OASH | Office of Infectious Disease and HIV/AIDS Policy

STATE ACTIVITIES TO COMBAT HEPATITIS C: HEPATITIS C MEDICAID AFFINITY GROUP FINAL REPORT

October 2021

Acknowledgements

We would like to acknowledge Mission Analytics Group, Inc, for assisting the Office of Infectious Disease and HIV/AIDS Policy in this project. As well as acknowledge the representatives from the CDC, CMS, HRSA, and SAMHSA who provided technical assistance and guidance throughout this project. Finally, we would like to thank the Hepatitis C Medicaid Affinity Group participants from the 19 jurisdictions, including 17 states, Washington, D.C., and Los Angeles County, for their hard work, collaboration, and commitment to increasing the number of people cured from hepatitis C.

Table of Contents

Executive Summary i
State Participant-Adopted Strategies Related to the Hepatitis C Care Cascade i
Implementation Facilitators and Challenges iii
Strategies States Can Consider to Improve Access to Treatment iii
Introduction 1
A. Challenges with Eliminating Hepatitis C as a Public Health Threat 1
B. Role of the Affinity Group in Addressing These Challenges 2
C. Evaluation Goals and Methods 4
D. Structure of the Report 5
1. Affinity Group State Strategies 6
A. Screening and Diagnosis 7
B. Linkage to Care 8
C. Treatment and Cure: Removing Access Restrictions 10
Removed Restrictions on DAAs in Medicaid 10
Streamlined Prior Authorization (PA) Processes and Medicaid "Carve Outs" 13
Medicaid Expansion in Idaho 13
D. Treatment and Cure: Making DAAs Affordable 15
Subscription Payment Models 15
340B Drug Pricing 16
E. Treatment and Cure: Expanding Provider and Treatment Capacity 17
2. Facilitators and Challenges to Strategy Implementation 20
A. Facilitators 20
Support of State Leadership 20
Community Engagement and Advocacy 21
Collaboration among Key State Personnel and Partners 21
B. Challenges 22
3. Engaging with the Affinity Group and its Role in Strategy Implementation 24
Information Sharing Across States 25
Information Presented by Subject Matter Experts 25
Collaboration across Agencies within a State 26
Outcomes Measure Reporting 27
4. Looking Forward: Recommendations for Future Efforts 29
A. State Strategy Recommendations 29
Remove Medicaid Sobriety Restrictions and Streamline PA Processes 29
Expand Co-Located Treatment Services and Treatment in Correctional Settings 29
Support Patient Navigation Efforts 30
Address Disparities in Care and Health Outcomes 30
Engage in Targeted Provider Outreach and Identify Provider Champions 31
Use Data Systems and Quality Measures to Drive Progress 31
B. Recommendations for HHS 32
Supporting State Strategies 32
Future Affinity Groups 33
Appendix A: End-of-Year Survey 34
Appendix B: Year 3 State Interview Protocol 38
References 39

EXECUTIVE SUMMARY

Nearly 2.4 million people in the United States are living with hepatitis C; the number of new cases continues to grow, primarily as a result of the opioid crisis.[1] The Hepatitis C Medicaid Affinity Group (Affinity Group), launched in 2017 by the U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Health (OASH) through its Office of Infectious Disease and HIV/AIDS Policy (OIDP), has fostered collaboration both within and across states to treat more people with hepatitis C and support viral hepatitis elimination efforts.

Nineteen jurisdictions, including 17 states, Washington, D.C., and Los Angeles County, participated in the Affinity Group for at least one year; five states participated for several. State teams included representatives from Medicaid, state departments of health, and, optionally, state departments of corrections and behavioral health agencies. The Affinity Group provided a platform for sharing information on hepatitis C screening and treatment across states and findings from subject matter experts through annual in-person convenings and monthly webinars. States also received technical assistance and support from federal partners and Mission Analytics Group, Inc., the organization contracted to facilitate and evaluate the Affinity Group.

State Participant–Adopted Strategies Related to the Hepatitis C Care Cascade

Participating states implemented strategies along the hepatitis C care cascade, promoting screening, linkage to care, and treatment access with the ultimate goal of increasing the percentage of people with hepatitis C who are cured.

- **Screening and diagnosis:** Six Affinity Group states targeted the first step of the hepatitis C care cascade by expanding the number of people being screened for hepatitis C. Strategies included media campaigns to increase public awareness, the co-location of hepatitis C screening and substance use disorder (SUD) services, and opt-out screening in correctional settings.

- **Linkage to care:** Five Affinity Group states implemented strategies to facilitate referrals to external providers when treatment was unavailable at testing sites. In other cases, they reached out to individuals who had previously tested positive to encourage follow-up and treatment.

- **Restrictions loosened**: To increase access to treatment, virtually all Affinity Group states worked to remove Medicaid restrictions on direct-acting antivirals (DAAs). Notably, in Wisconsin, utilization of DAAs increased for those born after 1989 when the sobriety restriction was removed in 2019, indicating that younger individuals, who are more likely to be at risk for hepatitis C due to injection drug use, benefit

from this policy. Seven Affinity Group states streamlined their Medicaid prior authorization processes to help promote standardized, prompt access to DAAs.

- **More affordable DAAs:** Six states implemented innovative drug purchasing strategies to increase access to DAA treatment via lower prices; this was achieved through either modified subscription payment models or the 340B Drug Pricing Program. The Alaska Department of Corrections, for example, increased the number of individuals treated for hepatitis C from just three in FY 2016 to 190 in FY 2020 through loosened eligibility restrictions, additional state funding, and 340B drug pricing.
- **Expanding provider capacity:** In many cases, states found that removing Medicaid restrictions was insufficient in terms of ensuring complete access to treatment due to the general lack of prescriber capacity. Many Affinity Group states mitigated this by training primary care providers on how to treat patients with hepatitis C and expanding treatment locations and policies.

Strategies that Directly Target Steps along the Care Cascade, and Year of Affinity Group Participation

State	Year			Screening/ diagnosis	Linkage to care	Treatment and cure		
	1	2	3			Access restrictions loosened	More affordable DAAs	Provider capacity enhanced
Indiana	●	●	●	✓	✓	✓	✓	✓
Louisiana	●			✓	✓	✓	✓	✓
Los Angeles County [a]		●		✓	✓	✓		
District of Columbia [a]		●		✓		✓		
Washington	●		●	✓		✓	✓	✓
Tennessee		●		✓		✓		✓
Arkansas			●		✓			
Wisconsin	●	●	●		✓	✓		
Michigan		●	●			✓	✓	✓
Alaska [a]		●				✓	✓	
New Hampshire [a]			●			✓	✓	
Massachusetts	●					✓	✓	
Virginia		●				✓		✓
Idaho			●			✓		✓
Vermont	●					✓		✓
West Virginia			●			✓		✓
Kentucky	●		●			✓		✓
New York	●					✓		
Maryland	●					✓		

[a] Focus on corrections; All states, except Tennessee and Wisconsin, have expanded Medicaid.

Implementation Facilitators and Challenges

States highlighted the importance of both the existence of a champion who is a leader at the state government level and community mobilization in progressing toward shared goals. States also valued the Affinity Group's role in promoting collaboration across states and among agencies within a state as well as its role in providing states with technical expertise via webinars, in-person convenings, and access to federal partner agencies and subject matter experts. However, states continue to face barriers in increasing access to treatment, including the high cost of medications, lack of provider capacity and willingness to treat, and challenges engaging people who inject drugs (PWID) in care. During the final year of the Affinity Group (Year 3), COVID-19 served as the most common state-reported challenge to combating the hepatitis C epidemic.

Strategies States Can Consider to Improve Access to Treatment

Affinity Group states have made significant advancements over the last three years in efforts to eliminate hepatitis C. However, continued innovation and funding are needed to expand and sustain progress. HHS can support state efforts described below through technical assistance, funding, and aligned policies:

- **Remove Medicaid Sobriety Restrictions and Streamline Prior Authorization Processes:** While states may face increased medication costs in the short term, they can make the case to policymakers and funders that treatment is highly effective for PWID and that better access to care can reduce transmission, thus decreasing long-term healthcare costs.
- **Expand Co-Located Treatment Services and Treatment in Correctional Settings:** As the population most disproportionately affected and at highest risk for hepatitis C has largely shifted from baby boomers to young PWID, states should adopt novel screening and treatment approaches. States could leverage the Medicaid SUD waiver to support the co-location of hepatitis C and SUD treatment.
- **Support Patient Navigation Efforts:** Individuals with hepatitis C, especially disproportionately impacted populations, or priority populations, like PWID, may need patient navigation assistance to link them to services and promote medication adherence. In addition to considering innovative DAA payment models, states and providers may need to leverage existing state and federal resources, such as fee-for-service (FFS) billing for community health worker (CHW)/navigator services, health home models, bundled payments, or managed care plan capitated payments that promote greater access to care for hepatitis C.

- **Address Disparities in Care and Health Outcomes:** States may need to improve surveillance and reporting systems to monitor health disparities, enhance partnerships across healthcare, social services, and public health, engage with community groups that work with disproportionately impacted populations, and support programs that address social determinants of health, such as those related to housing, education, employment, transportation, and food assistance in order to promote health equity in hepatitis C service delivery.
- **Engage in Targeted Provider Outreach and Identify Provider Champions to Increase the Number of Hepatitis C Treating Providers:** States can leverage available data to calculate screening and treatment rates by provider or provider organization, and then share those rates with providers to motivate change. States could focus on providers in areas with high rates of hepatitis C incidence and low treatment rates to make the largest impact. In addition, states that have lifted prescriber restrictions could engage with primary care providers, such as those working in Federally Qualified Health Centers (FQHCs). Identifying and working with clinical leaders within healthcare systems can support capacity-building efforts. In addition, funding for ongoing mentoring through ECHO-like models or state-specific telephone warm lines can help sustain efforts in the long term.
- **Use Data Systems and Quality Measures to Drive Progress:** States can support hepatitis C electronic health record system functions, such as screening prompts and streamlined medication workflows, through incentive payments or by facilitating collective purchasing for Medicaid providers. They could also benefit from the creation and use of standardized hepatitis C quality measures to identify gaps in care for Medicaid beneficiaries, measure strategies' effectiveness, and incentivize improved performance on these measures.

INTRODUCTION

Nearly 2.4 million people in the United States are living with hepatitis C; the number of new cases continues to grow, primarily as a result of the opioid crisis.[1] The Hepatitis C Medicaid Affinity Group (Affinity Group) has fostered collaboration both within and across states to treat more people with hepatitis C and support elimination efforts.

