NASTAD

TOOLKIT

Viral Hepatitis Testing

HEALTH SYSTEM ASSESSMENT

AUGUST 2023

CONTENTS

BRIEF PURPOSE

The Centers for Disease Control and Prevention (CDC) Division of Viral Hepatitis (DVH) has tasked each jurisdiction funded by CDC-RFA-PS21-2103 with conducting a local assessment of high-volume health systems and their current hepatitis C virus (HCV) and hepatitis B virus (HBV) screening practices. This document provides information and considerations for creating a jurisdiction-specific health system assessment (HSA). Approaches are not exhaustive but should support jurisdictions in brainstorming and producing the most appropriate HSA.

WHAT CAN THIS ASSESSMENT BE USED FOR

Through CDC-RFA-PS21-2103, jurisdictions are tasked with a short-term outcome of increased HCV and/or HBV testing in health systems (HS). The health system assessment (HSA) should be used to work toward this outcome and to identify opportunities for systems-level improvements to support reaching viral hepatitis elimination.

Why should jurisdictions conduct a health system assessment and what can be learned from them?

- Identify, describe and assess gaps in current and potential health system capacity for viral hepatitis testing.
- Identify current laboratory practices in the health system relevant to screening for and diagnosis of viral hepatitis infection
- Encourage routine/opt-out testing
    - Routine, opt-out screening has proved highly effective
    - Removes the stigma associated with HCV testing
    - Fosters earlier diagnosis and treatment
    - Reduces risk of transmission
    - Is cost-effective
- Identify challenges/gaps and factors associated with increasing testing uptake, and implementing testing strategies that promote treatment engagement, including reflex confirmation testing.
- Inform education, training, and capacity-building assistance to support increased testing for viral hepatitis, and to improve treatment engagement.
- Strengthen public health surveillance
- Improve engagement and continuity of care to treat and cure viral hepatitis
- Improve provider education on the use of technology to integrate and simplify ordering
- Improve and develop strategies to increase patient and provider awareness
- Strengthen relationships between the HD and clinical partners, including identifying local champions

Through the HSA, the institutional HCV and/or HBV screening policies and practices within the largest HS in a jurisdiction should be determined. Whichever topics are explored, practical and process-level barriers that impact implementation and completion of best practices are important to identify as a part of the HSA. The barriers and assets that most impact the uptake of HCV and/or HBV screening, testing, and treatment are useful to evaluate as well.

The findings and subsequent feedback given to the HS should support conversations around quality improvement of HCV and/or HBV screening, testing, treatment, and care. Ultimately, supporting practice changes in these high-volume settings will support achieving short-term outcomes of increasing testing in HS and longer-term viral hepatitis elimination goals.

HDs should consider collaboration with relevant professional organizations, hospital associations, licensing boards, etc. to optimize the HSA. Consulting these stakeholders on successful methodologies, dissemination, identification of appropriate strategies for engagement, and sharing/application of findings at elimination planning/coalition meetings may increase the impact of the assessment.

IMPLEMENTATION

Methodologies used for the HSA can be scaled dependent on jurisdiction resources and policies.

WHAT IS A "HEALTH SYSTEM?"

The target of the HSA are the five largest health systems in the jurisdiction, and HDs have discretion on determining which HS to include, including looking at HCV and/or HBV screening volume, patients admitted to the emergency room, alignment with elimination plan goals and priority populations. The PS21-2103 Notice of Funding Opportunity (NOFO) defines health system as "organizations of people, institutions, and resources that deliver health care services to meet the health needs of target populations. The specific definition of a health care system varies, example definitions are available on the Agency for Healthcare and Research Quality (AHRQ) website. One of the definitions used by AHRQ Compendium of U.S. Health Systems, 2016, defines HS as a system that includes at least one hospital and at least one group of physicians that provides comprehensive care (including primary and specialty care) who are connected with each other and with the hospital through common ownership or joint management. Jurisdictions can also consider "a group of Federally Qualified Health Systems that share the same Electronic Medical Records system or a group of affiliated hospitals and clinics" as a health system as indicated in the APR guidance from DVH.

