When the U.S. Preventive Services Task Force (USPSTF) recommended in 2013 that every baby boomer in America—adults born between 1945 and 1965—be screened for hepatitis C, it represented a mammoth challenge to physicians and health care organizations.

Leaders at the Mid-Atlantic Permanente Medical Group rose to meet that challenge to help identify and treat patients with hepatitis C. Each year, 17,000 Americans become infected with hep C, and hepatitis C-related liver disease kills about 15,000 annually, a death tally higher than HIV. With lifesaving direct-acting antiviral therapies now available, systematically ramping up screening has taken on paramount importance.

“We developed a working group with our senior leadership in the medical group, gastroenterology, infectious disease, laboratory, primary care, health IT and research teams,” said Cabell Jonas, PhD. “We took a look at our existing hepatitis C screening-to-treatment approach and went through and identified any gaps or areas of improvement that we could work on.

“The result was a new hepatitis C program that streamlined the screening-to-treatment process for patients and physicians,” Jonas added. “In our program, more patients complete all steps of the screening process in less time than in usual care. Our program is now our standard of care.”

Jonas directs research programs and is a research scientist focusing on genetics, liver health, LGBTQ+ health and physician research at the Mid-Atlantic Permanente Medical Group, which is a member of the AMA Health System Program that provides enterprise solutions to equip leadership, physicians and care teams with resources to help drive the future of medicine.

Before refining hepatitis care, the Mid-Atlantic Permanente Medical Group had screened less than 20% of baby boomers. Now 85% of baby boomers getting care from the medical group have been screened, compared with about one in five baby boomers nationwide.
The challenge was redoubled in 2020 when the USPSTF expanded its recommendations, urging screening for adults 18–79 years old. The Mid-Atlantic Permanente Medical Group, through this effort, has boosted hepatitis C screening in this age group from 42% to 70%.

Here is how the Mid-Atlantic Permanente Medical Group reconfigured its approach to hepatitis C screening and treatment.

**Take advantage of the EHR**

“Physicians can order a hepatitis C screening test for any patient who needs it by searching for and placing the order,” Jonas said. “But we also have other support tools to encourage hep C screening.”

For example, “we have implemented best-practice advisories and health maintenance topics, to EHR based tools, to alert physicians and staff that hepatitis C screening is recommended for the patient,” she said. “Initially the alerts were focused on baby boomers, but now we’ve expanded to the 18–79 age group. When an eligible person is in a medical visit, the alerts will prompt the physician to order testing on that patient.”

“When physicians nationwide are managing so many recommendations, it can be challenging to remember all of the screenings a given patient is eligible for. These alerts make it easy to see that this screening is a USPSTF recommendation, and this person is eligible based on their age,” Jonas added, noting physicians “can order the test right from the alert. It’s very easy. It only requires one click.”

The EHR will also flag “overdue tests and screenings in the health maintenance area,” she said. “So, when patients are roomed in the clinic, a staff member such as a nurse or a clinical assistant will look at that area of the EHR and see whether hepatitis C testing is due or overdue. Staff can then queue up testing for the physician to review and take action on.”

This functionality “enables multiple clinical team members to easily see that a patient is eligible for hep C testing and support physicians in completing the testing. Again, it is a one-click order,” Jonas added.

**Make it easier for physicians**

The aim was to make the process “less burdensome in terms of unnecessary tasks required by the physician. We want the right staff member to complete the right tasks,” Jonas said. “So, for the physician, they need to make the clinical decision that this screening is right for this patient and order it. Our coordinators support the patient through the testing process to confirm each step is completed.”


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“A big part of our training was telling the physicians: If you start the testing process, the coordinators will make sure your patient makes it through the testing steps to the end,” she said. “That was a big part of training and made this program very appealing because we’re not adding work. We’re saying: If you make the clinical decision to test for hep C, another staff member will help your patient make it through a multi-step testing process and make sure they are referred to gastroenterology.”

**Allow any specialty to order**

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“With our improved testing pathway, if a patient is in urgent care and their doctor sees a hep C testing alert, they can order the hep C screening,” Jonas said. “That seems simple, but in usual care, if a physician was not going to be the one to handle the follow up, they might be hesitant to order the test.

“But with our hep C testing program, for example, an orthopedist can order the test and our coordinator will step in and take it from there,” she added. “Because of Kaiser Permanente’s integrated care delivery system, the coordinator is able to follow up and connect the patient back to their primary care physician in a helpful way.”

Now “you have more physicians and staff supporting hep C testing throughout the medical system—it goes beyond gastroenterology, infectious diseases and primary care,” Jonas said.

**Implement reflex laboratory testing**

The Mid-Atlantic Permanente Medical Group also was a leader in “implementing reflex laboratory testing, where a hepatitis C antibody positive result automatically reflexes to a hepatitis C RNA in order to obtain a diagnosis from one blood draw.”

This is key because hep C screening is a two-step process, with an antibody test used to find out whether a patient has ever had hep C. A positive hep C antibody test means a nucleic acid test for hep C virus RNA is needed.

Eliminating that extra step in testing “has been a huge benefit” to patients, Jonas said, noting that such reflex testing has now become standard in hep C screening.

**Give patients a single point of contact**
“New roles were created for this program,” Jonas said. “Our nurse coordinators are a central point of contact for patients.”

Such a contact is needed because some hep C positive patients need support to complete the testing program.

“It is well documented in the literature that some patients will complete the first testing step, and may never complete the second test, or miss the liver assessment or the gastroenterology visit,” she said. “Our coordinators stay with the patient throughout the process to make sure they complete all steps, including the gastroenterology visit.”

“A huge part of meeting our screening and treatment goals has been having coordinators who can take over important tasks that do not require a physician. Our physicians and staff work together to make our hepatitis C program a success,” Jonas said.