A. Challenges with Eliminating Hepatitis C as a Public Health Threat

The introduction of direct-acting antivirals (DAAs) in late 2013 transformed the treatment landscape for hepatitis C. These daily oral medications replaced the need for hard-to-tolerate interferon injections, reduced the duration of treatment to around 12 weeks, and achieved sustained viral response (SVR) at rates approaching 100 percent.[2] DAAs were cost prohibitive when first introduced, but their prices have declined over time as more manufacturers have entered the market.[3] This highly effective and tolerable treatment for hepatitis C reduces morbidity and mortality for people with hepatitis C; it is also an important tool for interrupting hepatitis C transmission and eventually eliminating hepatitis C altogether.[4]

While DAAs provide a safe and highly effective mechanism for curing hepatitis C, this cure remains out of reach for many individuals, including individuals who do not know that they have hepatitis C. An estimated 57,500 cases of acute hepatitis C occurred in 2019, and of acute reported cases, most were connected to injection drug use.[5] The Centers for Disease Control and Prevention (CDC) and the U.S. Preventive Services Taskforce (USPSTF) recommend that all people aged 18 years or older get tested for hepatitis C at least once in their lifetimes, and routine testing is recommended for populations at higher risk. However, many individuals do not get tested due to asymptomatic infections, lack of access to care, or lack of awareness of their risk factors.[6,7] State and local surveillance systems are often underfunded or poorly equipped to track all acute and chronic cases of hepatitis C, resulting in an incomplete understanding of disease prevalence and incidence in their areas.[8] Only 4,136 cases of acute hepatitis C were reported to the CDC in 2019; the true incidence is estimated at over 57,000.[5]

Even among individuals who receive appropriate hepatitis C screening, access to DAA treatment remains a barrier, particularly for certain populations. With the introduction of DAAs, many payers, including Medicaid programs, instituted restrictions on DAA access and cumbersome prior authorization processes (PA) in response to the high cost of treatment (as high as $94,500 for one course of treatment when first introduced); many of these restrictions persist despite cost decreases.[9–11] States have commonly limited DAA access to

Medicaid beneficiaries who have both the most severe liver fibrosis scores and proven abstinence from alcohol and/or substance use. Many states have also restricted the ability to write DAA prescriptions to limited categories of specialists. In 2017, four years after DAAs were introduced, 34 state Medicaid fee-for-service programs imposed liver fibrosis restrictions, 42 imposed sobriety restrictions, and 38 imposed prescriber or other restrictions.[9] Additionally, state Medicaid program requirements frequently differed between managed care and fee-for-service, resulting in inconsistent access for Medicaid beneficiaries within each state.[9]

In addition to Medicaid restrictions, access to treatment remains inconsistent for people who inject drugs (PWID), who are often unengaged with regular healthcare and who often encounter providers who are hesitant to prescribe DAAs due to stigma and/or concerns about re-infection.[12] Similarly, many individuals in state correctional systems lack access to timely hepatitis C treatment and cure despite the higher prevalence of infection in this population.[13,14] These ongoing challenges highlight the need for effective state and federal interventions to improve rates of hepatitis C screening, treatment, and cure among Medicaid beneficiaries and other disproportionately impacted populations that have historically had less access to healthcare services and suffered worse health outcomes.

B. Role of the Affinity Group in Addressing These Challenges

Efforts to expand hepatitis C screening and treatment rely on successful collaboration between multiple state agencies. Medicaid, one of the largest insurers of individuals with hepatitis C, can play a crucial role in eliminating hepatitis C by encouraging providers to screen and treat enrollees. Similarly, state departments of corrections provide medical care to a disproportionately impacted population, and state behavioral health agencies are well-equipped to serve people with substance use disorder (SUD) through their network providers. Finally, state public health departments stay abreast of hepatitis C incidence trends through the analysis of hepatitis C surveillance data and often lead data-driven screening, linkage to care, and provider capacity building efforts. By coordinating their efforts, state agencies can better leverage scarce resources, reduce the duplication of initiatives, and make sure that key populations are served.

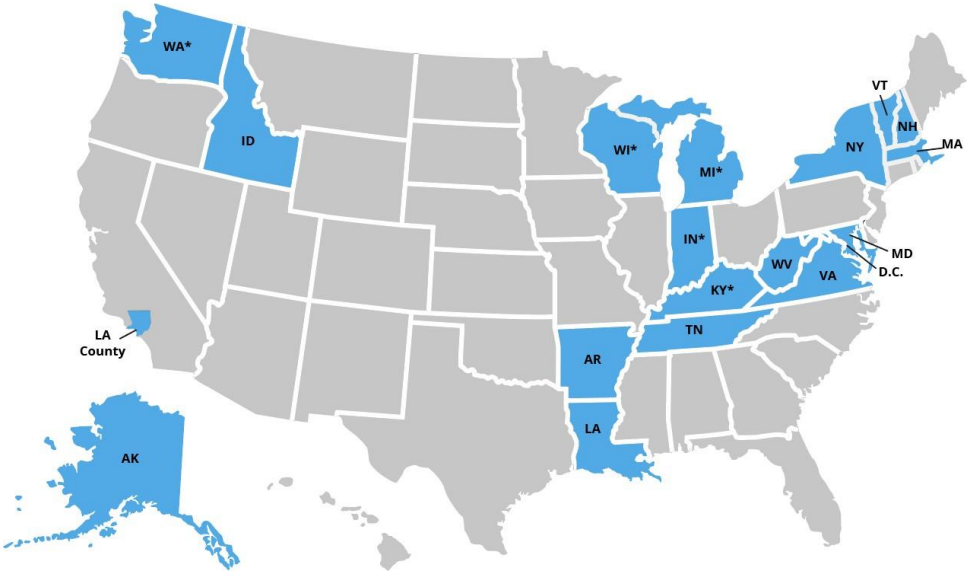
HHS Federal Partners

- Office of the Assistant Secretary for Health (OASH)/Office of Infectious Disease and HIV/AIDS Policy (OIDP)
- Centers for Medicare and Medicaid Services (CMS)
- Centers for Disease Control and Prevention (CDC)
- Health Resources and Services Administration (HRSA)
- Substance Abuse and Mental Health Services Administration (SAMHSA)

The Affinity Group, launched in December 2017 by the U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Health (OASH) through its Office of Infectious Disease and HIV/AIDS Policy (OIDP), promoted this collaboration to increase the number and percentage of Medicaid beneficiaries who are screened for hepatitis C and if positive, diagnosed and then successfully treated. Mission Analytics Group, Inc. was contracted to facilitate the Affinity Group and evaluate state initiatives to address hepatitis C. Representatives from CMS, CDC, HRSA, and SAMHSA supported the Affinity Group by advising OIDP on its design and ongoing implementation and providing technical assistance to states.

Nineteen jurisdictions, including 17 states, Washington, D.C., and Los Angeles County (hereafter referred to as "states"), participated in the Affinity Group for at least one year; five states participated for multiple years (Figure 1). State teams included representatives from Medicaid, state departments of health, and, optionally, state departments of corrections and behavioral health agencies. All states that submitted an Expression of Interest form were accepted to participate.

Figure 1: Affinity Group State Participants



* Indicates multi-year participant

At the beginning of each year, state participants identified strategies to address hepatitis C based on their state's unique needs and operational contexts. States often sought to improve treatment access by lifting restrictions on DAAs and training providers on hepatitis C treatment. During Year 2, which had an optional focus on people in correctional facilities, most states pursued corrections-specific strategies to reduce the cost of medications and provide treatment and linkage to care for incarcerated populations. Year 3 had an optional

focus on behavioral health; states set goals related to enhancing hepatitis C screening for priority populations and then connecting those populations with care. Across all three years, states developed action plans with concrete activities and timelines for achieving their goals over the year-long participation timeline.

To support action plan implementation, the Affinity Group provided a platform for sharing information on both hepatitis C screening and treatment across states and from subject matter experts through annual in-person convenings and monthly webinars. States also received technical assistance from both federal partners and the Mission Analytics Group project team and were provided with a Resource Catalog and an HHS website with hepatitis C-related resources. Finally, states calculated standardized hepatitis C-related outcome measures with Medicaid claims data using technical specifications developed by the Affinity Group.

C. Evaluation Goals and Methods

Throughout the three-year initiative, Mission Analytics Group and OIDP have collected and analyzed data to assess the implementation processes of states and evaluate the impact of their work and the Affinity Group. The evaluation aims to answer the following research questions:

1. What activities did states implement during their time in the Affinity Group and what factors supported or hindered implementation?
2. How did states engage with the Affinity Group and perceive that the Affinity Group impacted their work?
3. How did activities implemented by Affinity Group states impact access to hepatitis C screening and treatment?

Research questions were answered through multiple data sources. States submitted revised action plans throughout and at the end of each year to demonstrate activities accomplished. In addition, states provided updates and gave formal presentations during monthly Affinity Group webinars and annual in-person conferences. Quantitative information was collected through an online survey at the end of each year. The survey questions were modified each year; the third-year survey is located in Appendix A. The survey assessed the value of Affinity Group activities, levels of state collaboration before, during, and after the Affinity Group, and facilitators and barriers to strategy implementation. Data were aggregated across the three years for a total of 45 responses from 19 states (multiple responses were collected from the same state). Interviews were also conducted with multiple Affinity Group states over the three years to develop technical assistance fact sheets and case studies. All third-year Affinity Group

states participated in hour-long interviews in the fall of 2020. The interview protocol is located in Appendix B. The interviews solicited detailed feedback on facilitators and barriers to progress towards goals, the development of cross-agency partnerships and collaboration, the utility of the Affinity Group and technical assistance, and lessons learned while implementing strategies. Interviews were recorded, transcribed, and analyzed to identify common themes. Finally, in the spring of 2021, five states (Wisconsin, Idaho, Louisiana, Alaska, and West Virginia) submitted data on hepatitis C treatment to demonstrate the impact of their strategies.

D. Structure of the Report

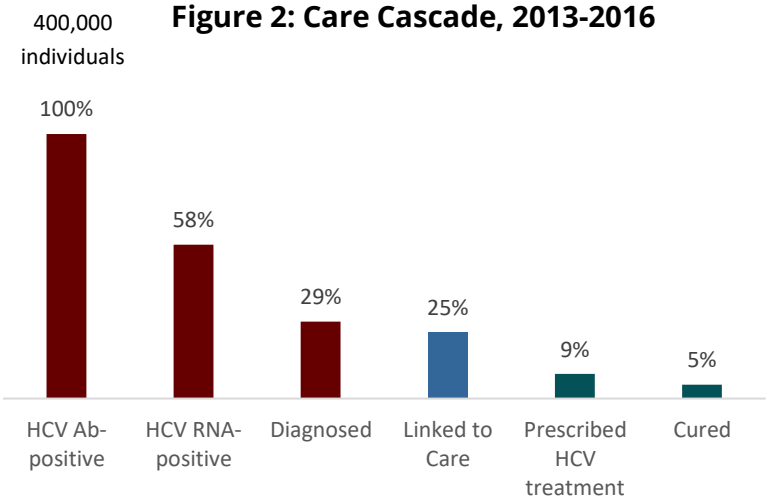
This final report summarizes evaluation findings in an effort to support the future replication of successful strategies to eliminate hepatitis C. The report's structure is as follows:

- Section 1 presents state strategies, implemented either during or after participation in the Affinity Group, that are directly related to steps on the hepatitis C care cascade – screening, linking to care, and treatment. For states with available data, we present data on treatment access both before and after strategy implementation.
- Section 2 discusses the factors that facilitated strategy implementation and the challenges states encountered.
- Section 3 describes how the Affinity Group supported states' strategies.
- The report ends with recommendations on actions states can take to continue to promote access to hepatitis C treatment and how HHS can support these efforts. Recommendations are also provided for future Affinity Groups.

1. Affinity Group State Strategies

Despite highly effective treatments, only a small percentage of individuals diagnosed with hepatitis C are cured, as demonstrated by the care cascade (Figure 2).[15] States have therefore implemented strategies to promote screening, linkage to care, and treatment access with the ultimate goal of increasing the cure rate. These strategies are presented in Table 1 and described below.