Inclusion of additional sites that are critical in a jurisdiction may be considered. Beyond the highest volume HS, it may be meaningful to identify and include the HS that serve the largest communities in a jurisdiction that experience health disparities and barriers to HCV and/or HBV screening and treatment. For example, a community health center may not be one of the top five highest volume HS overall but may see the highest volume of people who use drugs (PWUD) and therefore the importance of the policies, challenges, and solutions may be most impactful for this HS. Additionally, some jurisdictions have opted to assess top regional perinatal centers as it relates to their HCV screening practices due to the strong partnerships built in response to COVID-19.

IDENTIFYING HEALTH SYSTEMS/CLINICS/HOSPITALS FOR ASSESSMENT

Epidemiology support will be necessary to accurately identify HS for the evaluation. Utilizing public health disease surveillance data, HCV and HBV laboratory tests within the jurisdiction should be categorized by ordering provider or facility, and the highest volume institutions should be selected for the assessment. A recent period for laboratory testing should be selected to maximize the impact of the HSA, with preference to more recent years. A brief time frame may yield the most accurate picture of a HS's testing practices, i.e., one to three months.

Inclusion of all reported screening tests (positive and negative), deduplicated by specimen date, and individual may yield the best indication of the number of people screened within a HS. Multiple testing instances (at the patient level) may be a better indication of testing practices of the HS, as they identify different touchpoints of clinical care and guideline application. If a jurisdiction has reportable negative anti-HCV and/or HBsAg tests, they should be included to better represent screening practices as a whole.

Example 1

All newly reported positive and negative HCV antibody (anti-HCV) screening results in 2022 within the jurisdiction identify three major academic medical HS (multi-hospital and outpatient sites), and the five hospitals in the system.

Example 2

All newly reported positive and negative anti-HCV, HCV RNA, HBsAg, and HBV DNA test results in 2019 identify two hospitals within larger health systems, one community health center, and one syringe service program (SSP).

More intra-system approaches may be utilized as well. For example, outreach to primary care and family medicine practices (or obstetric and gynecology practices, emergency departments, etc.) within each medical system may be employed. The advantage to a more targeted approach may include increased validity of responses which may give more accurate depictions of practice within the HS, as compared to a system-wide policy not always being employed in every corner of the system. Further, the subspecialties may yield personnel contacts for supporting change. Major academic medical health system assessments may be very hard to coordinate and their leadership difficult to track down. Regardless of approach, the HSA responses should be among those who can accurately answer the questions. If barriers and challenges to practice implementation are included, providers with practical knowledge of implementation would be most advantageous to engage.

TOPIC INCLUSION

The specific content for the HSA will dictate, in part, the approach jurisdictions choose to complete their assessment. At a minimum, all HSAs should gather information on current HCV and/or HBV screening and testing policies and practices, the associated barriers and challenges, and potential solutions for optimized routine testing. The assessment should take into consideration that policies may not be reflected in practice/data, and practice may not be uniform across the full HS. Prevalence of disease should also be assessed for each HS in partnership with the public health surveillance program. HS capacity and barriers to routine opt-out testing should be evaluated. The depth of topic inclusion will dictate the meaningfulness and potentially actionable conclusions from the HAS.

Additional to testing, HDs may want to include questions about linkage and treatment services in their approach. These components will facilitate future collaboration with HDs to improve the HCV and/or HBV care continuums in each jurisdiction. These areas may also be in the most need of quality improvement and technical assistance. Even if a HD does not have the current capacity to support process improvement, the HSA could inform future activities and resource allocation.

See Appendices 1 and 2 for additional details, considerations, and examples.

