

Working together to improve health care quality, outcomes, affordability, and equity in Washington State

Hepatitis C Virus

November 2022

# Table of Contents

Executive Summary	3
Bree Collaborative Background	4
Hepatitis C Virus Elimination Background	5
Recommendations	7
Review of Evidence	12
Next Steps	16
Appendix A: Bree Collaborative Members	17
Appendix B: Hepatitis C Virus Charter and Roster	18
References	21

# **Executive Summary**

Hepatitis C virus (HCV) is the most common chronic blood-borne pathogen in the US.<sup>1</sup> In 2018, an estimated 59,000 Washingtonians were living with HCV, prompting Governor Inslee to issue <u>Directive of the Governor 18-13</u>: "Eliminating Hepatitis C in Washington in 2030 through combined public health efforts and a new medication purchasing approach."<sup>2</sup> Guidance for HCV, including recommendations for testing, managing, and treating HCV have been developed by the American Association for the Study of Liver Disease and the Infectious Disease Society of America.<sup>3</sup> Additionally, state and federal organizations have developed recommendations to eliminate HCV, including <u>Hep C Free Washington</u> and the U.S. Department of Health & Human Service's <u>Viral Hepatitis National Strategic Plan</u>. Despite existing recommendations for HCV prevention, testing, treatment and elimination, Washington continues to experience barriers in the care cascade, especially related to connecting people living with HCV to curative treatment.

The Bree Collaborative elected to develop recommendations for hepatitis C virus (HCV) elimination in 2022 and convened a workgroup of subject matter experts from January to November 2022. This guideline is meant to align with existing guidelines from Hep C Free Washington as well as the U.S. Department of Health and Human Services Viral Hepatitis National Strategic Plan. Specifically, recommendations focus on expanding access to HCV services and improving the care cascade through **quality metrics, care coordination, adopting non-traditional clinical models, engaging with providers, and embedding HCV services at community sites.** Recommendations are directed toward:

- Health systems leadership
- Providers (pharmacists and clinicians)
- Care coordinators
- Health insurance plans
- Public health agencies
- Legislative bodies
- Those receiving care (patients/consumers)

We summarize potential models to expand access to HCV services through a review of existing best practices, subject matter expert interviews, and published articles.

We have a rare opportunity to eliminate HCV in Washington state, given Washington state's public health and medication purchasing efforts. We should not squander this opportunity. This guideline offers additional strategies to coordinate HCV services for priority populations and ensure elimination of this serious public health threat. We hope this guideline is useful to our health care ecosystem as we achieve HCV elimination in Washington state.

# **Bree Collaborative Background**

The Dr. Robert Bree Collaborative was established in 2011 by Washington State House Bill 1311 "...to provide a mechanism through which public and private health care stakeholders can work together to improve quality, health outcomes, and cost effectiveness of care in Washington State." The Bree Collaborative was named in memory of Dr. Robert Bree, a leader in the imaging field and a key member of previous health care quality improvement collaborative projects.

Members are appointed by the Washington State Governor and include public health care purchasers for Washington State, private health care purchasers (employers and union trusts), health plans, physicians and other health care providers, hospitals, and quality improvement organizations. The Bree Collaborative is charged with identifying health care services annually with substantial variation in practice patterns, high utilization trends in Washington State, or patient safety issues. For each health care service, the Bree Collaborative identifies and recommends best-practice, evidence-based approaches that build upon existing efforts and quality improvement activities to decrease variation. In the bill, the legislature does not authorize agreements among competing health care providers or health carriers as to the price or specific level of reimbursement for health care services. Furthermore, it is not the intent of the legislature to mandate payment or coverage decisions by private health care purchasers or carriers.

See **Appendix A** for a list of current Bree Collaborative members.

Recommendations are sent to the Washington State Health Care Authority for review and approval. The Health Care Authority (HCA) oversees Washington State's largest health care purchasers, Medicaid, and the Public Employees Benefits Board Program, as well as other programs. The HCA uses the recommendations to guide state purchasing for these programs. The Bree Collaborative also strives to develop recommendations to improve patient health, health care service quality, and the affordability of health care for the private sector but does not have the authority to mandate implementation of recommendations.

For more information about the Bree Collaborative, please visit: <u>www.breecollaborative.org</u>.

Bree Collaborative members identified hepatitis C virus as a priority improvement area and convened a workgroup to develop evidence-informed standards. The workgroup met from January to November 2022.

See **Appendix B** for the workgroup charter and a list of members.

# **Hepatitis C Virus Elimination Background**

Hepatitis C Virus (HCV) is the most common blood-borne pathogen in the US and a leading cause of liver cancer and complications from liver disease.<sup>4</sup> HCV is a bloodborne virus that begins as an acute infection and becomes a chronic infection in most cases.<sup>5</sup> The chronic infection lasts for a lifetime if untreated. The number of acute HCV cases has been steadily increasing in the United States between 2012-2019, with an estimated 133% increase in acute cases reported in 2019 compared to 2012.<sup>6</sup> Every year HCV kills more people than over 60 other CDC-reportable infectious diseases combined, including HIV, HBV, and tuberculosis.<sup>7</sup>

In Washington, nearly 40,000 new cases of HCV were reported between 2012 to 2017, a 126% increase compared to the previous five years.<sup>8</sup> In response, Governor Jay Inslee signed executive order 18-13 to direct new public health efforts and a medication purchasing approach to eliminate HCV by 2030. Since then, the Washington Department of Health convened the Hep C Free Washington initiative, which released an initial set of recommendations for HCV elimination in 2019.<sup>9</sup>

Hepatitis C continues to disproportionately impact certain populations and communities. Nationwide, people who inject drugs, people with HIV, American Indians/Alaska Natives and African Americans experiences higher rates of HCV.<sup>10</sup> In Washington state, surveillance data from the Department of Health suggests two epidemics of chronic HCV – one among Baby Boomers and one among younger persons who likely inject drugs.<sup>11</sup> Other priority populations experiencing HCV disparities in Washington include people who have experienced incarceration, people living with HIV, African Americans, and Native Americans.<sup>12</sup>