Figure 2: Care Cascade, 2013-2016



Source: Hofmeister, et al. *Estimating Prevalence of Hepatitis C Virus Infection in the United States, 2013-2016*, Hepatology, Vol. 69, No. 3. 2019

Table 1: Strategies that Directly Target Steps along the Care Cascade and Year of Affinity Group Participation

State	Year			Screening/ diagnosis	Linkage to care	Treatment and cure		
	1	2	3			Access restrictions loosened	More affordable DAAs	Provider capacity enhanced
Indiana	●	●	●	✓	✓	✓	✓	✓
Louisiana [a]	●			✓	✓	✓	✓	✓
Los Angeles County [b]		●		✓	✓	✓		
District of Columbia [b]		●		✓		✓		
Washington	●		●	✓		✓	✓	✓
Tennessee		●		✓		✓		✓
Arkansas			●		✓			
Wisconsin [a]	●	●	●		✓	✓		
Michigan		●	●			✓	✓	✓
Alaska [a, b]		●				✓	✓	
New Hampshire [b]			●			✓	✓	
Massachusetts	●					✓	✓	
Virginia		●				✓		✓
Idaho [a]			●			✓		✓
Vermont	●					✓		✓
West Virginia [a]			●			✓		✓
Kentucky	●		●			✓		✓
New York	●					✓		
Maryland	●					✓		

a Provided pre-post data; b Focus on corrections; All states, except Tennessee and Wisconsin, have expanded Medicaid

A. Screening and Diagnosis

Six Affinity Group states targeted the first step of the hepatitis C care cascade by expanding the number of individuals being screened for hepatitis C antibodies and conducting follow-up RNA tests if positive.

- Media campaigns to encourage screening (IN)
- Co-location of hepatitis C screening and SUD treatment services (LA, WA)
- Opt-out testing in correctional settings (DC, TN, LA County)

Indiana implemented a broad outreach campaign in response to the 2020 USPSTF guidelines, which recommend screening all adults for hepatitis C at least once in their lifetimes and screening pregnant people during each pregnancy.[16] The previous guidelines recommended testing for people born between 1945-1965 and individuals with specific risk factors for hepatitis C.[16] Indiana launched two media campaigns, one for the general population and one for priority populations, using bus wraps, billboards, and TV/radio ads to encourage people to seek testing (Figure 3).

Figure 3: Indiana Hepatitis C Media Campaigns

General Population

Priority Populations

Source: Indiana Department of Health. Presentation to the Hepatitis C Medicaid Affinity Group, November 2020.

Other Affinity Group states expanded screening by making testing available at new service sites that serve populations with an increased prevalence of hepatitis C infections. Louisiana and Washington focused on expanded screening for PWID, as injection drug use continues to be the primary risk factor for new hepatitis C cases, especially among young adults. Louisiana promoted syringe service programs (SSPs) throughout the state by creating parish-level fact sheets on opioid epidemic trends and the benefits of SSPs and working with a Federally Qualified Health Center (FQHC) to offer hepatitis C screening at its

stand-alone SSPs. Washington is integrating hepatitis C screening into opioid treatment program (OTP) sites through capacity building and technical support.

Given that hepatitis C disproportionately affects individuals in correctional settings, multiple states implemented opt-out testing in their jails or prisons:

- Tennessee employed opt-out hepatitis C reflex testing (i.e., an immediate RNA test after an initial positive antibody test) at two prison intake facilities.
- Through its opt-out screening policy, Indiana continues to test the majority of its prison population.
- In 2019, Washington, D.C. began screening all individuals entering jails, approximately 1,000 individuals per month. Los Angeles County implemented opt-out testing for one year as part of a grant and identified approximately 2,000 people with active infections. The county continued to implement risk-based and on-demand testing after the grant ended.

B. Linkage to Care

Individuals who test positive for hepatitis C must be linked to medical care for treatment. Multiple Affinity Group states implemented strategies to facilitate referrals to external providers when treatment was not available at testing sites. In other cases, they reached out to individuals who had previously tested positive to encourage treatment.

- Link people leaving correctional settings to medical providers for treatment (IN, LA County)
- Follow up with individuals previously denied treatment under Medicaid who are now eligible due to the removal of restrictions (LA)
- Follow up with pregnant people diagnosed with hepatitis C to promote treatment for them and their babies (AR)
- Develop care cascades for pregnant people to inform future efforts (WI)

Indiana and LA County linked people who are unable to be treated for hepatitis C while incarcerated to care upon release. Indiana assigned individuals with hepatitis C to a care coordinator who then connects them to community providers and helps them obtain Medicaid coverage and access other wraparound services. The LA County jail system treated all individuals diagnosed with hepatitis C with a length of stay of at least six months; for individuals with shorter stays, LA County leveraged existing HIV care

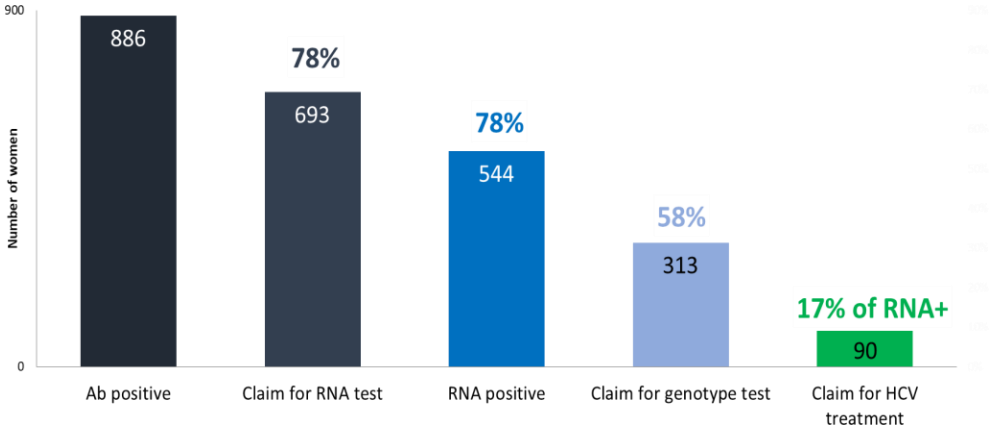
transitions teams to refer patients with hepatitis C to care. The county has also developed a registry to identify individuals diagnosed with hepatitis C who are entering jail and track necessary information for care coordination and treatment efforts.

Louisiana developed a data to care approach that was integrated with its efforts to expand access to care (discussed in greater detail below). Louisiana's Medicaid program provided the Office of Public Health (OPH) with a list of individuals who had been diagnosed with hepatitis C but had not received treatment due to previous DAA restrictions. OPH's Linkage to Cure Coordinators then contacted these individuals and referred them to providers.

Arkansas and Wisconsin focused on pregnant people and infants who tested positive for targeted outreach and linkage to care.

- Arkansas identified perinatal hepatitis C cases from 2018-2020 and worked with the Arkansas Children's Hospital to develop and implement care plans for babies who had not been treated.
- Wisconsin combined Medicaid, birth record, and surveillance data to create care cascades for women of childbearing age and infants born to people with a history of hepatitis C diagnosis. The state found that only 17% of women of childbearing age with a positive RNA test had a claim for hepatitis C treatment from 2015-2018 (Figure 4). These findings are informing the development of linkage to care strategies for these women and their babies.

Figure 4: Hepatitis C Care Cascade, Women Enrolled in Wisconsin Medicaid Ages 15-44 Years (2015-2018)



Source: Wisconsin Department of Health Services. Presentation to the Hepatitis C Medicaid Affinity Group, February 2019.

C. Treatment and Cure: Removing Access Restrictions

As previously discussed, the initial high price of DAAs led most state Medicaid programs to impose restrictions on access, especially when DAAs were first introduced and were costly to state Medicaid programs.[11,17] To increase access to treatment, Affinity Group states worked to remove restrictions on DAAs and streamlined authorization processes; Idaho, for example, increased access by implementing these changes in concert with Medicaid expansion.

Removed Restrictions on DAAs in Medicaid

During their Affinity Group participation, most states worked to reduce DAA restrictions like fibrosis score, prescriber, and sobriety restrictions, and to promote greater alignment between their fee-for-service (FFS) and managed care requirements. The "report cards" developed by the State of Hepatitis C project, a collaboration between the National Viral Hepatitis Roundtable and the Center for Health Law and Policy Innovation at Harvard Law School, showed that most Affinity Group states improved their grades from 2017 to 2021.[9] Among the 19 Affinity Group states from all three years, 12 currently have report card grades of A- or higher, indicating good access to DAAs through Medicaid (Table 2). Two states (Wisconsin and Michigan) improved from a D+ to an A+ rating, and Idaho improved from a D to an A-.

- Remove restrictions on DAAs in Medicaid (most states)
- Streamline PA processes (ID, KY, LA, MI, NY, WI, VA)
- Medicaid expansion (ID)

Table 1: Affinity Group State Report Card Grades (2017-2021), Restrictions Removed, and Remaining Restrictions

State	Grade		Removed Restrictions (2017-2021)			Remaining Restrictions
	2017	2021	Liver	Prescr.	Sobriety	
WA	A-	A+		•		No remaining restrictions; no PA for preferred regimen
CA (LAC)	B+	A+	•			
IN	B	A+	•	•		
NY	B-	A+		•	•	
MI	D+	A+	•	•	•	
WI	D+	A+	•	•	•	
LA	F	A+	•	•	•	
MA	A	A				PA w/ genotype still required

State	Grade		Removed Restrictions (2017-2021)			Remaining Restrictions
	2017	2021	Liver	Prescr.	Sobriety	
VA	B+	A	•	•	•	**Prescriber:** FFS and MCOs require a specialist to prescribe a non-preferred medication
AK	A-	A-				**Sobriety:** Screening for SUD and referral to services
VT	B	A-	•			**Prescriber:** By or in consultation with a specialist
ID	D	A-	•	•	•	**Sobriety:** Consider SUD in adherence counseling or referral for medication assisted treatment (MAT) for patients with opioid use disorder (OUD)
MD	C	B+	•			**Sobriety:** Screening for SUD **Prescriber:** Treatment plans developed by or in collaboration with a provider with expertise in hepatitis C management
DC	C	B+	•			**Sobriety:** FFS requires screening and counseling for SUD and requirements vary by managed care organization (MCO) **Prescriber:** Written by or in consultation with a specialist
NH	B+	B+				**Sobriety:** Screening and counseling for SUD **Prescriber:** By or in consultation with a specialist or by a prescriber who has completed continuing medical education on the treatment of hepatitis C
WV	C	B-	•			**Sobriety**: Three months abstinence **Prescriber**: Written by or in conjunction with a specialist
KY	D-	B	•	•	•	**Liver damage:** Requirements vary by MCO **Sobriety:** FFS inquires about patients' past history of substance use, and requirements vary by MCO **Prescriber:** FFS requires a prescription to be written by or in consultation with a specialist and requirements vary by MCO
TN	D	C	•	•		**Sobriety**: Six months abstinence **Prescriber**: All physicians can prescribe treatment except in certain clinical situations in which a specialist must consult
AR	F	F				**Liver damage:** F3 or greater **Sobriety**: Six months abstinence **Prescriber**: Specialists must prescribe

Source: Hepatitis C: State of Medicaid Access Report Cards (2017 ranking compared to current ranking), National Viral Hepatitis Roundtable and Center for Health Law and Policy Innovation at Harvard Law School, https://stateofhepc.org/. Higher grades indicate fewer restrictions related to fibrosis score, sobriety status, and prescriber qualifications as well as other state access policies, such as parity between FFS and managed care.