METHODOLOGIES

Considerations for approaches will depend on staff time and epidemiological support. Qualitative approaches will allow for a variety of activities not reliant on surveillance data and facilitate prevention staff completing activities independently. Consultation with other HD programs on similar assessments being considered could provide an opportunity to combine resources and approaches, improving completeness of responses and capitalizing on existing connections that may exist. Important to future conversations and HD initiatives is identifying a HS champion and gathering their contact information. Jurisdictions should use this outreach to foster relationships, when possible.

Questionnaire

A low resource approach is to utilize a questionnaire to collect the relevant information for this assessment. Survey platforms could be used to share a questionnaire electronically (REDCap, SurveyMonkey, etc.) or administered over the phone. Please see Appendix 3 for sample questions.

> **Considerations:** Identifying the correct person to answer questions may be challenging whether the survey is conducted telephonically or electronically. Consider contacting the practice/infrastructure administrator, the medical director of the facility or the chief medical officer of a hospital system. Existing contacts should be leveraged wherever possible, and other HD resources should be considered to facilitate connections such as the contact list to communicate changes to reportable disease requirements, and healthcare-associated infections program contacts. As with all survey efforts, it is likely that you will need to send multiple, periodic reminders to prompt survey completion, and/or work with other contacts to prompt a response. An initial introductory email may improve engagement; and to encourage completeness having a brief survey may be preferred.

Key Informant Interviews or Focus Groups

An option for HS engagement may include key informant interviews or focus groups with providers and decision-makers (such as the medical director and practice administrators) within the HS. These could also be existing champions who are well-informed about the system of services provided around viral hepatitis and may likely exist outside of HS leadership. During a key informant interview or focus group, related questions can be asked as would be addressed in a questionnaire, but the opportunity for a more in-depth conversation with follow-up questions may be possible. Prompting questions about patient flow and testing completion, for example, will

improve the HD understanding about practice implementation and true barriers for patients and providers within their jurisdiction.

> **Considerations:** Coordinating scheduling with HD and HS staff can be time intensive as can the meetings. The additional qualitative data collected from these meetings may be less precise, but will likely be more in-depth and nuanced for feedback. The creation or strengthening of a partnership may be more likely to come out of a dynamic conversation. Further, the inclusion of key informants from multiple practices/levels/roles within a HS (patients, OB/GYNs, PCPs, Hepatologists, nurses, case managers, etc.) will provide a multi-faceted picture of policy in practice in a HS.

ADDITIONAL METHODOLOGIES

The data collection tools below can be used by HDs to supplement data gathered from the questionnaire or key informant/focus group methodologies discussed above.

Review of written protocols and resources

A low-resource approach to gathering supplemental information may be to simply review the written protocols and test ordering forms used by providers. The policy may be to test all pregnant persons for a specific HBV panel during pregnancy. Is that a single item on the ordering form, or does the provider need to order each test separately? What does the laboratory Standard Operating Procedure say to do if a specimen tests positive for HCV? What if there is not enough serum to do further testing? Reviewing written resources may reveal that there are barriers to what is understood as the 'protocol' by providers versus official policy and can identify opportunities for improvement.

Disease Surveillance Data

An addition that may be considered is to utilize surveillance data to show the prevalence (proportion of individuals in a HS who were anti-HCV reactive and received an HCV RNA test). This is contingent on epidemiology resources but may yield more accurate results than what the HS can provide in a timely manner. If negative reporting is available, the scale of testing can also be assessed.

A care continuum approach to the assessment could be scaled as needed/able:

- Screening practices only: reported anti-HCV antibody; positive/negative if reportable.
- Reflex and continued care: positive/negative reported anti-HCV and HCV RNA; proportion of anti-HCV positive who receive HCV RNA testing and/or who have subsequent HCV RNA testing within the facility.
    - This may be a particular targeted part of your assessment. As an example, Hospital A says its policy is to reflex to HCV RNA for all positive anti-HCV test results – is this reflected in the data from the last month?
- Treatment practices: positive/negative HCV RNA results; any subsequent positive and negative HCV RNA results received.