The HCV cure cascade involves testing, diagnosis, linkage to treatment, and cure (medications called "direct acting antivirals" or DAAs can cure almost everyone living with HCV). The US Preventative Services Task Force recommends screening for HCV infection in all adults aged 18 to 79.<sup>13</sup> Once a patient has a reactive screening test (an antibody test), they are tested for current infection via a PCR or RNA test. If the RNA test is positive, the AASLD/IDSA guidelines recommend linking patients to a healthcare provider able to treat HCV and prescribe direct acting antivirals.<sup>14</sup>

While the cure cascade for HCV is well-defined, disparities in testing and treatment prevent many patients from accessing treatment. The greatest gap occurs between diagnosis and treatment. In Washington, only an estimated 12% of patients with diagnosed HCV infections start direct acting antiviral treatment.<sup>15</sup> Potential barriers preventing linkage to care include slack of providers willing to treat HCV, hesitancy to seek care due to past negative experiences with healthcare (often related to experiences of stigma and shame due to substance use), challenges navigating traditional health care settings (e.g., difficulty with appointments and health care literacy), and life domain issues that interfere with accessing care (e.g., experiences of homelessness and food insecurity that cause HCV treatment to be deprioritized in favor of more immediate needs).

# Bree Collaborative Draft Hepatitis C Virus Report and Recommendations

Given that in the cure cascade, the most significant gap occurs between diagnosis and treatment, this guideline focuses on strategies to link HCV-positive patients to care. Recommendations are meant to supplement existing treatment guidelines from the AASLD/IDSA, and viral hepatitis elimination plans from Hep C Free Washington and the US Department of Health and Human Services. The Bree recommendation focus areas are organized around priority recommendations from the Hep C Free Washington's Clinical Strategies Committee. The Bree workgroup's focus areas are detailed in **Table 1**.

Focus Areas	Goal(s)	
Metrics	<ul> <li>Incorporate Hepatitis C Virus (HCV) metrics into value-based contracts.</li> <li>Encourage increased screening and treatment for HCV.</li> </ul>	
Care Coordination and Expanding Access	<ul> <li>Provide appropriate care for people living with HCV, especially those with complex life domain issues, who experience stigma or discrimination, or other barriers to accessing care.</li> <li>Address barriers in the cure cascade from screening to treatment.</li> </ul>	
Embed HCV Care and Treatment Services in High- Impact Settings	<ul> <li>Increase the availability of HCV testing and treatment services outside of traditional clinical sites.</li> <li>Develop partnerships between providers, care coordinators, and community sites including syringe service programs and addiction treatment facilities.</li> </ul>	
Utilizing Non-Traditional Models	<ul> <li>Expand HCV testing and treatment opportunities for pharmacists and APPs.</li> <li>Adopt clinical models that involve access to HCV care and treatment via telemedicine for communities with limited access to services.</li> <li>Use innovative contracts and reimbursement models to increase the availability of HCV treatment.</li> </ul>	
Engaging Providers	• Ensure all providers, including primary care, are comfortable and willing to provide high-quality HCV care and treatment in their communities.	

# Table 1: Bree Collaborative Hepatitis C Focus Areas

# Recommendations

#### **Recommendations for Health Delivery Systems**

 Understand the background and urgency of the public health threat of HCV and efforts to eliminate this threat in WA state.

#### **Metrics**

- Develop and incorporate two HCV metrics into value-based contracts.
  - Current metrics may not/do not incentivize the need for screening and treatment
  - One metric should focus on HCV screening for adults aged 18 to 79.
  - One metric should focus on connecting people living with HCV to treatment, specifically prescription of direct acting antivirals (DAAs).
  - Incorporating these metrics in value-based contracts creates better incentives for providers and data collection for assessing our progress toward goals.

# Care Coordination

- Consider offering incentives to connect people living with HCV to treatment and care coordination services.
- Review current resources on HCV case management and care coordination.
- Offer or expand case management services for people living with HCV in high impact settings. High impact settings include settings that serve a high proportion of clientele who inject drugs, such as outreach sites, syringe service programs, substance use disorder treatment facilities, opioid treatment programs, and organizations serving people experiencing homelessness. Ensure care coordination programs address social needs.
- Embed case management services for people living with HCV in federally qualified health centers or other community clinics.
- Connect people living with HCV who have challenges accessing care to care navigation services.

# Embed HCV Access in Community Sites

- Embed HCV services outside of traditional clinical settings including syringe service programs, opioid use disorder/substance use disorder treatment centers, and communitybased organizations to serve priority populations with HCV testing, care, and treatment.
  - When possible, allow providers who treat HCV to work at these community sites instead of offering only hospital-based clinical services.

# Utilize Non-Traditional Models

- Encourage commercial pharmacies and community pharmacies to be able to promptly fill prescriptions for DAAs for all insurance types, or to communicate accessible alternative pharmacies for DAA prescriptions to the patient and prescribing clinician.
  - Educate pharmacists on how to process prescriptions for DAAs, including state preferred DAAs for patients with Medicaid

- Develop collaborative drug therapy agreements (CDTAs) and memorandum of understanding (MOU) agreements with pharmacists that allow pharmacists to treat people living with HCV.
- Expand access to clinics and providers that treat HCV, including accepting walk-in patients offering hours outside of the workday, and offering telehealth visits.

# **Engaging Providers**

- Ensure adequate training and support for all providers with prescribing authority to treat hepatitis C, including primary care providers.
- Educate physicians and pharmacists about HCV treatment, especially providers who treat related conditions including buprenorphine prescribers.
- Develop targets to treat patients with HCV and designate providers within the health system to help reach HCV targets.
  - Recognize and reward providers, teams, and clinics who provide HCV treatment to priority populations (people who inject drugs, people experiencing homelessness, etc.)
- Connect medical residents to providers currently treating HCV patients.
- Expand HCV screening. Ensure screening is offered to patients aged 18 to 79 when they access primary care.
  - Ensure that if an HCV antibody screening test is reactive in a laboratory, the lab automatically reflexes to a PCR test to confirm diagnosis.
  - Offer routine opt-out screening for HIV/HCV in the emergency department, especially when a blood draw is already indicated for the patient.
    - When possible, provide follow-up with patients who test positive the next time they interact with the health system, or by linkage to a care coordinator.
  - Screen pregnant individuals for HCV during each pregnancy.
- Offer and encourage vaccination for Hep A and Hep B.