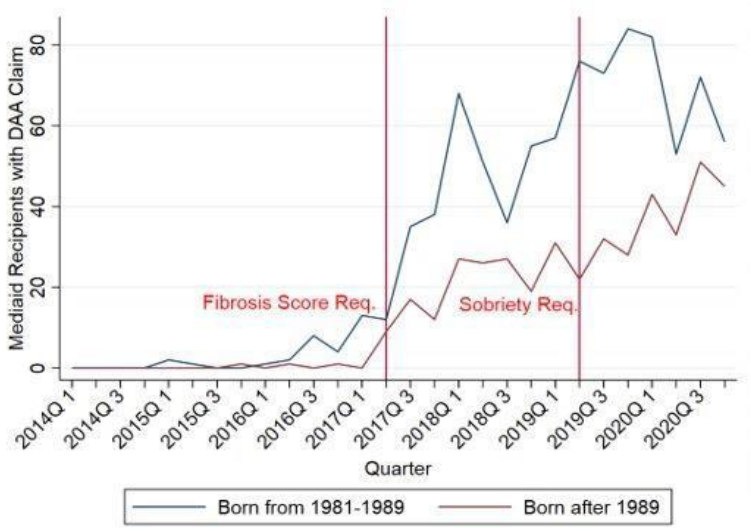
States employed a variety of strategies to remove restrictions as follows:

- Identified populations with the greatest treatment needs and conducted data analyses to inform policy changes;

- Hosted meetings between public health staff and Medicaid officials to help identify priorities and drive progress; and
- Made incremental changes, such as removing one restriction at a time.

State data show that the removal of restrictions improved access to treatment. The number of Medicaid beneficiaries with access to hepatitis C treatment increased when Wisconsin removed fibrosis score and prescriber-related restrictions in FY 2017 and sobriety restrictions in FY 2019 (Figure 5). The elimination of restrictions appeared to affect populations differently. After the removal of the fibrosis score restriction, DAA utilization increased at a faster rate for individuals born between 1981-1989. When the sobriety restriction was removed, DAA utilization increased for those born after 1989, indicating that younger individuals, who are more likely to be at risk for injection drug use, benefit from this policy.

Figure 5: Number of People Treated for Hepatitis C through Wisconsin Medicaid

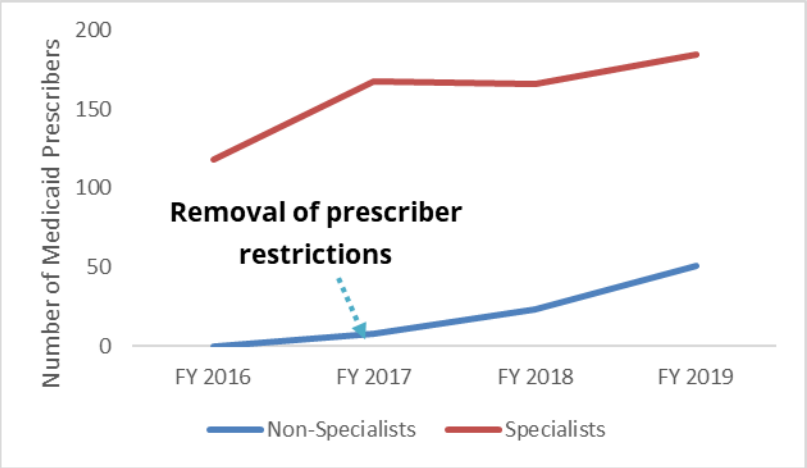


Source: Wisconsin Department of Health Services. Data submitted to the Hepatitis C Medicaid Affinity Group, April 2021.

Wisconsin also documented the effects of the removal of prescriber restrictions. As shown in Figure 6, the number of prescribing non-specialists increased from zero in FY 2016 to 51 in FY 2019. The number of specialist prescribers also increased during this time as part of a longer-term trend. Allowing non-specialists to prescribe DAAs is one strategy for improving access to care, particularly in rural areas with fewer specialists. To assess the impact of removing prescriber restrictions, Wisconsin calculated the percentage of rural-dwelling people with cases of hepatitis C reported to state surveillance system with a DAA prescriber within a 30-minute drive as a measure of access. The percentage of rural-dwelling individuals within a 30-minute drive rose from 23% in FY 2016 to 37% in FY 2019, two years

after restrictions were removed. In urban areas, 98% of beneficiaries had a provider within a 30-minute drive.

Figure 6: Number of Hepatitis C Prescribers in Wisconsin Medicaid



Source: Wisconsin Department of Health Services. Data submitted to the Hepatitis C Medicaid Affinity Group, April 2021.

Streamlined Prior Authorization (PA) Processes and Medicaid "Carve Outs"

In some cases, Affinity Group states removed major restrictions on DAAs, but found that the remaining PA requirements continued to impede treatment access. These requirements may include complex paperwork, variations in requirements for different payers, and strict medication quantity limits that do not cover the entire length of DAA treatment. All of these restrictions can put burdens on providers and lead to delays in treatment initiation.[9,19,20]

Seven Affinity Group states (Kentucky, Louisiana, Michigan, New York, Wisconsin, Virginia, and Idaho) streamlined their PA processes to help promote standardized, prompt access to DAAs. Common approaches included:

- Removing or shortening PA processes for drugs on the state's Medicaid preferred drug list (PDL)
- Streamlining clinical criteria and guidance
- Ensuring parity between FFS and managed care PA requirements. In some cases, states opted to "carve out" DAAs from managed care, resulting in all DAAs being covered under the state's FFS plan
- Increasing provider training and awareness of relaxed restrictions.

> *"In investigating the PA process, we have also learned that the specialty pharmacy process across six MCOs can introduce friction and act as a barrier to accessing DAAs." - Virginia leadership*

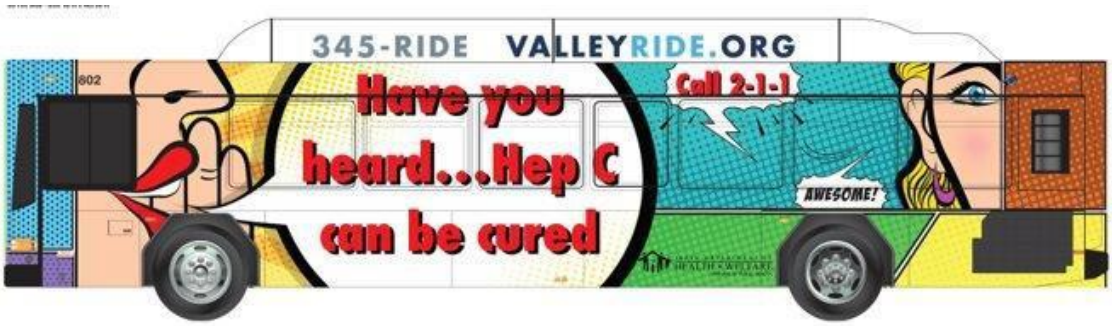
Medicaid Expansion in Idaho

In 2018, Idaho's Medicaid program eliminated fibrosis, sobriety, and prescriber restrictions. Effective January 2020, Idaho expanded Medicaid to individuals with an annual household income of up to 138% of the federal poverty level.[21] While this policy change was not specific to hepatitis C, Idaho reported that the expansion covered up to 90,000 new

beneficiaries.[22] The state also implemented a range of initiatives, including provider

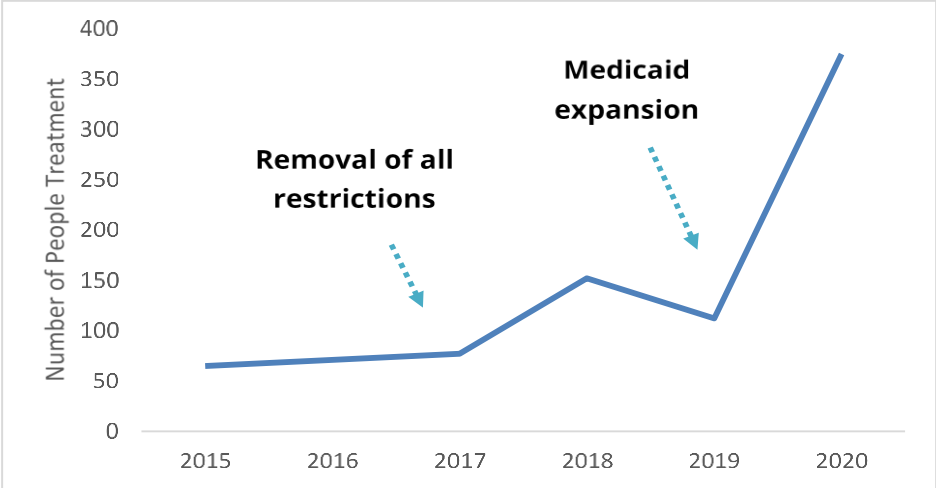
training and outreach, to help expand hepatitis C treatment access to both Medicaid beneficiaries and other populations throughout the state. The state recently launched a 12-month media campaign with bus wraps to promote awareness of hepatitis C treatment.[23]

Idaho Bus to Promote Hepatitis C Treatment



As a result of these efforts, Idaho experienced a surge in people being treated for hepatitis C, especially after Medicaid was expanded (Figure 7). Prior to Medicaid expansion, just 27% of individuals with a hepatitis C screening and subsequent hepatitis C diagnosis code recorded a claim for a DAA. In 2020, this percentage increased to 45%, even though more than twice as many people were screened (approximately 4,000 in 2019 and 10,000 in 2020) and many more were diagnosed (275 in 2019 and 469 in 2020).[24]

Figure 7: Number of People Treated for Hepatitis C through Idaho Medicaid



Source: Idaho Department of Health and Welfare, Division of Medicaid. Data submitted to the Hepatitis C Medicaid Affinity Group, April 2021.

D. Treatment and Cure: Making DAAs Affordable

Six states implemented innovative drug purchasing strategies to increase access to treatment with DAAs via lower prices, either through modified subscription payment models or 340B pricing.

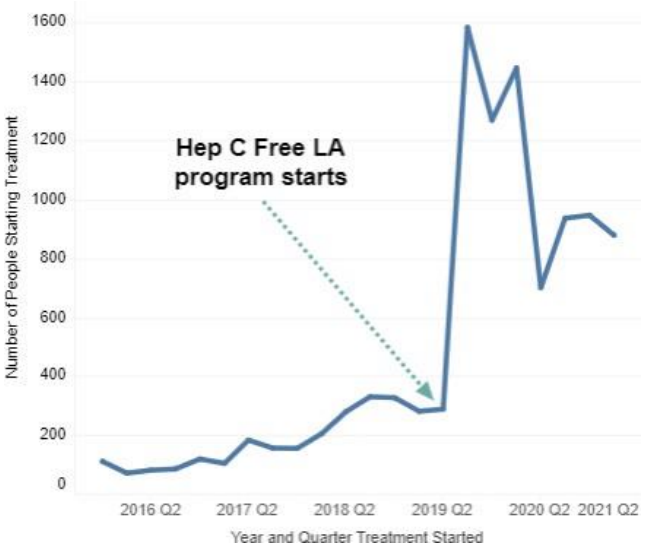
- Modified subscription payment models (LA, MI, WA)
- 340B pricing in correctional facilities (AK, IN, NH)

Subscription Payment Models

Louisiana was a leader in adopting a modified subscription payment model in July 2019. The Louisiana Medicaid program implemented a financial arrangement with the drug manufacturer Asegua Therapeutics, LLC (a subsidiary of Gilead Sciences, Inc.) to cover the cost of the preferred drug on a per treatment basis until an annual cap, approximately the total amount Medicaid paid for DAAs in fiscal year 2018, is met. After that point, Medicaid receives a full rebate on prescriptions through a supplemental rebate agreement. In exchange, there is a single preferred drug on the Medicaid drug formulary, though other DAAs can still be accessed through PA when medically necessary.