Patient Interviews

Inclusion of the direct experiences of patients of the HS could yield helpful information on barriers and challenges. Personal perspectives could be collected in several ways with a separate set of questions then utilized for the HS themselves. These questions could include queries around barriers to completing testing and treatment, understanding of the diseases and/or why they were tested. Disease surveillance data could be used to identify newly reported people living with HCV and/or HBV for HD staff to call and interview about their experiences at sites, lending important feedback for HS they may not generally collect. Another consideration may be working with SSPs to interview clients that have been engaging in HS for treatment and testing. Alternatively, collaboration with the HS to work with patients could be proposed, though it may be more likely to be fraught with privacy and safety concerns.

Brief Patient Intercepts

Another way to include patient experiences would be through brief intercepts with patients. This would involve HD staff asking patients 1-2 questions as they leave the healthcare provider. This could be something like 'Have you ever been offered a test for HCV by your healthcare provider? Were you offered one today?" This requires HD staff to be on-site for a period of time but may have fewer confidentiality concerns than a full interview. A HS may be wary of this approach, as may patients. Incentives may best facilitate these interactions.

Onsite Review of Processes

A time-intensive approach could include an onsite assessment at each HS. This approach would take a detailed interview into the clinical space to tease out detailed processes such as intake, phlebotomy access, case management, and treatment. This would involve high levels of buy-in from the HS and should only be considered if equitable feedback will be provided and discussed between HD and HS staff.

Additional Data Sources

Other sources of HS data in possession of the HD could be employed to assess the prevalence and/or impacts of each HS. Administrative claims data analysis (facility, department-level analysis may be possible), for example, may yield more comprehensive results than jurisdictional surveillance data. Information on treatment data may also be available through electronic case reporting or by some other means.

FEEDBACK TO SITES AND HD PROGRAMMING

After the HSA has occurred, the HD should compose and share feedback for each HS, if applicable. This feedback may foster relationships and demonstrate health department accountability, while offering an opportunity for quality improvement discussions with the HS.

Format

Feedback could be approached as general and easy to replicate for each HS, such as a standard 'one pager' containing the most current recommendations from national organizations on screening, along with local and national resources that may be helpful to address barriers and challenges. Alternatively, feedback can be individualized to each site, highlighting the results of the HSA and any perceived gaps and viable solutions. This approach will be more time intensive yet may be more impactful.

Any document could be emailed to the contacts engaged in the HS, however, sharing results and feedback in a meeting may resonate more with the HS. Sharing feedback with HS leadership may also support institutional policy transformation.

Considerations about broader jurisdiction-level dissemination of HSA findings should be considered, presenting findings to coalitions, stakeholders, and communities as resources allow.

Information to include

No matter the content of the feedback, HDs should be intentional about creating documents/conversations that are constructive.

Included should be recommendations to improve access to routine HCV and/or HBV testing (and other included topics), and opportunities for improvement and adherence to guidelines. Examples of innovative/gold standard/best practice clinical interventions and applications may be beneficial as well.

Opportunities to collaborate should be included in the feedback, including information on local coalitions/advisory boards/elimination committees and opportunities to engage with the HD and local stakeholders. Creating a dialogue will lend itself to collaboration and partnership. Offering an opportunity for HS to commit to process improvements may be included and HS may be more likely to buy in and be held accountable. Additional avenues for collaboration could include devloping information on cost-effectiveness for partners or web-based public-facing dashboards about site-specific activities as a report card-like tool (i.e., NYC's Hepatitis C Dashboard).

HD Lessons Learned and Implications for Programming

In addition to the feedback provided to HS about what they can do to improve processes, the HD should examine the HSA findings to identify their own opportunities to support/facilitate improvements. Each jurisdiction should reflect on how the HSA can inform programming, policy changes, funding requests, etc. Additionally, HDs should consider how these findings can be incorporated in their elimination or strategic plan activities and objectives, and how changes can be measured towards elimination goals. Through the multiple components of CDC-RFA-PS21-2103, activities may be scalable or refined to address challenges, barriers, and gaps identified in the HSA.