# **Recommendations for Providers – Clinicians and Pharmacists**

# Care Coordination

- Accept new patients living with HCV, especially when referred from care coordinators or case managers.
- Follow <u>AASLD/IDSA</u> guidelines for treating HCV, while adopting a non-stigmatizing, personcentered approach. Allow for flexibility in the treatment plan for patient's needs and preferences.
- Encourage vaccination for Hep A and Hep B.
- Prescribe direct acting antivirals (DAAs) as appropriate. DAAs should be reimbursed by the patient's insurance whether or not the patient finishes the treatment course.

# Embed HCV Access in Community Sites

 Provide HCV services outside of traditional clinical settings including syringe service programs, opioid use disorder/substance use disorder treatment centers, and community centers in underserved areas.

# Utilizing Non-Traditional Models

- Connect pharmacists and physicians to facilitate collaborative drug therapy agreements (CDTAs)
- Consider providing HCV counseling as a form of medication therapy management (MTM) for reimbursement
- Consider piloting pharmacist-led HCV treatment clinics.

# Engaging Providers

- Engage with interdisciplinary networks for treating HCV that include clinicians, pharmacists, and care coordinators.
- Use resources like Project ECHO or <u>UW's Hepatitis C Online</u> training
- Understand that people living with HCV may have complex life domain issues and may not complete their course of treatment. It is possible to re-treat patients who do not complete their medication schedule the first time, or to try alternative DAAs.

# **Recommendations for Health Plans**

# **Metrics**

- Incorporate two HCV metrics into value-based contracts
  - One metric will focus on HCV screening for adults aged 18 to 79
  - One metric will focus on connecting people living with HCV to treatment, specifically prescription of direct acting antivirals (DAAs)

# Care Coordination

- Offer risk-adjusted pool payments or consider bundled payments to help support care coordination services for providing services for patients with HCV, in addition to reimbursements for medications and office visits.
- Provide equitable and accessible care coordination services for plan enrollees that help connect enrollees to HCV services and address potential social need.
  - Ensure that in-person, local care coordination services are available or reimbursed as needed.
  - Consider partnerships with community-based care coordination programs to provide these on-the-ground, field-based services.

# Embed HCV Access in Community Sites

Develop contracts that incentivize screening for HCV at community sites.

# **Utilizing Non-Traditional Models**

- Develop reimbursement models for pharmacists to treat HCV, like Medication Therapy Management (MTM) reimbursements.
- Reimburse retail pharmacies for HCV screening and testing services.

# Engaging Providers

- Reimbursement models must support reflexive PCR testing to confirm positive HCV antibody tests.
- Provide educational material to providers about treating HCV.
- Ensure plan enrollees have access to counseling and education about DAAs.
- Incentivize HCV treatment through novel reimbursement pathways.
- Cover vaccination for Hep A and Hep B.

# **Recommendations for Public Health Agencies**

# **Metrics**

- Incorporate two HCV metrics into value-based contracts with state-purchased health plans
  - One metric will focus on HCV screening for adults aged 18 to 79
  - One metric will focus on connecting HCV-positive patients to treatment, specifically prescription of direct acting antivirals (DAAs)
- Consider adding HCV metrics to the state-wide Common Measures Set. The Washington State Department of Health will champion HCV metric development.
- Consider capturing patient demographic information in HCV screening lab surveillance, including patient race, ethnicity, and language (REaL) data, exposure, housing status, and pregnancy status for reporting purposes.

# Care Coordination

- Consider providing sustainable funding for HCV care coordination, case management training, and community organizations that address HCV. Sustainable funding may come from CDC, CMS, certified agencies that provide Title 19 case management, or funds from the recent opioid settlement.
  - Ensure any funded care coordination programs offer on-the-ground, field-based services that address social needs as well as medical needs.
  - Ensure funding for HCV care coordination can be used to conduct non-clinical work, including connecting patients to community services and meeting patient's social needs that prevent them from completing treatment.
  - Consider partnering with community-based organizations to expand access to case managers in the community.

# Embed HCV Access in Community Sites

- Consider partnering with community-based organizations to expand HCV services to community sites including syringe service programs, opioid use disorder/substance use disorder treatment centers, and community centers in underserved areas.
- Provide funding for HCV testing events at community sites.

# Utilizing Non-Traditional Models

- Continue discounted drug therapy agreements with HCV pharmaceutical companies
- Consider providing funding for pharmacists to provide HCV services.
- Consider HCV screening campaigns in partnership with retail pharmacies to expand access to antibody screening.
- Explore safe storage programs for HCV medications to remove barriers to care for people living with HCV who are unable to keep DAAs on their person.

# **Engaging Providers**

- Develop a region-specific provider outreach campaign with plans, providers, and local public health agencies to describe the epidemiology of HCV and current treatment guidelines.
- Provide easy-to-understand educational material about the urgency of eliminating HCV in Washington state and best practices for testing and treating HCV.
- Partner with communities to develop targeted outreach to priority populations.

# **Review of Evidence**

# Alignment with State and National Hepatitis C Elimination

Hepatitis C is a preventable public health threat. Despite being curable in a relative short course of treatment, national hepatitis C rates nearly tripled between 2011 to 2018.<sup>16</sup> In response, many public health agencies have developed plans to eliminate viral hepatitis by 2030, defined by the World Health Organization (WHO) as a 90% reduction in incidence and a 65% reduction in mortality.<sup>17</sup>

The WHO recently updated their global health sector strategy on HIV, viral hepatitis, and sexually transmitted infections for 2022-2030.<sup>18</sup> The US Department of Health and Human Services (HHS) released their third Viral Hepatitis National Strategic plan to cover 2021 – 2025.<sup>19</sup> In Washington, Hep C Free Washington developed a ten-year plan in 2019 that builds off existing work to expand HCV care across the state.<sup>20</sup>

The Bree Collaborative's Hepatitis C recommendations build off existing priority areas from Hep C Free Washington and the Viral Hepatitis National Strategic Plan. Each focus area in this report is linked to existing priorities for HCV elimination. This report is meant to supplement existing HCV elimination plans by providing next steps to achieve HCV elimination priorities.