The payment model was part of Louisiana's broader *Hep C Free LA* efforts. To encourage the take-up of medications, Louisiana removed the PA requirement for the preferred drug, including its remaining fibrosis score restriction. The state also developed a streamlined protocol for hepatitis C clinical workup and treatment as well as provider training. Finally, direct outreach to people who had previously been denied treatment and a public awareness campaign both contributed to a dramatic increase in DAA utilization in Medicaid and state corrections, as shown in Figure 8. Unfortunately, the COVID-19 pandemic reduced prescriptions in 2020.

Figure 8: Individuals Treated for Hepatitis C through Louisiana Medicaid and State Corrections



Source: Taking Control of Hep C. Louisiana Department of Health, https://ldh.la.gov/assets/hepc/prod/.

Two other states, Washington and Michigan, adopted similar models in 2019 and 2021, respectively, based on state-specific needs. Washington's model, which also covers state employees, supports the state's goal of eliminating hepatitis C by 2030. Michigan, the most recent state to launch a subscription payment model, developed a contract with a DAA manufacturer to obtain a reduced price on a selected DAA medication in exchange for the drug occupying preferred status on the state's Medicaid formulary with no PA requirements.

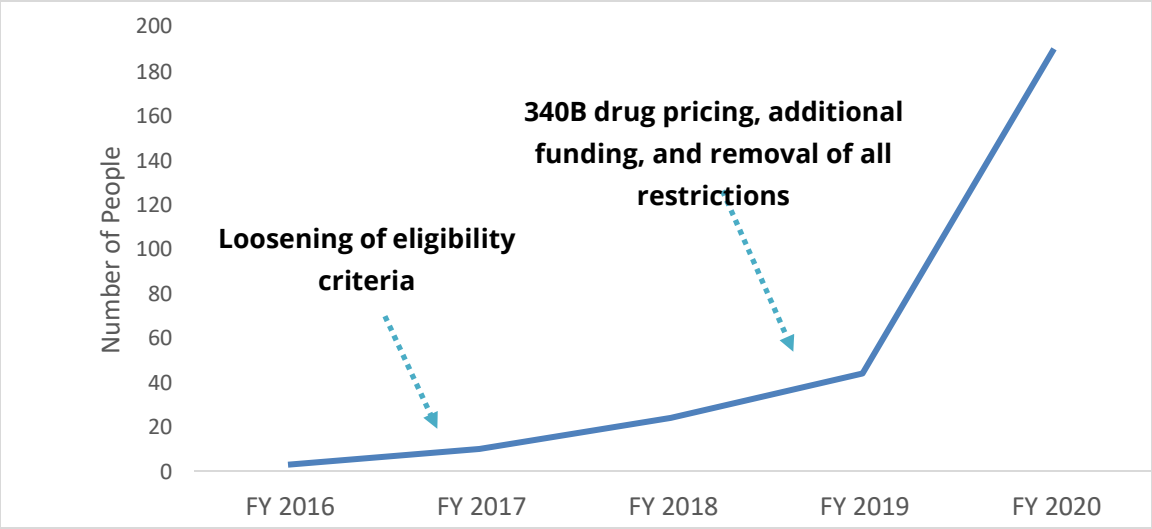
340B Drug Pricing

Three Affinity Group states (Alaska, Indiana, and New Hampshire) implemented the 340B Drug Pricing Program in correctional facilities to lower the cost of DAAs. These states established in-kind relationships with 340B Drug Pricing Program-covered entities, specifically those receiving Section 318 funding, to extend benefits to patients within the correctional system.[25,26] Following these three states, Kentucky plans to explore the feasibility of a 340B drug pricing strategy in their correction systems in 2021.

Alaska was the first of the Affinity Group states to implement the 340B drug pricing strategy. As with Louisiana, its pricing strategy was part of a larger effort to improve access to care, in this case through the Alaska Department of Corrections. The Alaska Department of Corrections began to loosen eligibility criteria for medications in FY 2016, gradually increasing the number of individuals treated from just 3 in FY 2016 to 44 in FY 2019 (Figure 9). Treatment rose sharply in FY 2020 to 190 individuals after 340B drug pricing was adopted and the cost of medications per individual decreased. The legislature also

allocated more funding to hepatitis C treatment due to successful advocacy from the Alaska Hepatitis Advisory Work Group, a collaboration between the Department of Corrections, the Alaska Native Tribal Health Consortium, and the Department of Health and Social Services.

Figure 9: Individuals Treated for Hepatitis C in Alaskan Correctional Settings



Source: Alaska Department of Corrections. Data submitted to the Hepatitis C Medicaid Affinity Group, April 2021.

E. Treatment and Cure: Expanding Provider and Treatment Capacity

In many cases, states found that removing restrictions was insufficient for ensuring complete access to treatment due to a general lack of prescriber capacity. Therefore, many Affinity Group states trained providers on how to treat patients with hepatitis C and expanded treatment locations and policies.

- Provider needs assessments (TN, VT, WA)
- Training (LA, MI, NH, VA)
- Telementoring and hotlines (ID, IN, MI)
- Using data to identify gaps in provider locations (MI, WI)
- Expanding treatment in corrections (AK, IN, VA)
- Co-locating SUD and hepatitis C treatment (WA, KY)

Common Affinity Group state strategies included:

- **Provider needs assessments**: Tennessee, Vermont, and Washington surveyed a range of providers, including Medicaid, corrections, and SUD clinicians, to pinpoint gaps in knowledge, learn more about current hepatitis C treatment practices, and guide the creation of subsequent provider training modules. Washington plans to pair survey results with findings from key informant interviews as part of its overall effort to explore integration of hepatitis C treatment in behavioral health settings.

> *"[Our survey of family medicine practitioners] found that most family medicine physicians in Wisconsin didn't even know that they could now prescribe hepatitis C treatment, and most were not prescribing it." - Wisconsin leadership*

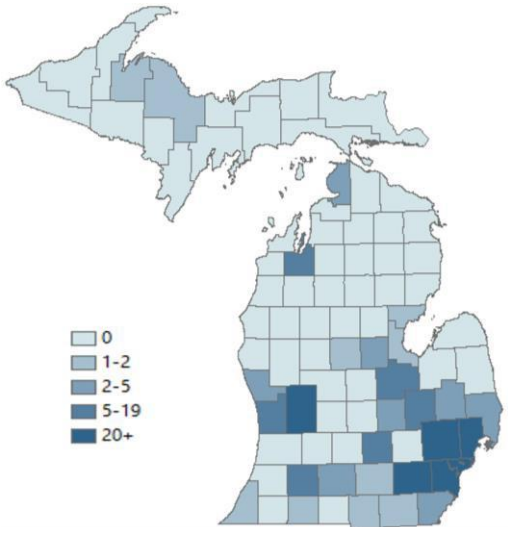
- **Training:** Louisiana and Michigan both leveraged existing resources through regional AIDS Education & Training Centers to provide prescribers with hepatitis C-specific education. Other states, including Virginia and New Hampshire, developed new provider trainings and webinars covering topics related to hepatitis C, either on their own or with partners.

Evidence of Impact: West Virginia Hepatitis Academic Mentoring Partnership

The West Virginia Department of Health and Human Resources, in partnership with WVU Medicine, launched the Hepatitis Academic Mentoring Partnership in 2020 to increase the capacity of primary care and addiction care providers to prescribe DAAs and treat hepatitis C. As of spring 2021, 70 primary care and addiction providers had received mentorship and peer-based training to meet the Medicaid program's specialist requirements through the partnership. Between March 2020 and March 2021, 21 of these providers reported delivering 218 patient consultations. Of the 50 individuals who had reached the required 12-week time point for a full course of DAA treatment, 48 were cured.[27] West Virginia is expanding the consultation service to reach additional providers.

- **Telementoring and hotlines**: Michigan developed a clinical consultation hotline for SUD treatment providers to connect on hepatitis C treatment questions. Indiana implemented a hepatitis C Project ECHO to mentor primary care providers and invited Medicaid officials to help explain the PA requirements associated with prescribing DAAs; Idaho launched a similar Project ECHO model in spring 2021. Indiana also implemented a unique peer education ECHO-like model within the corrections system, which trained eligible incarcerated individuals to offer harm reduction and preventive care education sessions to their peers.
- **Using data to identify gaps in care provision**: Michigan, Vermont, and Wisconsin analyzed Medicaid and surveillance data to learn more about the locations of hepatitis C providers in their states and possible disparities in access to care. Michigan found that 65% of its counties had no PA requests submitted by any providers (Figure 10); this information was used to motivate the development of the subscription payment model and removal of PA requirements. Vermont completed a similar analysis by overlaying prescriber location with hepatitis C prevalence.

Figure 10. Number of Hepatitis C Prescribers in Michigan Medicaid by County (June 2018 - August 2019)



Source: Michigan Department of Health & Human Services. Presentation to the Hepatitis C Medicaid Affinity Group, September 2020.

- **Expanding treatment in corrections:** Virginia implemented a pharmacist-led treatment model in prisons, and Indiana has treated nearly half of the entire hepatitis C patient population within the Department of Corrections to date, building on its early progress in improving linkages to care and care transitions for incarcerated people with hepatitis C.
- **Co-locating hepatitis C and SUD treatment:** Washington and Kentucky have begun to explore how to integrate hepatitis C care with behavioral health agencies, SUD treatment facilities, and/or SSPs, training behavioral health providers on hepatitis C treatment, and developing guidelines to help agencies bill for services.

2. Facilitators and Challenges to Strategy Implementation

States highlighted the importance of having both a champion within the leadership of the state government and community mobilization to drive progress towards shared goals. However, states continue to face barriers in increasing access to treatment, including the high cost of medications, lack of provider capacity and willingness to treat, and challenges with engaging PWID in care. During the final year of the Affinity Group (Year 3), COVID-19 was the most common challenge to combating the hepatitis C epidemic.

A. Facilitators

Support of State Leadership

> *"One of the reasons that has really helped is support from the executive level. is very focused and veryinterested in all ideas to controlling prescription drug costs, not only forconsumers, but also for state programs like Medicaid and corrections. having that leadership buy-in, was one reasonfor our success."*
> *– Affinity Groupparticipant –*

Multiple states indicated that they could not have moved their activities forward without the support of individuals in leadership positions. For example, Louisiana garnered support from the Secretary of the Department of Health to implement the subscription payment model. The Secretary had made curbing high drug prices a priority and brought national attention to innovative strategies for eliminating hepatitis C, such as implementing the subscription payment model. The Governor of Washington announcing his goal of eliminating hepatitis C by 2030 in 2018 allowed the state to more rapidly implement aspects of its elimination plan. In Michigan, a new governor with a focus on controlling prescription drug costs partnered with the Medicaid Director and executive leadership in the state legislature to successfully launch the state's subscription payment model.