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APPENDICES

APPENDIX 1: BEST PRACTICE OUTLINES

SCREENING (HBV AND HCV)

- Does the HS follow national guidelines for screening?
  - In which settings/practices?
  - Is testing routine and opt out? If so, what is the uptake?
- How is it ensured that each patient who is eligible to be screened is in fact screened at their next applicable appointment?
  - Electronic Health Record (EHR) reminders? Workflows to remind providers? Checklist at initial visit? Letters sent to patients to encourage their testing?
- Are there resource limitations to following a routine opt-out screening model?
- What does patient education look like at the time of testing?
- If a laboratory test is ordered, which tests are included? For anti-HCV testing, does it reflex to HCV RNA? For HBV, is it HBsAg alone, or with HBsAb and HBcAb, as well?
- Where are lab specimens drawn? Onsite or elsewhere? Are there barriers to patients receiving their labs? Are there any support or reminders to ensure patients complete their bloodwork?
- Where are lab specimens processed and how is this information reported back to the HS?
- If a patient is diagnosed with either HCV or HBV, how does the patient find out? Who tells them? What information is provided to the patient at this time?
- Are providers well equipped to interpret laboratory results? Are there champions to support non-specialists in the jurisdiction, such as Project ECHO?
- What support is given to patients regarding linkage to care after a diagnosis? Who does this work? Is there any direct or quick pipeline to treating providers so patients do not have to wait a long time? Is treatment available at the same clinic where testing was conducted?
- If a patient is diagnosed with HCV or HBV, what follow up is done to encourage care, treatment, cancer screenings, vaccinations, testing for HIV and other STIs, etc.
- What languages are supported through onsite translation services? Telephonic or remote?
- Does the HS practice a harm reduction approach to their patients care? Are providers and other staff comfortable having conversations with or about substance use and related topics? Is there a way to provide a warm hand off from patient to harm reduction resources?
- Was any education or practice guidance given to staff regarding the change in recommendations for universal testing?

VACCINATION

- Does the HS follow national guidelines for vaccinations for HBV?
  - In which settings/practices?
  - How do providers confirm who needs vaccination? Reviewing EHR? Screening for immunity? Reviewing jurisdiction's immunization registry?
  - Does provider give HBV vaccination if status is unknown? For all patients or only those at risk or patients who request vaccination?
  - Was any education or practice guidance given to staff regarding the change in recommendations for universal vaccination?
- Are there notifications in the EHR to ensure all adults are vaccinated for HBV?
  - Are there any lists generated to identify those who need vaccination to support completion of universal vaccination?
- Are vaccinations provided in office or are patients referred elsewhere? (This response will likely vary on practice)
  - If elsewhere, is it in the same building? Separate locations? To pharmacies? If pharmacies, does the provider have confirmed locations where vaccinations are provided?
- How is the patient reminded of additional doses? Texts? Calls? Reminder cards/sheets?
- What barriers do providers perceive in HBV vaccination and series completion?
- What barriers do patients experience in receiving HBV vaccination and completing the series?
- What HBV vaccination product is given to patients? Is any consideration given to different populations on selection of a 2- versus 3- dose series?

LINKAGE

- What support is given to patients regarding linkage to care after a diagnosis? When does this linkage support occur?
- Who does this work? Are these staff embedded in the clinics where diagnosis occurs? Specialists' office?
  - If specialists' office, how do they become aware of eligible patients? Lists?
- What funding supports these linkage staff?
- How many attempts are made to facilitate linkage to care? What contact information is collected to best prevent a loss to follow-up?
- Does the linkage staff person make the appointment? Provide clinic's information (referral)?
- Are other supports to facilitate linkage provided, such as travel vouchers, incentives, childcare, or extended hours?
- What is the timeline from diagnosis to an appointment? Is there any direct or quick pipeline to treating providers so patients do not have to wait a long time?
- What information regarding treatment (duration, side effects, adherence, etc.) is given to patients at the time of linkage?

