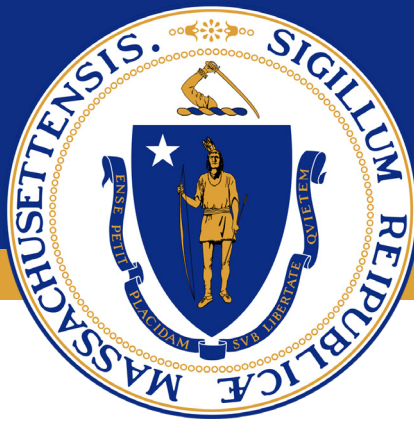




# HEPATITIS C VIRUS SCREENING, TESTING, AND TREATMENT ASSESSMENT

**July 2025**

Executive Summary



## BACKGROUND AND METHODS

The Massachusetts Department of Public Health (DPH) strives to support and advance hepatitis C virus (HCV) treatment in Massachusetts hospitals, and create equitable access to HCV screening, testing, and treatment. In 2024, MDPH engaged JSI Research and Training Institute, Inc. (JSI) to conduct an assessment of HCV testing and treatment protocols and workflows at six high volume hospital systems across Massachusetts.

DPH contracted with JSI to conduct the assessment. JSI interviewed 29 key staff members from the hospital systems from April to July 2024 via Zoom. Those interviewed worked in infectious disease care, gastrointestinal disease care, primary care, and/or hepatology. The interviews were recorded and transcribed, then analyzed by JSI staff.

## KEY FINDINGS

Throughout the interviews, several important themes about HCV treatment and testing emerged.

### Eligibility:

Those interviewed said it's important for hospitals to have a good process in place to identify patients who need HCV testing or screening. Interview participants indicated that determining whether HCV testing is appropriate for individual patients may be guided by a variety of factors, including a patient's condition, likelihood of exposure, US Preventive Services Task Force Guidelines, provider clinical judgement, and availability of diagnostic tests. However, most Massachusetts hospital systems lack formal protocols designating who should be tested for HCV and how health care staff should recommend testing.

Most hospitals reported utilizing electronic health records (EHR) systems to determine who should be tested for HCV, but with significant variability in implementation of alerts across hospitals and departments. EHR systems can provide reminders to providers about patients who have not received recommended HCV testing. Many of those interviewed said these alerts may be important in health care settings that don't often treat HCV, where providers may otherwise overlook patients who might need HCV testing. Others expressed concern that alerts may lead to alarm fatigue, and should only be used when other HCV criteria have been met.

### Screening and testing:

HCV screening and testing procedures varied across hospitals and departments and are influenced by tests and order sets available through affiliated laboratories. Interview participants reported variability across departments and hospitals, and in the tests/order sets which are available to them. In some hospitals, providers may or must order HCV antibody, HCV RNA, and other tests separately. This may necessitate a second blood draw to confirm HCV infection in the event that a positive result is returned on an antibody test. In other hospitals, reflex from antibody to RNA testing is available, thus permitting final, diagnostic results from a single specimen. However, in some hospitals while reflex testing is available, it is not standard of practice, and providers may not be aware that it is appropriate to order reflex testing.

Time to availability of results is also highly variable across hospitals, reflecting varied laboratory capacity and processes. Interview participants reported it takes between 24 hours to 48 hours for antibody test results to become available. HCV RNA test results can take anywhere from a few days to one week to become available.

Providers receive test results through the EHR as soon as they become available. Test results are typically available through patient portals. Not all patients are active portal users, necessitating that providers use alternative means to deliver test results such as mail, phone calls, or other methods to contact patients with HCV infection about test results and to coordinate next steps. Practices for patient follow-up are highly variable by hospital and department.

### **Linkage to treatment:**

Providers often connect patients with HCV infection to treatment within the same health system. Patients either are treated by their primary care provider or by a specialist. Referrals for patients diagnosed within primary care settings are often referred to specialists for HCV treatment (e.g., GI, ID, or hepatologist), rather than being treated within a primary care setting, even for uncomplicated cases. Wait times for treatment vary considerably across health systems, with urgent cases, such as individuals with cirrhosis getting linked to treatment soonest.

### **Provider education and quality of care:**

The hospital systems assessed reported an absence of structured and institution-wide HCV-specific education programs for providers, but those interviewed said ad hoc HCV learning opportunities for staff, including educational days, infectious disease symposiums, and staff meetings on the subject were available.