Medicaid Medical Directors were also important champions for moving activities forward. The partnership activities between divisions within Wisconsin's Department of Health Services were solidified with a new Medicaid Medical Director who recognized the importance of improving access to medications by removing restrictions. The story was similar in Idaho; the Medicaid Medical Director made hepatitis C treatment a focus when Medicaid was expanded.

Finally, the high cost of treatment often necessitates additional funds to increase access; both Indiana and Alaska benefited from legislative support in terms of securing funds to treat incarcerated individuals with hepatitis C.

Community Engagement and Advocacy

> *"At the end of the day, the success of these things relies on the community. You're going to have to have your community involved with how services are delivered. You're going to need your community involved in advocating to change policy. You're going to need your community involved with the DOC. The people who participate in the program are the ones who help drive the message home." – Affinity Group participant –*

Community engagement and advocacy are often the catalysts of the successful implementation of planned initiatives, in part by garnering leadership support. Community groups that work directly with individuals with and at risk for hepatitis C are often most familiar with the barriers to treatment and potential strategies for removing these barriers. Community members with lived experience can serve as effective advocates at the legislative and state agency levels by promoting the consumer voice and proposing solutions. For example, Indiana conducted 13 focus groups in various locations throughout the state and over 100 interviews with key informants, including people with lived experiences, to inform its 10-year elimination plan. Through this work, the state developed a strong network of entities involved in the provision of services and learned of their particular priorities in terms of hepatitis C elimination. Indiana continues to seek community input in deciding how funds received from the state for hepatitis c are used on the ground.

Similarly, Alaska attributes its success in treating its incarcerated population to the advocacy and support of the Alaska Hepatitis Advisory Work Group, a collaboration between several state agencies and community groups. They successfully lobbied the legislature for additional treatment funds for prisons/jails by highlighting a study that demonstrated a significant drop in the burden of disease for the entire community when hepatitis C elimination in prisoners and PWID was prioritized.

Collaboration among Key State Personnel and Partners

> *"When we put together the Affinity Group proposal, that's when we started meeting new people and actually found the right folks to talk to. So that's another really kind of huge positive from this experience is getting to meet not only a new colleague, but also finding the right colleagues to talk to about how to actually move projects along."*
> *– Affinity Group participant –*

States also reported that building working relationships with staff members in partner agencies expedited progress toward hepatitis C elimination goals. The partnership between the Kentucky Department of Public Health (DPH) and the Department of Medicaid Services (DMS), for example, enabled the establishment of a single preferred Medicaid DAA list under FFS and managed care and the removal of prescriber specialist requirements for "simplified" DAA treatments. DPH motivated these

DMS changes through the presentation of epidemiological data and clinical guidelines that illustrated the severity of the epidemic and the importance of expedited treatment.

After the launch of its subscription payment model, Washington recognized the need to focus outreach on PWID. Therefore, the Health Authority (Medicaid) partnered with the state Behavioral Health Agency to lead hepatitis C testing and treatment efforts and draw on the agency's subject matter expertise and relationships with OTP sites.

These cross-agency partnerships often require dedicated staff and regular communication. For example, the Hepatitis C Elimination Project Manager at Louisiana's OPH worked directly with staff from Medicaid and the Department of Corrections to develop the modified subscription payment model while in Washington, regular meetings between the Health Authority, the Department of Health, and the behavioral health agency helped align goals and propel behavioral health initiatives forward.

Universities have also been key partners for Affinity Group states. In Michigan, Virginia, and West Virginia, universities have provided clinical and analytical expertise for provider training and data analysis.

B. Challenges

Many states have developed ambitious strategies to combat hepatitis C, but have encountered challenges with implementation. For one, some states with more restrictive Medicaid treatment policies were unable to remove restrictions because of the expenditures that Medicaid would incur as a result of high drug prices. Some states that have streamlined PA have also seen new challenges, such as additional PA restrictions imposed by private insurers or roadblocks with specialty pharmacy regulations, that continue to limit access to DAAs and require ongoing state attention to remedy.

Furthermore, states continue to struggle with serving PWID, the population at highest risk for hepatitis C. States have aimed to integrate treatment services into non-traditional settings that serve this population, including SSPs and OTPs, but have experienced problems incorporating hepatitis C treatment and care coordination into both workflows and OTP/SSP data management systems (for record keeping purposes). States are also faced with funding and billing issues. They aim to determine whether these services are budget neutral and not duplicative with existing services in the community and to train OTPs/SSPs on hepatitis C procedure codes and billing requirements. In fact, all nine states that participated in Year 3 of the Affinity Group planned to expand treatment sites and services, especially for this population, but only four were able to make, "fair or significant progress," according to the online survey conducted at the end of the Affinity Group.

In addition, about a third of respondents reported that staff turnover within Medicaid or public health agencies was an additional challenge. These states ultimately relied on other committed members of their teams to make progress on their goals and action plan strategies, but reported that staff turnover introduced delays to their progress.

Multiple states also aimed to improve data sharing across state Medicaid, public health, and corrections agencies but ran into legal and administrative roadblocks. As a result, these states lacked sufficient data to inform the development and evaluation of hepatitis C-related strategies.

"COVID basically paused all of our Affinity Group Projects." – Affinity Group participant –

Finally, during Year 3, most of the respondents that completed the end-of-year survey (71%) stated that COVID-19 had a moderate or significant impact on their progress throughout the year. The state of New Hampshire ceased participation in the Affinity Group entirely due to COVID-19. Overall attendance at the monthly calls decreased and hepatitis C-related work slowed as staff time and resources were diverted to fighting the pandemic.

3. Engaging with the Affinity Group and its Role in Strategy Implementation

The Affinity Group supported state activities by promoting collaboration both across states and among agencies within a state and by providing states with technical expertise via webinars, in-person convenings, and access to federal partner agencies and subject matter experts. Most survey respondents across all three years found the work of the Affinity Group to be "valuable" or "very valuable" (an average of 79% across all components) (Figure 11).

Figure 11: Percentage of Respondents who Rated an Affinity Group Component as Valuable or Very Valuable (N=45; Years 1-3)

Source: Survey, Hepatitis C Affinity Group States, Years 1-3

OIDP developed the Hepatitis C Medicaid Affinity Group website with information on state strategies, links to webinar presentations, and resources developed through the group, including case studies and fact sheets.

Information Sharing Across States

> *"We had reached out to and…had separate conversations with Louisiana. We had a number of conversations with some other states that have done some work in the Hep C space."*
> *– Affinity Group participant –*

One of the goals of the Affinity Group was to increase interaction across states so that initiatives, challenges, and solutions could be shared. The aspect of the Affinity Group that was most commonly reported as "very valuable" was the information presented by other states during presentations and discussion groups; one hundred percent of respondents in the Years 1-3 surveys agreed or strongly agreed with the statement, "I was pleased with the level of state engagement and questions on the monthly webinars," and 96% agreed or strongly agreed that, "other states gave me ideas for activities we could implement in my own state." For example, Michigan's adoption of its payment subscription model was informed by Year 1 states Louisiana and Washington while New Hampshire relied heavily on Alaska's experience with 340B drug pricing to prepare for its own 340B pricing strategy.

Information Presented by Subject Matter Experts

> *"The Hepatitis C Medicaid Affinity Group has been invaluable to [state's] ability to ramp up treatment for incarcerated individuals. Due in part to connections made through the Affinity Group, we were able to access 340B pricing, participate in provider training, and open up treatment for hepatitis C." – Affinity Group participant –*
>
> *"It finally just all came together and I had [the Affinity Group] to help coordinate those initial meetings and just really get things going…without having been a part of that group…it would've been extremely hard to get 340B in the prison system here." – Affinity Group participant –*

States also found the information presented during monthly webinars and in-person convenings by subject matter experts informative and useful for strategy implementation (91%). Speakers included direct service providers, such as clinicians providing hepatitis C care, researchers that analyzed the cost-effectiveness of screening and treatment approaches, and policymakers and program implementers at federal, state, and local levels. In some cases, states adopted approaches that were first introduced in these sessions; both Alaska and New Hampshire, for example, adopted 340B drug pricing strategies in correctional settings after Affinity Group presentations.

Some of the most well-received webinars according to post-webinar surveys include:

- *Innovative Testing and Treatment Models:* Presentations on the Oklahoma State University Telemedicine Van and the University of San Francisco DeLIVER Van highlighted strategies for testing and treating priority populations, including individuals in rural areas and PWID.

- *Pharmacist-led Treatment Models*: Presentations on pharmacist-led models in prison systems from the Virginia Department of Corrections described how this strategy can help expand treatment access.
- *Hepatitis C and the Native Population*: This presentation by representatives from the Indian Health Service and the Northwest Indian Public Health Board highlighted disparities in hepatitis C outcomes and strategies for improving access through ECHO models. Participants found the content useful given that Native populations had not been a focus in their elimination efforts.

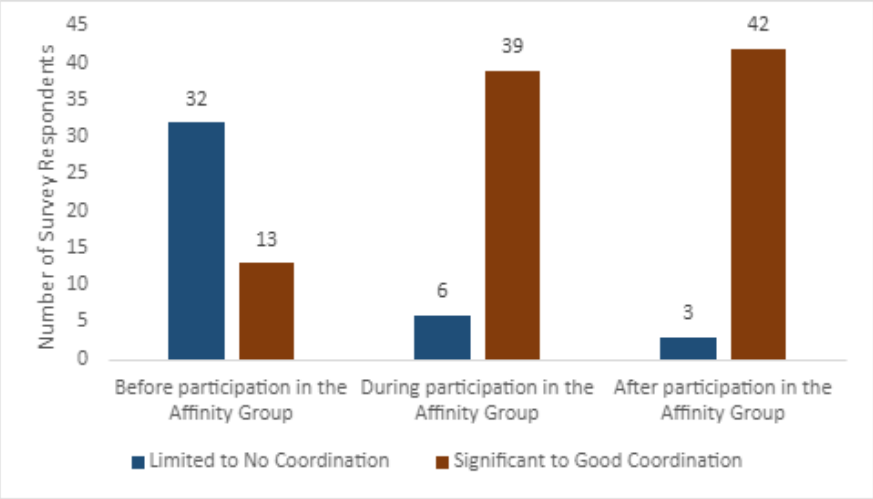
> *"I liked the webinars because you had a range of topics. When we discussed the Netflix subscription model, that probably isn't in our future right now, but I really liked hearing about the stuff that people did around that, hearing how it could work or how it doesn't work." - Affinity Group participant –*

Collaboration across Agencies within a State

Another goal of the Affinity Group was to improve coordination between state agencies, including Medicaid programs, public health agencies, corrections agencies, and other state-specific partners. In general, survey respondents across all three years reported that perceived coordination increased because of their participation in the Affinity Group and that they expected this level of coordination to continue (Figure 12). Of 45 total respondents, 39 (90%) reported experiencing good coordination during the Affinity Group; just 13 respondents (29%) reported having good coordination beforehand. In a survey of Year 1 and Year 2 states no longer participating in the group conducted during Year 3, 90% reported that the Affinity Group had supported continued collaboration within their states.

> *"The Affinity Group brought public health and Medicaid together in a room monthly and made the inequities of Medicaid restrictions visible to our Medicaid partners. I believe that drove them to push for change." – Affinity Group participant –*

Figure 12: Level of Coordination Between State Partners through Participation in the Hepatitis C Medicaid Affinity Group (N=45; Years 1-3)



Source: Survey Data, Hepatitis C Affinity Group States, Years 1-3.