TREATMENT/CARE

- Do you have any providers who treat HCV and/or HBV in the HS?
    - What practices are they located in? Primary care/family medicine? Infectious disease? Hepatology? Gastroenterology?
- Do you provide care/treatment services via telehealth, when possible?
- Are there dedicated staff to support patients' care and navigation through treatment? What does that process look like?
- Are there staff located within the practice to support insurance enrollment and/or prior authorization (PA) for medication (if applicable)? Patient assistance programs?
    - What challenges related to PAs does your staff experience? Your patients?
- Who do you treat for HCV? Sobriety requirement? Fibrosis staging requirement? (Ask regardless of PA rules for your state, as some providers may not follow)
- What barriers do providers experience in treatment/care for HCV and/or HBV?
    - Too much paperwork? Too many patients?
- What barriers do patients experience in treatment/care for HCV and/or HBV?
    - Lab work completion? Ultrasounds? Cancer screenings?
    - Specialty pharmacy barriers such as needing a home address or phone to receive medications?
    - Childcare? Office hours are prohibitive? Travel? Cultural competency of staff? Language?
        - » What support do you provide to patients who have barriers? Such as travel vouchers or extended office hours?
- Is there a sufficient number of providers to treat HCV and/or HBV? Would your system facilitate training to increase the number of treaters?

APPENDIX 2: FACTORS TO CONSIDER

When considering questions and feedback for your HSA, it is important to have in mind facilitators and barriers to screening, etc. The following components have been shown to have positive or negative impacts on completion of screening, testing, linkage, treatment, and care even when system-level policies are in place.

- Does the HS follow national guidelines for screening?
- Electronic Health Records (EHR) reminders can be a tool to support providers ordering screening tests by showing testing or follow-up needs for specified patients and can be updated as recommendations change. Limitations include provider burnout with lots of different prompts for different conditions that may make providers more likely to close the reminders without completing the task, to access key parts of the EHR for the patient visits. Additionally, EHRs require fields that on age, risk, and history of testing to provide appropriate prompts. If these fields do not exist, particularly for risk-based screening, prompts may have less utility.
- Standing orders for screening tests in an HS can enable nursing staff to complete the testing without direct involvement of a provider. This can support a higher proportion of patients being screened if the limited provider time isn't required.
- Bundled testing orders can facilitate providers ordering all tests needed to limit confusion and support completion of all recommended laboratory tests.
- Reflex testing for two-step laboratory testing can support completion of screening and confirmation testing, either for HCV or HBV.
- Workflows (including inter-departmental referrals) for screening, testing, linkage, and treatment (note: maybe practice, department, or facility-specific) can be explored to identify places where process flows may lead to time, physical, or staffing supports for patients. Likewise, they may lead to barriers for patients and providers effectively completing the care continuums.
- Other barriers to screening may include the following: laboratory procedures, phlebotomy resources onsite vs. offsite, provider capacity, provider comfort and interest in completing screening and treatment, provider knowledge of HCV/HBV or of current screening recommendations, stigma, cost, and other contributors to patient refusals.
- Other topics to consider identifying may include the following: processes/policies for persons living with HCV and/or HBV, follow-up testing protocols, education and other resources, treatment and linkage case management, healthcare insurance enrollment assistance, and other system navigation resources.