# **HCV Quality Metrics**

HHS: National Viral Hepatitis Plan	Hep C Free WA
4.1 Improve public health surveillance through	2. Identify data sources and strategies to strengthen the
data collection, case reporting, and investigation at	characterization of HCV disease burden in Washington
the national, state, tribal, local, and territorial	State.
health department level.	4. Identify and track data metrics using currently available
	data

To achieve HCV elimination, we must set strong targets and collect the data to measure our progress toward achieving those targets. Improving HCV metrics and surveillance has emerged as a priority for both HHS and Hep C Free Washington.

Currently, the US Preventative Services Task Force (USPSTF) recommends universal HCV screening for all adults aged 18 to 79.<sup>21,22</sup> Additionally, HCV care management recommendations from the AASLD/IDSA recommend connecting patients who screen positive to appropriate treatment.<sup>23</sup> Despite the straightforward care cascade, data on adherence is difficult to come by in Washington state. This workgroup recommends implementing HCV quality measures to track patients through the care cascade. Specifically, one metric should track HCV screening rates and one metric should track prescriptions for direct acting antivirals.

The Centers for Medicaid and Medicare Services includes a metric for screening patients for HCV in their measures inventory tool, although the metric is currently not being implemented.<sup>24</sup> The CMS recommended metric is:

# Percentage of patients age >= 18 years who received one-time antibody screening for hepatitis C virus (HCV) infection

<u>Numerator</u>: Patients who received a one-time antibody test for HCV infection <u>Denominator</u>: All patients >= 18 years of age who had at least one preventive visit OR were seen at least twice within the 12-month reporting period.

<u>Denominator exceptions</u>: Documentation of medical reason(s) for not receiving one-time screening for HCV infection (e.g., decompensated cirrhosis indicating advanced disease [i.e., ascites, esophageal variceal bleeding, hepatic encephalopathy], waitlist for organ transplant, limited life expectancy, other medical reasons) OR Documentation of patient reason(s) for not receiving one-time screening for HCV infection (e.g., patient declined, other patient reasons)

In addition to the CMS metric for screening, this workgroup recommends a metric for prescribing HCVpositive patients direct acting antivirals. There are currently no national recommendations for HCV treatment metrics. Instead, based on expert consensus this workgroup recommends the following metric which can be obtained through the Washington All-Payer Claims Database:

# Percentage of patients with a positive RNA HCV test who receive a prescription for direct acting antivirals for HCV.

<u>Numerator</u>: Patients who received a prescription for direct acting antivirals for HCV <u>Denominator</u>: All patients >= 18 years of age who have tested positive for HCV through an RNA test <u>Denominator exceptions</u>: Avoid duplicate patients who have both a positive antibody and a positive RNA test.

Both metrics can be captured using existing data from the <u>Washington All Payer Claims Database</u>.<sup>25</sup> The Washington State Department of Health can serve as the lead organization to provide support for adding HCV metrics to the state-wide Common Measures Set.

# Care Coordination and Expanding Access

<ul> <li>HHS: National Viral Hepatitis Plan</li> <li>1.5 Increase the capacity of public health, health care systems, and the health workforce to prevent and manage viral hepatitis.</li> <li>3.1 Reduce stigma and discrimination faced by people with and at risk for viral hepatitis.</li> <li>3.3 Expand culturally competent and linguistically appropriate viral hepatitis prevention, care, and treatment services.</li> <li>3.4 Address social determinants of health and co-occurring conditions.</li> </ul>	<ul> <li>Hep C Free WA</li> <li>7. Improve access to and use of clinical care and supportive services by sufficiently scaling coverage and widening the scope of community-based navigation and case management programs.</li> <li>8. Increase HCV awareness, resources, and education, and reduce stigma</li> </ul>
conditions.	
5.1 Integrate programs to address the syndemic of viral	
hepatitis, HIV, STIs, and substance use disorders.	

HCV diagnosis and treatment is often impeded by barriers to accessing care, stigma against HCV-positive patients, and social need that prevents patients from completing treatment. Care coordination or case management services can help address barriers and link patients to care.

The AASLD/IDSA, the CDC, and the Washington DOH all provide recommendations for providers to counsel HCV-positive patients.<sup>26,27,28</sup> Beyond provider counseling, studies how shown that innovative

models that take a multidisciplinary approach will likely improve treatment access and linkage to care, including patient navigation programs.<sup>29</sup>

Embedded patient navigators or care coordinators increases the rate of linkage to care despite the prevalence of patient barriers<sup>30,31,32</sup> Care coordination services are especially critical for vulnerable populations, including people who inject drugs, are marginalized or experiencing homelessness, or are uninsured. The Hepatitis Education Project, a Washington-based collaborative of patients and medical professionals, developed medical case management toolkit to offer guidance to organizations starting new program for HCV care coordination. The five-step toolkit can be implemented in clinics or community-based organizations or help guide policymakers to target funding to HCV care coordination programs.<sup>33</sup>

In addition to case management, peer supports who have previously been diagnosed with HCV can help follow new HCV patients through treatment. In one short-term project run by SouthWest Accountable Community of Health and SeaMar Clinics, 70% of patients living with HCV enrolled in a peer-support programs completed treatment, compared to 20% of patients not enrolled in the program.<sup>34</sup>

Care coordination programs are one mechanism to increase access to HCV diagnosis and treatment services. Other changes to clinical service delivery can also expand access to priority populations. Clinics can offer expanded hours and accept new HCV positive patients despite perceived barriers to care. For The AASLD/IDSA HCV treatment guidelines recommend substance use disorder/opioid use disorder treatment programs and syringe exchange programs offer routine, opt-out antibody testing and linkage to care services.<sup>35</sup> Additionally, public health programs can incorporate HCV treatment services into existing programs for HIV or sexually transmitted infections.<sup>36</sup>

Another potential strategy for connecting people to HCV services is contingency management (CM), or the use of financial incentives to ensure healthy choices. Studies have shown that contingency management is effective for substance use disorders, although legal barriers prevent the spread of CM programs.<sup>37</sup> One pilot study in New York demonstrated higher rates of HCV linkage to care using CM<sup>38</sup> although more research is needed to determine best practices for contingency management and HCV.