Outcomes Measure Reporting

Through participation in the Affinity Group, states calculated baseline outcome measures to help monitor screening and treatment rates amongst the Medicaid population and identify gaps in access to care; thirteen states across all three years reported baseline outcome measures. Baseline data were reported for the year prior to the states' participation in the Affinity Group. On average, there were relatively low baseline screening and treatment rates in the states' Medicaid populations. The state average in adult Medicaid hepatitis C screening rates was approximately 7% (ranging from 4%-23%), and the state average in treatment rates among those who tested positive was 19% (ranging from 2%-42%).[1] These findings reflect the ongoing challenges states face in completing the care cascade of screening, linkage to care, treatment, and cure for Medicaid beneficiaries with hepatitis C.

According to the survey results, over 60% of states across all years indicated that the outcome measures were valuable or very valuable. While other aspects of the Affinity Group had a greater impact, states reportedly appreciated the process to support data-driven approaches. Virginia indicated that the treatment rate uncovered through outcome measure reporting motivated efforts to streamline DAA PA processes, and Idaho used measures to evaluate the impact of Medicaid expansion on hepatitis C screening and treatment. Other states may have found that the burden of outcomes measure reporting was not worth the benefit, especially given the challenges in analyzing Medicaid claims data

[1] Given most states participated in the Affinity Group just one year, we did not conduct a trend analysis.

and the lack of formalized, hepatitis-C related continuous quality improvement (CQI) processes within Medicaid.

4. Looking Forward: Recommendations for Future Efforts

Affinity Group states have made significant advancements over the last three years toward eliminating hepatitis C. As the population most disproportionately affected and at highest risk for hepatitis C has largely shifted from baby boomers to young PWID and other populations, states have adopted novel screening and treatment approaches. However, continued innovation and funding are needed to expand and sustain progress. HHS can support state efforts through technical assistance, funding, and aligned policies.

A. State Strategy Recommendations

Remove Medicaid Sobriety Restrictions and Streamline PA Processes

Twenty-eight states still have some type of sobriety restrictions in place, such as required abstinence for at least a month or required referrals to a behavioral healthcare provider before treatment with DAAs.[10] States maintain these restrictions despite the fact that SVR rates for PWID are close to 90%,[28] creating barriers to treatment access for those most at risk for hepatitis C. While states may face increased medication costs in the short run, they can make the case to policymakers and funders that DAA treatment is highly effective for PWID, and that they can reduce transmission, thus decreasing long-term healthcare costs through better access.

States can also address lengthy and complicated PA processes that delay treatment, even in states without Medicaid DAA restrictions. PA processes are often inconsistent across managed care plans and payers, leading to additional complexity and administrative burdens. Simplifying and aligning PA processes across payers can encourage more providers to prescribe DAAs and ensure timely treatment for individuals with hepatitis C. Once again, states should emphasize that treating more people with hepatitis C can reduce transmissions and long-term health care costs due to liver failure and hepatocellular carcinoma when promoting these policy changes.[29] Existing research indicates that Medicaid programs can save close to $16,000 per individual via DAA treatment, and states can use the Hep C State Policy Simulator to develop state-specific savings calculations.

Expand Co-Located Treatment Services and Treatment in Correctional Settings

While screening for hepatitis C in SSPs and OTPs has become more commonplace, these service sites still struggle to directly treat people with hepatitis C and provide the related medical case management. The Medicaid SUD waiver, issued in 2017, provides an opportunity for states to incorporate this care into non-traditional settings and improve outcomes for Medicaid beneficiaries.[30] States should apply for and leverage the Medicaid SUD waiver to develop innovative approaches for funding treatment in non-traditional

settings. In addition, states should work with OTPs/SSPs to identify and address barriers to billing and workflow issues.

Similarly, by treating individuals in correctional settings, especially in prisons where length of stay is more likely to cover a full treatment course, states can reduce community transmission and ensure timely treatment. Opt-out testing at entry and care transition coordination for individuals upon release can also facilitate needed care.

Support Patient Navigation Efforts

Individuals with hepatitis C, especially priority populations such as PWID, may need patient navigation assistance to link them to services and promote medication adherence. These patient navigators could sit at clinical sites or community-based organizations, including SSPs or OTPs, to coordinate medical appointments, provide insurance assistance, connect clients to support services like housing and transportation, and, perhaps most importantly, motivate continued medication adherence through education and tools, such as pill boxes and phone reminders. The Ryan White HIV/AIDS Program (RWHAP), administered by HRSA, offers an important model for this type of support. However, because hepatitis C does not have this dedicated funding stream, states and providers may need to leverage existing state and federal resources, such as grants and funding offered through SAMHSA or FQHC. In addition, Medicaid can play a role in funding these services through a variety of payment models, including FFS billing for community health worker (CHW)/navigator services, health home models, bundled payments, and managed care plan capitated payments. Patient navigators should be fully incorporated into multidisciplinary care teams and supported through training, certification, and supervision.

Address Disparities in Care and Health Outcomes

Many states do not collect data on how hepatitis C impacts various populations due to lack of demographic and risk factor data in their surveillance systems. However, states have expressed interest in improving health equity and addressing known disparities related to race, ethnicity, and other social determinants of health (e.g., housing, mental health, and substance use). States can improve laboratory reporting by adding demographic and social risk factor fields to reporting forms and systems and training and funding providers to submit these data. More robust reporting and data management systems can ultimately help states better identify disparities to inform interventions and measure their effectiveness.

When addressing disparities, states should take a broad approach by supporting communities, aligning efforts, and changing policies and practices that are barriers to health equity. This will require enhancing partnerships across healthcare, social services and public health, engaging community groups that work with disproportionately impacted

populations, and supporting programs that address social determinates of health, such as housing, education, employment, transportation, and food assistance. States can also support health equity efforts by providing platforms for shared learning across organizations and agencies and disseminating best practices and related implementation toolkits.

Engage in Targeted Provider Outreach and Identify Provider Champions

States can adopt targeted approaches to increase provider capacity, such as using Medicaid claims and surveillance data to identify providers with low screening and treatment rates in areas with a high prevalence of hepatitis C. Direct outreach that involves sharing data with providers may encourage them to increase treatment access. Additionally, states that have lifted prescriber restrictions can engage primary care providers like Federally Qualified Health Centers (FQHCs) to screen and treat for hepatitis C. Changes in clinical protocol often require a clinician "champion" within a healthcare system to develop and encourage the adoption of new processes and provide ongoing mentoring for providers new to hepatitis C treatment. As part of their targeted provider outreach, states can identify and contact clinical leaders and support them in increasing the screening and treatment capacities of their agencies. States can also work with clinical champions to develop materials to educate providers on statewide hepatitis C policy changes. Funding for ongoing mentoring through ECHO-like models or state-specific warm lines could also assist in sustaining capacity-building efforts.

Use Data Systems and Quality Measures to Drive Progress

Electronic health records can also motivate change within clinical settings through screening prompts and streamlined medication workflows. States can incentivize these upgrades through financial assistance or technical assistance on effective health IT tools and strategies for working with vendors.

States may also benefit from the creation of standardized hepatitis C quality measures to monitor the quality of hepatitis C care of r Medicaid beneficiaries. States readily track the utilization of DAAs within Medicaid and correctional settings, but this method has limitations. First, greater DAA use may be driven by an increase in infections as opposed to an effective treatment policy. In addition, this number does not provide information on how a state is addressing the overall need for care. Conversely, screening, treatment, and cure rates illustrate the percent of the eligible population that has been screened and/or treated and has been prescribed treatment and/or achieved SVR. While public health agencies typically use this method when developing care cascades, state Medicaid programs face greater challenges in analyzing claims data for quality of care purposes.

States should also continue efforts to combine data sources across state agencies, including Medicaid, public health (i.e., surveillance), corrections, and community providers to develop and monitor comprehensive hepatitis C care cascade dashboards; academic partnerships can assist in facilitating data access and analysis.

B. Recommendations for HHS

Supporting State Strategies

HHS can support the above efforts through expanded technical assistance and funding as follows.

- *Co-location of services:* HHS can identify and disseminate lessons learned from the application of the Medicaid SUD waiver and best practices related to hepatitis C screening and treatment in SSPs/OTPs to help drive state progress. States also indicated they need additional support in calculating the cost-effectiveness of offering services in SSPs/OTPs. HHS-supported analyses could point to long-term financial benefits for the state through the early detection and treatment of hepatitis C. In addition, HHS can work with states to support providers in achieving sustainable business models for hepatitis C screening and treatment, including billing guidance for SSPs/OTPs and strategies for integrating care services into workflows and data systems.
- *Clinical quality measures:* HHS can support data efforts and incentivize improved access, quality of care, and health outcomes through the development and use of hepatitis C Medicaid clinical quality measures for screening, linkage to care, treatment, and cure.
- *Health disparities:* HHS is poised to provide technical assistance to states in terms of addressing health disparities; states may also be better able improve surveillance systems and identify disparities through increased federal funding
- *Patient navigation:* HHS can also support patient navigation efforts through additional funding opportunities, especially through payer coverage and reimbursement, and promoting lessons learned and best practices from other disease initiatives, such as programs addressing HIV.
- *Promote health IT tools:* In partnership with states, HHS can provide financial and/or technical assistance to incentivize health IT tools for providers that encourage hepatitis C screening and treatment.

Future Affinity Groups

While feedback on the role of the Affinity Group in advancing state strategies was generally positive, both Mission Analytics Group and individual states identified opportunities to improve future efforts. For one, participants reported that there are trade-offs between broad Affinity Groups versus those with a narrower focus. The HIV Health Improvement Affinity Group, implemented in 2017 with 19 states, focused on data sharing across state Medicaid and public health programs for care cascade development. This defined focus facilitated common technical assistance efforts and the tracking of progress over time. Conversely, participants in the Hepatitis C Medicaid Affinity Group worked on strategies ranging from payment reform to provider training, meaning that some states may have been less engaged with the Affinity Group because not all of its foci were relevant to their individual strategies. Selecting more specific topics might generate more collaboration, but state participation may decrease if the scope of the project is more limited.

Many state participants highlighted the value of engaging with their peers through the annual in-person convenings and state action plan updates during the monthly calls. However, states were often hesitant to share questions and ideas in large group calls and sessions. HHS should therefore ensure adequate time for informal, small group discussions when planning Affinity Group activities. For example, the use of online break out rooms, made more common due to the COVID-19 pandemic, can promote informal discussions in virtual settings. HHS can also allot time for individual state teams to collaborate, especially when multiple agencies attend webinars or conferences.

HHS should also encourage ample state participation in new affinity groups, especially from states that need additional support, by identifying potential barriers to participation and developing recruitment plans that respond to those barriers. Email blasts through federal partner listservs, targeted outreach at conferences and through individualized emails and calls, and state-specific outreach materials may all be part of recruitment plans, depending on state needs.

Lastly, states were provided with a small stipend during Year 3 of the Affinity Group after such a recommendation from Year 1 and 2 states. States indicated that this stipend helped support staff in coordinating efforts and moving action items forward. They also reported using the stipend on Project ECHO efforts, social media advertising, radio ads for hepatitis C media awareness campaigns, gift card incentives for survey respondents, partnerships with community partners, and hepatitis C rapid testing kits for SSPs; the continued use of stipends in Affinity Groups could motivate state participation and cover the cost of project activities.

APPENDIX A: END–OF–YEAR SURVEY

All state participants who attended at least one monthly webinar will be encouraged to complete the survey.