APPENDIX 3: QUESTION BANK

Questions on screening and guidelines

Jurisdiction	Questions on screening	Questions on screening guidelines
Maryland	Do you offer routine HBV screening and testing? (yes/no/unknown)	Do you have guidelines for HBV screening? (yes/no/unknown)
California	What are your hepatitis B and hepatitis C screening practices now? What prompts a hepatitis B or hepatitis C test for an asymptomatic patient in primary care? (Note all that apply)	Does your FQHC offer routine, opt-out hepatitis B or hepatitis C testing? If so, based on what criteria? • Routine, opt-out testing is offered to everyone • Risk based • Provider recommendation • CDC guidelines • USPSTF guidelines
Montana	Can you walk me through how your facility conducts HCV testing, starting from the initial screening? Can you describe to me how [INSERT FACILITY NAME] promotes HCV testing? Passively (e.g. screening guidance posted in exam rooms)? Actively (i.e. universal screening for every patient)? (PROBE: Do you believe the facility's promotion strategy fosters accessible HCV testing, open communication, and patient trust?) • Do you take part in promoting routine HCV testing? Are staff who provide direct patient care encouraged by administration and management to regularly promote routine HCV testing when communicating with patients? Can you describe to me how [INSERT FACILITY NAME] promotes routine HBV testing? • Do you take part in promoting routine HCV testing? Are staff who provide direct patient care encouraged by administration and management to regularly promote routine HBV testing when communicating with patients?	What are the facility policies around HCV screening and testing? How are the policies and procedures around HCV screening, testing, and reporting communicated to staff? • Does your facility have a policy regarding reflex HCV testing? What are the facility policies around HBV screening and testing? How are the policies and procedures around HBV screening, testing, and reporting communicated to staff?

Questions on staffing and workflows

Jurisdiction	Questions about staffing	Questions about workflow
Philadelphia	Do you have on-site phlebotomists or do patients have to go off-site to get hepatitis B/C tests? • If so, do they receive a lab slip and guidance for this? • If yes, how many patients complete their screenings?	Are patients able to be tested at the time of clinical encounter or is testing separate from it?

Questions on barriers to screening

Jurisdiction	Questions about provider barriers to screening	Questions about HS barriers to screening
California	What barriers do you anticipate? How do you assure HCV RNA testing for those with positive HCV antibody?	
Montana		What are two ways [INSERT FACILITY NAME] can improve their promotion of routine HCV testing? What makes promoting routine and reflex HCV testing at [FACILITY] challenging? What are the consistent challenges or barriers that you and your facility face when providing HCV screening, testing or treatment? (Probe for factors related to system-level factors like medical provider capacity, finances, training/capacity, insurance and Medicaid restrictions, etc. Probe for external factors such as forms of communication, geographical locations, issues with finding a receiving facility, availability of community resources, etc.) • How does your facility currently address these challenges?
Philadelphia	Are there any challenges staff have in ordering tests? Screening patients in general? (e.g., laboratory procedures, policies, provider capacity, provider knowledge, stigma/provider perceptions/interest, cost, refusals, different lab tests are confusing, competing priorities)	

Questions on tests performed and testing volume

Jurisdiction	Questions on tests performed	Questions on testing volume
Maryland		Percentage of patients requesting HBV screening and testing Number of patients tested for HBV in the last 12months
Philadelphia	Do you provide HBV/HCV screening? • If yes, what labs are ordered: HBsAg, Anti-HBs, Anti-HBc, Anti-HCV (HCV Ab) If a patient tests positive for HBsAg, are secondary tests like HBeAg, HBV DNA performed? If a patient tests positive for HCV Ab, are secondary tests like HCV RNA performed? Is HCV reflex automatically completed or will second testing be needed? If not all these screening tests are offered, how do you handle that to ensure patients are being properly screened?	

Questions on referral and treatment/case management

Jurisdiction	Questions on referrals and linkage to care	Questions on case management and treatment
California	How do you handle linkages to care? In-house vs. referral to a specialist?	What is the capacity for in-house HBV/HCV treatment? (Refer to ECHO)
Maryland	HBV treatment referral services offered (yes/no/unknown)	HBV infection management offered (yes/no/unknown) HBV treatment services offered (yes/no/unknown) HBV treatment services offered to uninsured (yes/no/unknown)