Providing adequate care coordination programs will require collaboration across clinics, community sites, and public health programs to reach priority populations. Specifically, care coordination programs require sustainable funding to address barriers to care. Funding may come from grants or operating budgets from CMS, CDC, HCA, or the recent opioid settlement. Alternatively, policymakers could look to HIV/AIDS care coordination programs for an example of funding mechanisms. In Washington state, the Health Care Authority has an agreement with the Department of Health to administer funds for Title XIX HIV/AIDS Targeted Medical Case Management.<sup>39</sup> A similar program or an expansion of Title XIX funds could expand case management access to people living with HCV.

HHS: National Viral Hepatitis Plan	Hep C Free WA
1.5 Increase the capacity of public health,	9. Improve access to and use of clinical care for marginalized
health care systems, and the health	populations at risk for or living with HCV through innovative
workforce to prevent and manage viral	service delivery models.
hepatitis.	10. Build the capacity of the health care workforce to diagnose and
	treat HCV.

# Integrating Pharmacists and Engaging Providers

<ul> <li>13. Improve access to HCV treatment and comprehensive healthcare.</li> <li>14. Improve the ability of people taking HCV direct-acting antivirals to complete treatment</li> </ul>
--

One barrier to HCV services is a lack of available providers to provide non-stigmatizing services. To address the lack of providers treating HCV this workgroup examined two options: engaging providers to encourage more physicians to treat HCV or integrating pharmacists in the care cascade to provide HCV treatment.

As part of engaging with providers, this workgroup recommends expanded access to HCV screening. The US Preventative Service Task Force recommends HCV screening in all adults aged 18 – 79. One strategy to expand screening includes screening for HCV in the emergency department (ED). ED screening for HCV has been studied several times and can be an effective strategy to increase HCV screening and diagnosis rates.<sup>40</sup> In accordance with the <u>American College of Emergency Physicians</u>, this workgroup does not endorse mandatory ED screening for HCV and other blood-borne pathogens,<sup>41</sup> but we do encourage routine opt-out screening for HCV/HIV, especially when a blood draw is already appropriate for the patient.

Currently, a limited number of providers will accept HCV-positive patients, especially if those patients are currently injection drug users or experiencing social barriers to treatment.<sup>42</sup> There are several models to engage providers in treating HCV. The Extension for Community Healthcare (ECHO) Project was first developed as a platform to deliver complex HCV care to underserved populations through education and inter-disciplinary education.<sup>43</sup> In 2009, the University of Washington (UW) built a telehealth ECHO Project to help bring HCV, chronic pain, and HIV/AIDS services to rural regions in the Pacific Northwest.<sup>44</sup> In addition to the ECHO project, the UW Infectious Diseases Education & Assessment (IDEA) program offers an online module to train providers on HCV treatment.<sup>45</sup>

Alternatively, pharmacists can add to the number of providers able to treat HCV through collaborative drug therapy agreements (CDTAs) and pharmacist-led clinics. CDTAs allow pharmacists to prescribe, modify, or discontinue medication therapy without having patients be seen by clinicians, although they require a physician to sign off on the agreement.<sup>46</sup> Additionally, the Section 340B of the Public Health Service Act allows eligible health systems that serve uninsured and low-income patients to purchase outpatient pharmaceuticals at low costs to stretch their resources.<sup>47</sup> The revenue gained from these drug purchasing agreements has allowed some hospitals to develop pharmacist led clinics. Additional reimbursement and program changes are required to fully integrate pharmacists on the care team. One potential next step is to compensate pharmacists for their clinical work with patients living with HCV using Medication Therapy Review, which can be performed by pharmacists with or without a CDTA and is especially effective for patients with multiple chronic conditions or complex medication therapies.<sup>48</sup>

# **Next Steps**

An estimated 65,000 Washingtonians are living with HCV, and an average of 582 HCV-associated deaths occur annually in Washington state.<sup>49</sup> In Washington state, the biggest gap in the HCV care cascade occurs between diagnosis and treatment, with Baby Boomers, people who inject drugs, people who have experienced incarceration, people living with HIV, African Americans, and Native Americans experiencing disparities in care.<sup>50</sup> Bolstering the care cascade and addressing disparities in care will require a multi-sector approach to engage providers in HCV treatment, provide care coordination services, and evaluate state-wide progress with appropriate quality metrics. This report lays out several opportunities for improvement, summarized in the figure below:

Public Health	<ul> <li>HCA: continue drug purchasing strategies, consider reimbursement for HCV care coordination similar to Title XIX Case Management for HIV.</li> <li>DOH: Continue HCV planning for priority populations, develop educational material and communication campaigns to engage providers.</li> </ul>	
Health System Leadership	<ul> <li>Healthcare Delivery Systems: Develop targets and metrics for HCV elimination, assign providers to help meet HCV goals, engage additional providers and pharmacists to increase the workforce able to treat HCV patients.</li> <li>Health Plan Leadership: Collect data on HCV screening and treatment access, onsider value-based payment models to reimburse care coordination activities or to reimburse pharmacists for threating HCV patients</li> </ul>	
Providers	<ul> <li>Clinicians: Provide non-stigmatizing care to HCV-positive patients, connect with provider peer-networks for support as needed.</li> <li>Pharmacists: Consider treating HCV patients using CDTAs, pharmacist-led clinics using 340B Drug Pricing Programs, or billing for HCV care coordination using Medication Therapy Management.</li> </ul>	

Each healthcare partner has a unique role to play in HCV elimination. We are living in a unique moment where HCV elimination is possible through collaboration and alignment across healthcare stakeholders. We hope this report supplements existing state and national plans to eliminate HCV by providing a framework for expanding access to HCV services and care coordination. Future work from Hep C Free Washington will continue to inform HCV elimination activities, including support strategies for connecting with opioid treatment programs, improve access in rural communities, and reach further priority populations including people who have experienced incarceration.

