

Implementing a Hepatitis C Screening Program

Hepatitis C is the most common bloodborne disease in the US, with approximately 4 million people in the US infected and over 130-150 million infected worldwide.¹ Most infections are acquired from illicit drug use, with the most vulnerable population being individuals born between 1945 and 1965. About 75% of patients with Hepatitis C become chronically infected and, of those, about 30% develop liver cirrhosis with permanent liver damage. Worldwide approximately 700,000 deaths occur annually from Hepatitis C as a result of cirrhosis or liver cancer.² Previously, patients who wanted to eradicate the virus had to undergo treatments with a combination of medications that caused significant side effects; certain populations were excluded from treatment because of comorbid diseases. In October 2014, the Food and Drug Administration (FDA) approved Harvoni® (ledipasvir, sofosbuvir) after a number of impressive clinical trials which showed superior efficacy over existing treatments.³ Harvoni® not only had a much higher rate of virus eradication, but it also had a much lower side effect profile. Availability of Harvoni® and some additional antiviral medications that have subsequently gained FDA approval, has renewed the push to identify patients with Hepatitis C so that they can take advantage of available treatments.

The Abington Health (AH) division of Jefferson Community Physicians is a network of outpatient primary care and sub specialty practices located in the Philadelphia suburbs. The network includes over 200 physicians who have continued to push further into value-based health care, which is defined as safe, appropriate, and effective care at

a reasonable cost. In the summer of 2016, the AHP network administration was presented with a unique challenge: To quickly implement an extensive screening process for Hepatitis C. The network was able to meet the challenge and increased the percentage of patients screened from 6% to >45% (Fig. 1) in a short amount of time by developing a systematic, thoughtful process. This project emphasized improving health care value by improving the clinical quality of the health system's practices.

In 2012, the Centers for Disease Control and Prevention (CDC) recommended that all healthcare providers offer Hepatitis C screening to all patients born between the years 1945 and 1965.⁴ In 2014, New York became the first state to mandate that hospitals and primary care providers offer screening. In 2016, Pennsylvania passed [Act 87](#), that employed the same screening requirements as the New York provision. The Act required all providers develop a plan by September 16, 2016 to screen these at-risk patients, a date that was only a few short weeks after the law was adopted. Abington Health took this challenge head on and quickly developed a multi-disciplinary team to create guidelines and processes to address the mandate.

The team started meeting in August 2016 to meet the September 16th deadline and with an initial goal of identifying the major stakeholders. Included on the list were the administrators who would be held to the state standard through political and possible legal pressures; clinicians who would be responsible for discussing the rationale for the test, ordering the test, and discussing the results; and the informatics team who would have to assist

in optimizing the electronic medical record. Patients were also identified as stakeholders who would need to have bloodwork drawn, may have a financial contribution for the testing, and may have difficulty with clinical decision making if they test positive.

The Hepatitis C team then set out to educate the stakeholders. The administrators were initially educated through conference calls and emails that included the specifics of the legislation. The team used clinical administrators to create a frequently asked question (FAQ) sheet for clinicians and a PowerPoint presentation that was presented at the monthly Physician Leader Meeting. The physician leaders were responsible for sharing this information with the other clinicians in their offices. As an integral part of the clinical team, medical assistants were also provided education about Hepatitis C and why there was a need to promote testing in the practices.

The team quickly realized that to initiate behavioral change they would not only have to educate the stakeholders, but they would also have to change the clinician's environment to make the initiative easier to implement. This is an area in which the Informatics department had a major role. They worked diligently to make sure that the electronic medical record interface was conducive to making the screening process a success. An alert was placed into the system for any patient who met the criteria for hepatitis C screening. This alert was marked as red if not completed. Once the test was ordered, this alert would change to green so that the patient would not be asked again about screening. In an effort to meet the strict intent of the law, an electronic template was also created

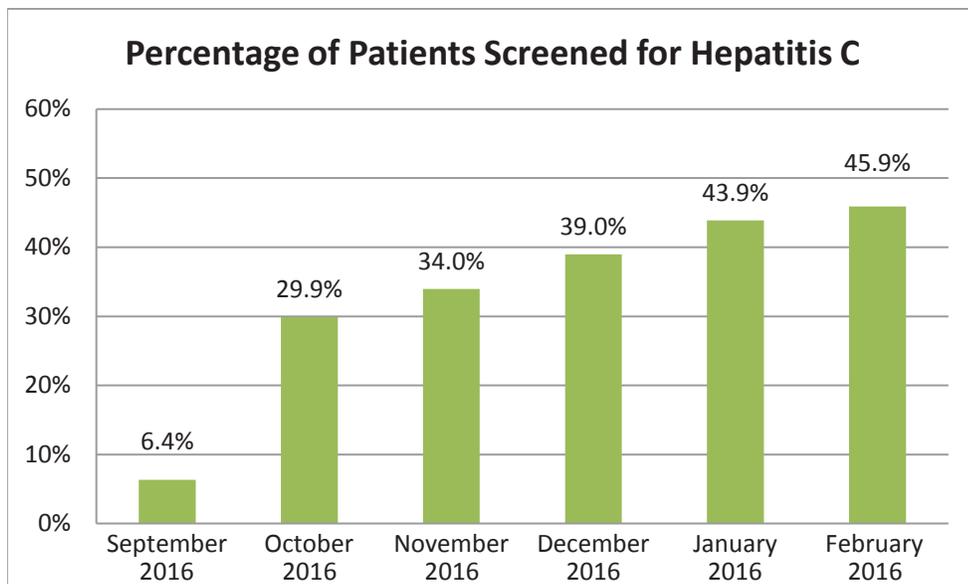
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with language that documented that the patient was asked about their hepatitis C screening status.

The final piece of the group's effort was the formulation of outcome metrics. The Informatics team created three sets of categories. The first metric category was the number of patients who had the test ordered. The second category was the number of patients who had documentation that the test was completed. The third category, which is still being developed, is determining if the test was offered but subsequently refused by the patient. The results of the metrics were initially presented to the administration and then to the clinicians approximately every two weeks since the law went into effect to encourage further adoption.

While Abington Health Physicians has a long way to go to reach its goal of universal Hepatitis C screening for high risk individuals, they have already shown in a short amount of time that leading a well- coordinated effort can quickly lead to screening adoption even in a large complicated health system. The outpatient

Figure 1



practices will continue to diligently pursue these screening goals and use this project as a template for the implementation of other large scale screening initiatives as the United States marches toward a health care system based on value.

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