Jurisdiction	Questions on referrals and linkage to care	Questions on case management and treatment
Montana	What worked well in your experiences in terms of coordinating care between yourself and patients, laboratories, and other physicians? • Why do you think this worked well? • What relationships, policies, or other factors contributed to successful care coordination? What didn't work well in terms of coordinating care? Why do you think there were challenges in coordinating care? Is there anything you wish had happened differently in terms of coordinating care? Why or why not?	
Philadelphia	Where are people referred for follow up care? When and how do referrals happen? Do you feel confident in referring patients to other offices in your health system's network? Is there support from your health system in creating referral relations between offices? Do you provide linkage support for patients needing referral? • If yes, what sort of support (i.e., case management, schedule appointments, reminders, benefits enrollment assistance)? What standards of practice exist around re-engaging patients after referral? Are there EMR prompts to remind providers in your office to follow up with patients? Do positive HBV/HCV test results and/or diagnoses go on patients' problem lists in their EMR chart? Are there any challenges staff have in treating patients and/or making referrals? What has been working to treat/refer patients effectively? Are there any needs your site has on education, trainings, overview of PDPH services, technical assistance, or other resources for HBV and HCV information or care? Do you provide education/resources to patients on hepatitis B/C? Would you like PDPH to send over educational materials to your office?	Do you have any providers on site to treat HBV/HCV? • If no, why not? • If yes, how many? Are there EMR prompts to remind providers in your office to follow up with patients? Do positive HBV/HCV test results and/or diagnoses go on patients' problem lists in their EMR chart? Are there any challenges staff have in treating patients and/or making referrals? What has been working to treat/refer patients effectively? Are there any needs your site has on education, trainings, overview of PDPH services, technical assistance, or other resources for HBV and HCV information or care? Do you provide education/resources to patients on hepatitis B/C? Would you like PDPH to send over educational materials to your office?

GLOSSARY

CDC – Centers for Disease Control and Prevention

DVH – Division of Viral Hepatitis

EHR – Electronic Health Record

HBV – Hepatitis B Virus

HCV – Hepatitis C -Virus

HS – Health System

HSA – Health System Assessment

PA – Prior Authorization

PAP – Patient Assistance Plan

PWUD – Person Who Uses Drugs

SSP – Syringe Service Program

RESOURCES

Health System Assessment Resources

- CDC: Assessment & Planning Models, Frameworks & Tools: https://www.cdc.gov/publichealthgateway/cha/assessment.html
- Resources to increase survey response rate:
  - https://www.alchemer.com/resources/blog/enhance-survey-response-rate
  - https://www.cdc.gov/healthyyouth/evaluation/pdf/brief21.pdf
- State Hospital Associations: https://www.aha.org/directory/2020-06-09-state-hospital-associations
- State Community Health Center Associations: https://www.nachc.org/about-nachc/state-affiliates/state-regional-pca-listing
- NPIN Integrated Viral Hepatitis Community (includes examples of jurisdictional health systems assessments):
  - Registration details
    - » Go to the NPIN site: https://npin.cdc.gov/user/register
    - » Complete the registration form using your work email.
    - » Enter the invitation code: COOLEY
  - Direct link to jurisdictional heath systems assessments: https://npin.cdc.gov/posts-by-group-folder/362565/358294

CDC Hepatitis B/C Screening Recommendations and Testing Algorithms

- Hepatitis B testing algorithm and interpretation
- Hepatitis B screening recommendations
- Hepatitis C testing algorithm and interpretation
- Hepatitis C screening recommendations

National and Professional Organization Screening Recommendations

- U.S. Preventive Services Task Force: Hepatitis B Virus Infection in Adolescents and Adults: Screening Recommendations

- U.S. Preventive Services Task Force: Hepatitis C Virus Infection in Adolescents and Adults: Screening Recommendations
- American College of Obstetricians and Gynecologists: Routine Hepatitis C Virus Screening in Pregnant Individuals

Treatment Resources

- American Association for the Study of Liver Diseases and Infectious Disease Society of America: HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C
- CDC: Hepatitis C Treatment Locator Widget

Research Studies

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