

Preventing Liver Cancer in Iowa

by Promoting Vaccination and Screening Among Opioid Users

Overview

Liver cancer can be caused by long-term infections with hepatitis C virus (HCV) or hepatitis B virus (HBV). The opioid epidemic has increased the number of people who inject drugs in the United States, which may lead to an increased risk of HCV and HBV transmission through use of shared equipment.¹ These factors may contribute to the increase in liver cancer in the United States.²

Although the risk of developing liver cancer is low, surviving liver cancer is very difficult. For every 100,000 people, 8 new liver and intrahepatic bile duct cancer cases are reported, and 7 people die of these diseases, according to 2019 data from United States Cancer Statistics.³

From 2000 through 2020, there were 20,780 confirmed cases of long-term HCV infections reported to the [Iowa Department of Public Health](#). In 2020, a total of 825 Iowans were newly diagnosed with a chronic HCV infection; of these, 30% were younger than 40, and 71% reported using injection drugs.⁴ In addition, the incidence rate of new liver and intrahepatic bile duct cancer cases in Iowa has increased substantially, from 1.7 cases per 100,000 in 1975–1979 to 6.9 cases per 100,000 in 2018–2019.⁵



Demonstration Projects Help Promote Vaccination and Screening Among Opioid Users

CDC provides funding, guidance, and technical assistance to its [National Comprehensive Cancer Control Program](#) (NCCCP) recipients to create, carry out, and evaluate plans to prevent and control cancer. In 2019, CDC started a 3-year demonstration project, working with four NCCCP recipients to build sustainable partnerships with local organizations to improve knowledge and awareness of the link between injecting drugs and getting hepatitis and liver cancer.

Iowa Takes Action to Prevent Liver Cancer

The [Iowa Comprehensive Cancer Control Program](#) at the Iowa state health department participated in a CDC demonstration project to put promising or proven liver cancer prevention strategies into action. The goal was to reduce the incidence of HBV and HCV infections and opioid overdose and decrease liver cancer rates among people who inject drugs.



Demonstration Project Strategies for Iowa



Provider Education

Iowa's cancer program partnered with the [Iowa Primary Care Association](#) and [Des Moines University](#) to:

- Educate Iowa providers (primary care, medication-assisted treatment, substance use disorders, and behavioral health) on the relationship between opioid injection, HBV, HCV, and liver cancer.
- Plan, host, and record educational sessions through the primary care association HCV and behavioral health [Project ECHO](#)[®] platforms.
- Offer continuing medical education (CME) credits for completed educational sessions through the university.
- Make recorded versions of educational sessions available through the primary care association SharePoint site and the university website.
- Collect data to track participation in the live educational sessions, as well as changes in knowledge, awareness, ability, and intent of participating providers to talk to their patients about HBV and HCV.



Improving Delivery of Viral Hepatitis Services

Iowa's cancer program partnered with the state's primary care association to:

- Provide an opportunity for community-focused primary care providers who participated in the HCV ECHO to virtually present cases of HCV-positive patients and seek consultation to determine the appropriate course of treatment.
- Review and revise the case presentation form so that providers could better assess for risk factors (such as opioid or injection drug use) and HBV infection status (current or past).
- Collect data to track the number and types of cases presented and courses of treatment recommended.

Project Achievements



Provider Education

- 8** live educational sessions were delivered through the HCV and behavioral health ECHO platforms.
- 251** providers (not all unique) participated across the 8 live sessions.
- 8** recorded sessions were made available to registered participants through the primary care association SharePoint site.
- 3** recorded sessions on HCV were made available on the university website.
- 6** sessions were approved by the university for CME credits; 85 participants were awarded CME credits during the project period.
- 24** providers completed the retrospective pre-post assessment to assess changes in knowledge, awareness, ability, and intent.



Improving Delivery of Viral Hepatitis Services

- 14** ECHO sessions on HCV were conducted.
- 99** cases were presented across all sessions. Of these cases:
 - All cases presented were for patients diagnosed with chronic HCV.
 - 52 unique providers participated across all sessions.
 - 42 hepatitis A vaccines and 48 HBV vaccines were administered during the project period.
 - 14 patients were in the queue to begin HCV treatment during the project period.[†]
 - 11 patients were started on HCV treatment during the project period.
 - 5 patients completed HCV treatment during the project period.