Hospitals and health systems engage in a wide variety of quality management and improvement initiatives. However, many of those interviewed said there is an absence of robust, system-wide mechanisms and practices within their own hospital system for quality improvement and quality management as related to HCV screening, testing, and treatment. Several mentioned this is particularly notable in comparison to much more robust quality improvement efforts associated with HIV infection.

### **Challenges and facilitators:**

Barriers to HCV testing and care can stem from both patient social circumstances and issues within the health care system. Patients may miss out on or be delayed in HCV testing or care because they lack stable housing or transportation, for example. For patients who have been informed of their new diagnosis, a longer wait time to access treatment is a source of considerable anxiety and acts as a barrier in completing treatment. Those interviewed reported that partnerships with community-based organizations that support patients with housing and transportation can help with this.

Providers reported they may be hindered from providing comprehensive care and providing necessary patient follow-up because of busy work schedules. Availability of ancillary staff, including patient navigators, community health workers, nurses, pharmacists, and medical assistants is valuable to supporting provision of comprehensive care. Availability of specialty clinical expertise needed to treat HCV infection, particularly patients who may not be appropriately treated in primary care was cited as a significant concern. Many providers also mentioned the usefulness of the EHR alert system and medical interpreters in consistently providing quality HCV testing and treatment.

## WAYS TO IMPROVE HCV TESTING AND CARE IN MASSACHUSETTS

Based on the interviews, areas of opportunity to improve care include:

### **Implement policies and procedures to facilitate efficient and effective screening and treatment of HCV.**

Hospitals should put in place standardized, system-wide policies and procedures for HCV screening and treatment. Data on testing and treatment should be reviewed regularly, and in the context of routine quality improvement activities, to ensure they are done consistently and effectively. Hospitals should set quality improvement measures, or goals, to address any gaps in care. To do this, hospitals will need to prioritize resources for ongoing data review and dedicated personnel to track and monitor HCV indicators.

**Adopt strategies to ensure reflex testing is the standard of care in Massachusetts.** Hospitals without HCV reflex testing should implement reflex testing as standard of care to ensure reduce the chances that patients with HCV infection will not be diagnosed and timely linked to treatment. This is especially important for patients who are considered high risk or vulnerable. To make this happen, providers should be given education on what HCV testing is, why it's important, and how to order an HCV test. Hospital and/or affiliated laboratories should implement practices to enable reflex testing as a standard of care.

**Put in place strategies to ensure primary care providers have the knowledge and resources to treat HCV infection.** Hospitals should improve primary care provider access to consultations with specialists. Training to help primary care providers to treat HCV infections directly will also improve treatment outcome, and to link to specialty care when it is appropriate. In addition, hospitals should enhance EHR utilization, and offer training to providers on how to use new features to reduce gaps in care.

**Adopt multiple strategies to provide patient education.** Hospitals must involve all staff, not just clinical providers, in improving patient education about HCV treatment. Hospitals should also consider using and providing appropriate training to patient navigators, community health workers, medical assistants, and nurse educators to help with the workload. Hospitals should also encourage and support providers in participating in continuing medical education programs and educational conferences focused on HCV.

**Adopt strategies that make services more accessible, especially for high-risk populations.** Strategies can include extended laboratory hours for blood draws, mobile outreach vans, care navigators, and support staff that work directly with patients to ensure that they follow and complete treatment. Hospitals should consider incentives to encourage patients at higher risk to complete treatment.

**Make HCV testing available in Emergency Departments (EDs), adapting models developed for other infectious diseases.** Emergency departments can identify high-risk patients and link them to HCV care. ED physicians may be hesitant to order HCV testing because they worry there will be no follow-up after patients leave ED. Adopting existing models used for HIV screening in the ED may help with these concerns, increase testing rates, and provide an opportunity to link high-risk and vulnerable populations to care. As one hepatologist suggested, "I think it's really important, ultimately, for us to apply test and treat approaches in one sitting wherever possible, particularly among the high-risk populations who are at highest risk, not only of having it, but of course of transmitting it."

**Use the resources of the hospital inpatient units for HCV testing and the start of treatment.** Hospitals can improve HCV testing and treatment by ensuring it's available when needed for patients who are admitted for non-HCV related issues. Tracking and linking patients who test positive for HCV during hospitalization ensures that patients who might otherwise miss testing and treatment are reached.