1. Which option best represents your state agency type?

   ☐ Medicaid program ☐ Public health department ☐ Corrections agency ☐ Behavioral health agency ☐ Other: _____

2. State name (drop down)

3. During the time you participated in the Affinity Group, please rate your progress in the following areas: *(Year 3 only)*

	N/A*	**No progress**	**Minimal progress**	**Neutral**	**Fair progress**	**Significant progress**
Provider training (e.g., Project ECHO)						
340B pricing						
DAA payment reform (e.g., modified subscription payment model)						
Removal of restrictions for hepatitis C treatment						
Removal of prior authorization for hepatitis C treatment						
Expanded treatment sites or services (e.g., integration of treatment in behavioral health settings)						
Data analysis (e.g., DUA established, calculated cascade of care, mapped location of prescribing providers)						
Other (please describe):						

** Not a planned activity in your state*

4. How much did the Affinity Group contribute to the progress your state made on your Action Plan and/or other strategies described in question 3?

   ☐ Without the Affinity Group, my state would have made little progress

   ☐ The Affinity Group facilitated/expedited the activities, but we would have accomplished our goals on our own eventually

   ☐ The Affinity Group had little effect on my state's progress

5. Please rate **the level of coordination between state partners** (e.g., Medicaid, public health, corrections, behavioral health) that participated in the Affinity Group. Significant coordination means sharing of data, joint decision-making, partnership on initiatives, and/or frequent communication.

	No coordination	**Limited coordination**	**Good coordination**	**Significant coordination**
Coordination before the Affinity Group	☐	☐	☐	☐
Coordination during the Affinity Group	☐	☐	☐	☐
Anticipated level of coordination after the Affinity Group	☐	☐	☐	☐

6. Please select the response that best reflects your experiences working with other states that participated in the Affinity Group.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I was pleased with the level of state engagement and questions on the monthly webinars	☐	☐	☐	☐	☐
I communicated with other states about their hepatitis C-related activities outside of the monthly calls and in-person convenings	☐	☐	☐	☐	☐
Other states gave me ideas for activities we could implement in my own state	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My state provided ideas or guidance to other states working on similar initiatives	☐	☐	☐	☐	☐
I did not find other states' activities relevant to activities in my own state	☐	☐	☐	☐	☐

7. Please rate how valuable you found various aspects of the Hepatitis C Medicaid Affinity Group overall:

	Don't know or N/A	Not valuable	Minimally valuable	Neutral	Valuable	Very valuable
Guidance from federal partners	☐	☐	☐	☐	☐	☐
Information presented by other states in the group	☐	☐	☐	☐	☐	☐
Information presented by subject matter experts	☐	☐	☐	☐	☐	☐
Outcomes measures reporting	☐	☐	☐	☐	☐	☐
Support and technical assistance provided by the Mission facilitators	☐	☐	☐	☐	☐	☐
Development of Logic Model and Action Plan	☐	☐	☐	☐	☐	☐
Updates on our state's Action Plan on monthly webinars	☐	☐	☐	☐	☐	☐
Increased collaboration opportunities within our state	☐	☐	☐	☐	☐	☐
Resource Catalog	☐	☐	☐	☐	☐	☐

8. Please select the response that best reflects the impact of the challenges you faced in the implementation of your Action Plan.

	No impact	Minimal impact	Moderate impact	Significant impact
Staff turnover	☐	☐	☐	☐
Lack of engagement from state/department leadership	☐	☐	☐	☐
Lack of engagement from partner agency	☐	☐	☐	☐
COVID-19	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐

9. Is there anything else that you would like to say about challenges you faced?

   _____

10. Did your state receive the $10,000 stipend? *(Year 3 only)*

    ☐ Yes ☐ No ☐ Not sure

11. If yes, can you describe how you used/plan to use your stipend funds? *(Year 3 only)*

    _____

12. Is there anything else that you would like to say about how your participation in the Affinity Group supported hepatitis C screening and treatment?

    _____

13. Do you have any suggestions for improving the Affinity Group or similar efforts?

    _____

APPENDIX B: YEAR 3 STATE INTERVIEW PROTOCOL

1. Please briefly describe the activities you planned to implement during the Affinity Group. Which activities did you accomplish? Did you implement any activities that you had not initially planned?
2. Did the Affinity Group support implementation? If so, how? *[probe: monthly webinars, technical assistance from federal partners or Mission, exchange with other states in the group, coordination with individuals from my own state]*
3. Do you think you would have made the same progress without the Affinity Group? Why or why not? What aspects of the Affinity Group did you find the most/least valuable?
4. What was (or will be) the impact of activities on screening and treatment access? How have you (or plan to) measure impact? Would you be willing to share data with us for the Affinity Group evaluation and potentially collaborate on a publication?
5. Which activities did you *not* accomplish and why not?
6. What lessons learned from implementation successes and challenges would you like to share with other states? Knowing what you know now, what would you have done differently to achieve better outcomes?

REFERENCES

1. Center for Disease Control and Prevention. Hepatitis C Questions and Answers for Health Professionals. Hepatitis C Questions and Answers for Health Professionals. Published August 7, 2020. Accessed May 21, 2021. https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm

2. Burstow NJ, Mohamed Z, Gomaa AL, et al. Hepatitis C Treatment: Where are we Now? *Int J Gen Med*. 2017;10:39-52. doi:10.2147/IJGM.S127689

3. Dickson S, Reynolds I. Estimated Changes in Manufacturer and Health Care Organization Revenue Following List Price Reductions for Hepatitis C Treatments. *JAMA Netw Open*. 2019;2(7):e196541. doi:10.1001/jamanetworkopen.2019.6541

4. World Health Organization. Hepatitis C. Published July 27, 2020. Accessed May 26, 2021. https://www.who.int/news-room/fact-sheets/detail/hepatitis-c

5. Center for Disease Control and Prevention. Hepatitis C Surveillance in the United States for 2019. Published May 26, 2021. Accessed June 18, 2021. https://www.cdc.gov/hepatitis/statistics/2019surveillance/HepC.htm

7. Taylor LE, Swan T, Matthews GV. Management of Hepatitis C Virus/HIV Coinfection Among People Who Use Drugs in the Era of Direct-Acting Antiviral–Based Therapy. *Clin Infect Dis Off Publ Infect Dis Soc Am*. 2013;57(Suppl 2):S118-S124. doi:10.1093/cid/cit326

8. Kim AY, Onofrey S, Church DR. An Epidemiologic Update on Hepatitis C Infection in Persons Living With or at Risk of HIV Infection. *J Infect Dis*. 2013;207(Suppl 1):S1-S6. doi:10.1093/infdis/jis927

9. National Viral Hepatitis Roundtable, Center for Health Law and Policy Innovation, Harvard Law School. *Hepatitis C: The State of Medicaid Access. 2017 National Summary Report.*; 2017. https://stateofhepc.org/wp-content/uploads/2017/10/State-of-HepC_2017_FINAL.pdf

11. Lu CY, Ross-Degnan D, Zhang F, et al. Cost Burden of Hepatitis C Virus Treatment in Commercially Insured Patients. *Am J Manag Care*. 2019;25(12):e379-e387.

12. Bruggmann P, Grebely J. Prevention, Treatment and Care of Hepatitis C Virus Infection Among People Who Inject Drugs. *Int J Drug Policy*. 2015;26 Suppl 1:S22-26. doi:10.1016/j.drugpo.2014.08.014

13. Beckman AL, Bilinski A, Boyko R, et al. New Hepatitis C Drugs Are Very Costly And Unavailable To Many State Prisoners. *Health Aff (Millwood)*. 2016;35(10):1893-1901. doi:10.1377/hlthaff.2016.0296

14. Thanthong-Knight S. State Prisons Fail To Offer Cure To 144,000 Inmates With Deadly Hepatitis C. Kaiser Health News. Published July 9, 2018. Accessed May 26, 2021. https://khn.org/news/state-prisons-fail-to-offer-cure-to-144000-inmates-with-deadly-hepatitis-c/

15. Megan G. Hofmeister. Estimating Prevalence of Hepatitis C Virus Infection in the United States, 2013-2016. *Hepatology*. 2019;69(2).

16. US Preventive Services Task Force, Owens DK, Davidson KW, et al. Screening for Hepatitis C Virus Infection in Adolescents and Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2020;323(10):970. doi:10.1001/jama.2020.1123

17. Kim MM, McGonigle KM. Restricted Access and Delays to HCV Treatment Among Medicaid Patients in Louisiana. *J Health Disparities Res Pract*. 2018;12(1):8.

18. Medicare Advantage Applications | CMS. Accessed July 29, 2021. https://www.cms.gov/Medicare/Medicare-Advantage/MedicareAdvantageApps

19. American Medical Association. 2019 American Medical Association Prior Authorization (PA) Physician Survey. Published online 2020. Accessed September 25, 2020. https://www.ama-assn.org/system/files/2020-06/prior-authorization-survey-2019.pdf

20. Zoratti MJ, Siddiqua A, Morassut RE, et al. Pangenotypic Direct Acting Antivirals for the Treatment of Chronic Hepatitis C Virus Infection: A Systematic Literature Review and Meta-Analysis. *EClinicalMedicine*. 2020;18. doi:10.1016/j.eclinm.2019.12.007

21. YourHealthIdaho. Medicaid Expansion. Accessed May 7, 2021. https://www.yourhealthidaho.org/medicaid-expansion/

22. National Viral Hepatitis Roundtable, Center for Health Law and Policy Innovation, Harvard Law School. Hepatitis C State of Medicaid Access Report Card: Idaho. Published online 2019. Accessed May 7, 2021. https://stateofhepc.org/wp-content/themes/infinite-child/reports/HCV_Report_Idaho.pdf 23. Idaho Department of Health and Welfare. Idaho: Final State Update to the Hepatitis C Medicaid Affinity Group. Presented April 12, 2021.

24. Magni Hamso. Effective Strategies for HCV Elimination in Idaho. Data provided to the Hepatitis C Medicaid Affinity Group April 2021.

25. Sexually Transmitted Disease Clinics. Official website of the U.S. Health Resources & Services Administration. Published April 21, 2017. Accessed March 13, 2020. https://www.hrsa.gov/opa/eligibility-and-registration/specialty-clinics/sexually-transmitted-disease/index.html

26. Health Resources & Services Administration. FAQs. HRSA 340B Drug Pricing Program: FAQs. Published April 21, 2017. Accessed March 16, 2020. https://www.hrsa.gov/opa/faqs/index.html

27. Judith Feinberg, MD. DAA Utilization Data from a Provider Mentorship Program in West Virginia. Data provided to the Hepatitis C Medicaid Affinity Group April 2021.

28. Graf C, Mücke MM, Dultz G, et al. Efficacy of Direct-Acting Antivirals for Chronic Hepatitis C Virus Infection in People Who Inject Drugs or Receive Opioid Substitution Therapy: A Systematic Review and Meta-analysis. *Clin Infect Dis Off Publ Infect Dis Soc Am*. 2020;70(11):2355-2365. doi:10.1093/cid/ciz696

29. Roebuck MC, Liberman JN. Assessing the Burden of Illness of Chronic Hepatitis C and Impact of Direct-Acting Antiviral Use on Healthcare Costs in Medicaid. *Am J Manag Care*. 2019;25(8 Suppl):S131-S139.

30. Olson D. Treatment of Hepatitis C and Substance Use Disorder: Examples and Possibilities. Presented at the Hepatitis C Medicaid Affinity Group February 8, 2021.