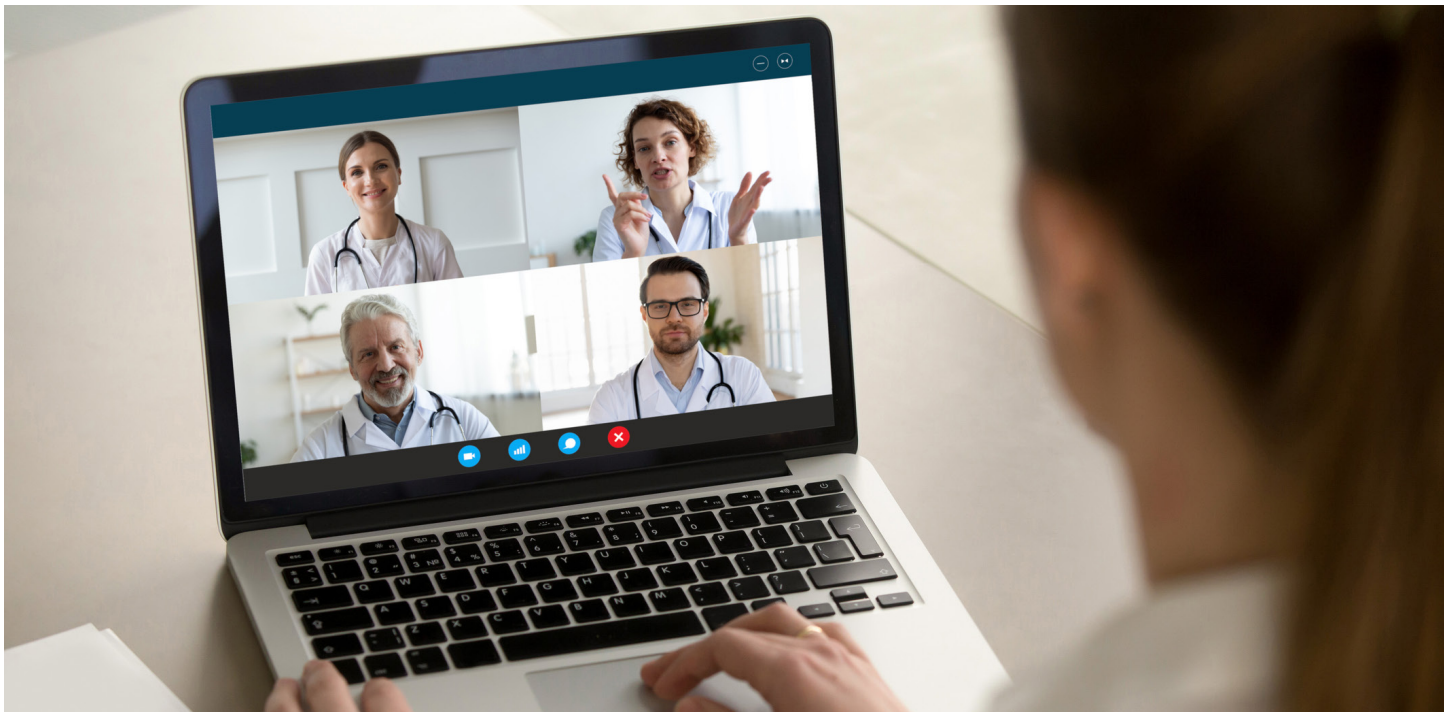
[†] These patients were in the queue during the project period because of requirements that must be met before HCV treatment can begin such as waiting for lab results to arrive, the COVID vaccine interaction period to end, or the patient to return for a follow-up visit.

Lessons Learned

- ECHO educational session speakers often only presented on one of the three topics (opioids, viral hepatitis, or liver cancer) instead of tying them together. Prepared slides or bullet points for presenters are essential for integrating the three topics and making the connection between them.
- Getting providers to complete the retrospective pre-post assessment for the educational sessions was challenging. Making completion of the assessment a requirement for receiving CME credits and providing information on why the assessment is important may help boost response rates.
- The ECHO case presentations on HCV provide a forum to address the barriers to care (such as Medicaid restrictions) that many patients face when referral to a specialist is required.
- Including case outcome fields (such as treatment started date, treatment completed date, vaccine series started date, and vaccine series completed date) on case presentation forms will help to track final outcomes of patients whose cases were presented during the ECHO presentations.

Materials Available

- **[Recorded ECHO Series Address Hepatitis C, A Risk Factor for Liver Cancer](#)**, Iowa Cancer Consortium
- **[HIV and HCV Co-Infection Overview](#)**, Iowa Primary Care Association, Project ECHO®
- **[How Do We Provide HCV Care for Individuals Experiencing Homelessness?](#)**, Iowa Primary Care Association, Project ECHO®
- **[Addressing the Emerging Viral Hepatitis, HIV, and Opioid Use Disorder Epidemics In Rural Communities](#)**, Iowa Primary Care Association, Project ECHO®



References

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