Member	Title	Organization
Susie Dade, MS	Patient Advocate	
David Dugdale, MD, MS	Medical Director, Value Based Care	University of Washington Medicine
Gary Franklin, MD, MPH	Medical Director	Washington State Department of Labor and Industries
Stuart Freed, MD	Chief Medical Officer	Confluence Health
Mark Haugen, MD	Family Medicine	Walla Walla Clinic
Darcy Jaffe, MN, ARNP, NE-BC, FACHE	Senior Vice President, Safety & Quality	Washington State Hospital Association
Sharon Eloranta	Medical Director, Performance Measurement and Care Transformation	Washington Health Alliance
Norifumi Kamo, MD, MPP	Internal Medicine	Virginia Mason Franciscan Health
Angie Sparks, MD	Chief Medical Officer, Community Plan	UnitedHealthcare
Wm. Richard Ludwig, MD	Chief Medical Officer, Accountable Care Organization	Providence Health and Services
Greg Marchand	Director, Benefits & Policy and Strategy	The Boeing Company
Kimberly Moore, MD	Associate Chief Medical Officer	Franciscan Health System
Carl Olden, MD	Family Physician	Pacific Crest Family Medicine, Yakima
Drew Oliveira, MD	Executive Medical Director	Regence BlueShield
Mary Kay O'Neill, MD, MBA	Partner	Mercer
Kevin Pieper, MD	Chief Medical Officer	Kadlac Medical Center
Susanne Quistgaard, MD	Medical Director, Provider Strategies	Premera Blue Cross
John Robinson, MD, SM	Chief Medical Officer	First Choice Health
Jeanne Rupert, DO, PhD	Provider	The Everett Clinic
Hugh Straley, MD (Chair)	Retired	Medical Director, Group Health Cooperative; President, Group Health Physicians
Shawn West, MD	Medical Director	Embright, LLC
Judy Zerzan, MD, MPH	Chief Medical Officer	Washington State Health Care Authority

# Appendix A: Bree Collaborative Members

# Appendix B: Hepatitis C Virus Charter and Roster

# The Bree Collaborative Hepatitis C Charter and Roster

# **Problem Statement**

Hepatitis C virus (HCV) is the most common chronic blood-borne pathogen in the US and a leading cause of complications from chronic liver disease.<sup>1</sup> In 2018, an estimated 59,100 Washingtonians were living with HCV, prompting Governor Inslee to issue Directive of the Governor 18-13: "Eliminating Hepatitis C in Washington in 2030 through combined public health efforts and a new medication purchasing approach."<sup>2</sup>

#### Aim

To increase evidence-informed screening, monitoring, and access to treatment for Hepatitis C virus (HCV) to reduce the burden of HCV in Washington state.

# Purpose

To propose evidence-informed recommendations to the full Bree Collaborative on achieving HCV elimination including:

- Monitoring HCV prevalence and treatment using existing metrics or through new data strategies.
- Improving access to patient-centered preventative and universal screening services for HCV.
- Improving equitable access to HCV treatment and intervention services.
- Building clinical capacity and simplifying clinical workflows to diagnose and treat HCV.
- Identifying engaging, and treating underserved patients with HCV.
- Training and incentivizing primary care providers on how to treat HCV.
- Increasing HCV awareness, education, and reducing stigma.
- Engaging pharmacists as a care team partner.
- Developing reimbursement models to reach patients with HCV outside of traditional delivery systems.

# **Duties & Functions**

The workgroup will:

- Research evidence-informed and expert-opinion informed guidelines and best practices for screening, monitoring, and treating HCV (emerging and established).
- Identify current barriers and future opportunities for implementing interventions.
- Consult relevant professional associations and other stakeholder organizations and subject matter experts for feedback, as appropriate.
- Align with other related state-wide initiatives and Hep C Free Washington.

<sup>&</sup>lt;sup>1</sup> US Preventative Services Task Force (2020). Screening for Hepatitis C Virus Infection in Adolescents and Adults. JAMA. doi:10.1001/jama.2020.1123

<sup>&</sup>lt;sup>2</sup> HEP C Free Washington (2019). Plan to Eliminate Hepatitis C in Washington State by 2030. http://www.doh.wa.gov/HepCFreeWA

# Bree Collaborative Draft Hepatitis C Virus Report and Recommendations

- Maintain an equity lens while developing recommendations.
- Meet for approximately nine months, as needed.
- Provide updates at Bree Collaborative meetings.
- Post draft report(s) on the Bree Collaborative website for public comment prior to sending report to the Bree Collaborative for approval and adoption.
- Present findings and recommendations in a report.
- Recommend data-driven and practical implementation strategies including metrics or a process for measurement.
- Create and oversee subsequent subgroups to help carry out the work, as needed.
- Revise this charter as necessary based on scope of work.

#### Structure

The workgroup will consist of individuals confirmed by Bree Collaborative members or appointed by the chair of the Bree Collaborative. The Bree Collaborative director and program coordinator will staff and provide management and support services for the workgroup.

Less than the full workgroup may convene to: gather and discuss information; conduct research; analyze relevant issues and facts; or draft recommendations for the deliberation of the full workgroup. A quorum shall be a simple majority and shall be required to accept and approve recommendations to send to the Bree Collaborative.

# Meetings

The workgroup will hold meetings as necessary. Bree Collaborative staff will conduct meetings, arrange for the recording of each meeting, and distribute meeting agendas and other materials prior to each meeting. Additional workgroup members may be added at the discretion of the Bree Collaborative director.

Name	Title	Organization
Abha Puri, MPH	Program Manager	Community Health Plan of Washington
Emalie Huriaux, MPH	STD, Adult Hepatitis, and Syringe Service Program (SSP) Manager	Washington State Department of Health
John Scott, MD, MSc	Professor, Department of Medicine Medical Director, Telehealth Associate Medical Director, Liver Clinic	University of Washington
Jon Stockton, MHA	Adult Viral Hepatitis Coordinator	Washington State Department of Health
Judith Tsui, MD, MPH	Associate Professor, Department of Medicine Director, UW Medical Student Addiction Research Program	University of Washington
Melda Velasquez	Service Line Director	Kadlec Regional Medical Center
Omar Daoud, PharmD	Director of Pharmacy	Community Health Plan of Washington

# Bree Collaborative Draft Hepatitis C Virus Report and Recommendations

Patrick Judkins	Education and Outreach Specialist,	Thurston County Health
	Disease Control and Prevention	Department
Ryan Pistoresi, PharmD, MS	Assistant Chief Pharmacy Officer	WA Health Care Authority
Wedny Wong, BSc	Ambulatory Clinical Pharmacist	Providence Health and Services
Vania Rudolph, MD, MPH	Addiction Medicine Specialist	Swedish Health Centers
Yumi Ando, MD	Gastroenterology Specialist	Kaiser Permanente

# References

<sup>1</sup> US Preventative Services Task Force. 2020. Screening for Hepatitis C Virus Infection in Adolescents and Adults: US Preventative Services Task Force Recommendation Statement. JAMA. doi:10.1001/jama.2020.1123 <sup>2</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington Department of Health. https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1 <sup>3</sup> American Association for the Study of Liver Disease and Infectious Disease Society of America. 2020. HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. https://www.hcvguidelines.org/ <sup>4</sup> US Preventative Services Task Force. 2020. Screening for Hepatitis C Virus Infection in Adolescents and Adults: US Preventative Services Task Force Recommendation Statement. JAMA. doi:10.1001/jama.2020.1123 <sup>5</sup> World Health Organization. 2022. Hepatitis C Key Facts. Accessed August 2022. Available: https://www.who.int/news-room/fact-sheets/detail/hepatitis-c <sup>6</sup> Centers for Disease Control and Prevention. 2021. Viral Hepatitis Statistics and Surveillance: Figure 3.1 Number of reported acute hepatitis C virus infection cases and estimated infections - United States, 2012-2019. Accessed August 2022. Available: https://www.cdc.gov/hepatitis/statistics/2019surveillance/Figure3.1.htm <sup>7</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington Department of Health. https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1 <sup>8</sup> Office of the Governor. 2018. Directive of the Governor 18-13: Eliminating Hepatitis C in Washington by 2030 through combined public health efforts and a new medication purchasing approach. Accessed January 2022. Available: https://www.hca.wa.gov/assets/program/hep-c-elimination-gov-directive-18-13-final.pdf <sup>9</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington Department of Health. https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1 <sup>10</sup> US Department of Health and Human Services. 2021. Viral Hepatitis National Strategic Plan Overview. Accessed July 2022. Available: https://www.hhs.gov/hepatitis/viral-hepatitis-national-strategic-plan/national-viral-hepatitisaction-plan-overview/index.html <sup>11</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington Department of Health. https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1 <sup>12</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington Department of Health. https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1 <sup>13</sup> US Preventative Services Task Force. 2020. Screening for Hepatitis C Virus Infection in Adolescents and Adults: US Preventative Services Task Force Recommendation Statement. JAMA. doi:10.1001/jama.2020.1123 <sup>14</sup> American Association for the Study of Liver Diseases and the Infectious Diseases Society of America. 2021. HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. Accessed March 2022. Available: https://www.hcvguidelines.org/evaluate/testing-and-linkage <sup>15</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington Department of Health. https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1 <sup>16</sup> US Department of Health and Human Services. 2020. Viral Hepatitis National Strategic Plan for the United States: A Roadmap to Elimination (2021-2025). Washington, DC. Accessed July 2022. Available: https://www.hhs.gov/sites/default/files/Viral-Hepatitis-National-Strategic-Plan-2021-2025.pdf <sup>17</sup> World Health Organization. 2022. Hepatitis C Key Facts. Accessed August 2022. Available: https://www.who.int/news-room/fact-sheets/detail/hepatitis-c <sup>18</sup> World Health Organization. 2022. Global health sector strategies on, respectively, HIV, viral hepatitis, and sexually transmitted infections for the period 2022-2030. Geneva. Accessed August 2022. Available: https://www.who.int/publications/i/item/9789240053779

<sup>19</sup> US Department of Health and Human Services. 2020. Viral Hepatitis National Strategic Plan for the United States: A Roadmap to Elimination (2021-2025). Washington, DC. Accessed July 2022. Available:

https://www.hhs.gov/sites/default/files/Viral-Hepatitis-National-Strategic-Plan-2021-2025.pdf

<sup>20</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington Department of Health. <u>https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1</u>

<sup>21</sup> US Preventative Services Task Force. 2020. Screening for Hepatitis C Virus Infection in Adolescents and Adults: US Preventative Services Task Force Recommendation Statement. JAMA. doi:10.1001/jama.2020.1123

<sup>22</sup> Chopra, S & Arora, S. 2022. Screening and diagnosis of chronic hepatitis C virus infection. UpToDate.

<sup>23</sup> American Association for the Study of Liver Disease and Infectious Disease Society of America. 2020. HCV

Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. <u>https://www.hcvguidelines.org/</u><sup>24</sup> Centers for Medicare & Medicaid Services. 2022. One-Time Screening for Hepatitis C Virus (HCV) for Patients at Risk. Accessed February 2022. Available:

https://cmit.cms.gov/cmit/#/MeasureView?variantId=1477&sectionNumber=1

<sup>25</sup> Washington State Health Care Authority. 2022. Washington State All Payer Claims Database (WA-APCD). Accessed September 2022. Available: <u>https://www.hca.wa.gov/about-hca/data-and-reports/washington-state-all-payer-claims-database-wa-apcd</u>

 <sup>26</sup> American Association for the Study of Liver Disease and Infectious Disease Society of America. 2020. HCV
 Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. <u>https://www.hcvguidelines.org/</u>
 <sup>27</sup> Centers for Disease Control and Prevention. 2021. Hepatitis C Virus Infection. Accessed February 2022. Available: https://www.cdc.gov/std/treatment-guidelines/hcv.htm

<sup>28</sup> WA Department of Health. 2022. Hepatitis C. Accessed July 2022. Available: <u>https://doh.wa.gov/you-and-your-family/illness-and-disease-z/hepatitis-information/hepatitis-c</u>

<sup>29</sup> Zuckerman, A, Carver, A, & Chastain, C. 2018. Building a Hepatitis C Clinical Program: Strategies to Optimize Outcomes. Current Treatment Options in Infectious Disease. 10(431–446). https://doi.org/10.1007/s40506-018-0177-5

<sup>30</sup> Hunt, B, Ahmed, C., Ramirez-Mercado, K. 2020. Routine Screening and Linkage to Care for Hepatitis C Virus in an Urban Safety-Net Health System, 2017-2019. Public Health Reports. 136(2):219-227. doi:10.1177/0033354920969179

<sup>31</sup> Sherbuk, J., McManus, K., Knick, T., & Canan, C. 2019. Disparities in Hepatitis C Linkage to Care in the Direct Acting Antiviral Era: Findings from a Referral Clinic with an Embedded Nurse Navigator Model. Frontiers in Public Health. 7:362. DOI:10.3389/fpubh.2019.00362

<sup>32</sup> Starbird, L., Han, H., Sulkowski, M., Budhathoki, C., Reynolds, N., & Farley, J. 2018. Care2Cure: A randomized controlled trial protocol for evaluating nurse case management to improve the hepaitis C care continuum within HIV primary care. Research in Nursing and Health. DOI: https://doi.org/10.1002/nur.21903

<sup>33</sup> Hepatitis Education Project. Hepatitis C Medical Case Management Toolkit: Creating and Expanding Services. Accessed February 2022. Available: <u>https://cardeaservices.org/wp-</u>

content/uploads/2021/09/HEPHCVMCMToolkit-FINAL12.21.18.pdf

<sup>34</sup> Southwest Accountable Community of Health. 2021. Hep-C Cures Project Sees Success. Accessed April 2022. Available: <u>https://www.southwestach.org/news/hep-c-cures-project-sees-success</u>

<sup>35</sup> American Association for the Study of Liver Disease and Infectious Disease Society of America. 2020. HCV

Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. https://www.hcvguidelines.org/

<sup>36</sup> Falade-Nwulia, O., Sutcliffe, C., Mehta, S., Moon, J., Chander, G., Keruly, J., Katzianer, J., Thomas, D., Moore, R., & Sulkowski, M. Hepatitis C Elimination in People With HIV is Contingent on Closing the Gaps in the HIV Continuum. Open Forum Infectious Disease. doi: 10.1093/ofid/ofz426

<sup>37</sup> Glass, J., Nunes E., & Bradley, K. 2020. Contingency Management: An Effective Treatment For Substance Use Disorders and the Legal Barriers that Stand in its Way. Health Affairs. Accessed November 2022. Available: <u>https://www.healthaffairs.org/do/10.1377/forefront.20200305.965186/</u>

<sup>38</sup> Norton B.L, Bachhuber, M.A, Singh R., Agyemang L., Arnsten J.H, Cunningham C.O., & Litwin A.H. 2019. Evaluation of contingency management as a strategy to improve HCV linkage to care and treatment in persons attending needle and syringe programs: A pilot study. Int J Drug Policy. Jul; 69: 1-7. doi: 10.1016/j.drugpo.2019.02.009

<sup>39</sup> WA Department of Health. 2021. Ryan White Part B HIV Community Services Provider Manual. Accessed August 2022. Available: <u>https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs//410-080-</u> <u>HIVCommunityServicesProviderManual2021.pdf</u>

<sup>40</sup> Ford J., Chechi T., Toosi K., Mahmood B., Meehleis D., Otmar M., Tran N., & May L. 2021. Universal Screening for Hepatitis C Virus in the ED Using a Best Practice Advisory. West J. Emerg Med. May; 22(3):719-725. doi: 10.5811/westjem.2021.1.49667

<sup>41</sup> American College of Emergency Physicians. 2021. Policy Statement: Screening for Disease and Risk Factors in the Emergency Department. Accessed September 2022. Available: <u>https://www.acep.org/globalassets/new-pdfs/policy-statements/screening-for-disease-and-risk-factors-in-the-emergency-department.pdf</u>

<sup>42</sup> Amoako, A., Ortiz-Paredes, D., Engler, K., Lebouche, B., & Klein, M. 2021. Patient and provider perceived barriers and facilitators to direct acting antiviral hepatitis C treatment among priority populations in high-income countries: A knowledge synthesis. International Journal of Drug Policy. 96. https://doi.org/10.1016/j.drugpo.2021.103247

<sup>43</sup> Arora, S., Kalishma, S., Thornton, K., Dion, D., Murata, G., Deming, P., Parish, B., Brown, J., Komaromy, M., Colleran, K., Bankhurst, A., Katzman, J., Harkins, M., Curet, L., Cosgrove, E., Pak, W. 2010. Expanding access to hepatitis C virus treatment – Extension for Community Healthcare Outcomes (ECHO) project: disruptive innovation specialty care. Hepatology. 52(3). doi:10.1002/hep.23802.

<sup>44</sup> Scott, J., Unruh, K., Catlin, M., Merrill, J., Tauben, D., Rosenblatt, R., Buchwald, D., Doorenbos, A., Twole, C., Ramers, C., & Spacha, D. 2012. Project ECHO: a model for complex, chronic care in the Pacific Northwest region of the United States. Journal of Telemedicine and Telecare. 18(8):481-484.doi:10.1258/jtt.2012.GTH113.

<sup>45</sup> University of Washington Infections Diseases Education and Assessment. 2022. Hepatitis C Online. Accessed July 2022. Available: <u>https://www.hepatitisc.uw.edu</u>

<sup>46</sup> Washington State Pharmacy Quality Assurance Commission. 2020. Guidance on Collaborative Drug Therapy Agreements. WA Department of Health. Accessed August 2022. Available:

https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs//690327.pdf

<sup>47</sup> Health Resources and Services Administration. 2022. 340B Drug Pricing Program. Accessed August 2022. Available: <u>https://www.hrsa.gov/opa</u>

<sup>48</sup> Centers for Disease Control and Prevention. 2021. Community Pharmacists and Medication Therapy Management. Accessed August 2022. Available: <u>https://www.cdc.gov/dhdsp/pubs/guides/best-practices/pharmacist-mtm.htm</u>

<sup>49</sup> WA Department of Health. 2019. Hepatitis C in the United States and in Washington State. Accessed August
 2022. Available: <u>https://doh.wa.gov/sites/default/files/legacy/Documents/5100//420-002-epitrends2019-05.pdf</u>
 <sup>50</sup> Hep C Free Washington. 2019. Plan to Eliminate Hepatitis C in Washington State by 2030. Washington
 Department of Health. <u>https://doh.wa.gov/sites/default/files/legacy/Documents/Pubs/150nonDOH-HepCFreeWA-PlanJuly2019.pdf?uid=62f42cce08fc1</u>