Improving Hepatitis C Screening Rates in an Ambulatory Clinic: an Observational Study

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INTRODUCTION

Hepatitis C virus (HCV) is a liver disease that can progress to hepatic fibrosis, cirrhosis, and hepatocellular carcinoma. Risk factors for HCV include people born between 1945 and 1965, hemodialysis, history of Intravenous drug abuse (IVDA), persistent elevation in alanine transaminase without a known cause, human immunodeficiency virus (HIV) infection, and patients who received clotting factors before 1987 or blood products before 1992. Therefore, the CDC and USPSTF recommends HCV screening for all those born between 1945 and 1965 (the baby boomer population) and those with other risk factors.^{1,2}

An internal review demonstrated that hepatitis C screening was not routinely or adequately offered at our clinic, an academic practice based in Allentown, Pennsylvania that consists of internal medicine residents and four faculty physicians.

Our goal was to increase HCV screening in baby boomers and assess provider knowledge about HCV screening.

METHODS

The baseline screening rate over one year was obtained from medical records. All providers were questioned about hepatitis C screening guideline recommendations, their comfort with screening guideline recommendations, and barriers to screening. After obtaining baseline reports all residents, attending physicians, and clinical staffs were educated on CDC and USPSTF guidelines of HCV screening on baby boomers through lectures, email reminders, and monthly meetings. Patients were educated about HCV screening indications during a routine office visit.

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HCV screening test was performed on all patients born between 1945 and 1965 with an unknown HCV status who had no previous HCV antibody testing in the electronic medical record. If the test was positive, then patients were called and informed about the result and referred to hepatitis care clinic for further work up.

RESULTS

The baseline screening rate was 3.0%. We found that 56% of providers were unsure who is eligible for screening. The majority (60%) mentioned not remembering to discuss screening, and only 12% felt very confident with their understanding of the guidelines. All providers cited they would screen more patients if there were a screening prompt.

We screened 300 patients, and ten patients had a positive HCV screening test (3.3%). Only two patients had a positive viral load (20.0%). Five out of 10 positive HCV positive patients had an intravenous drug abuse history (50.0%). No patients had undergone previous treatment for HCV infection.

DISCUSSION

Roughly 50% of patients with chronic HCV infection are unaware of their diagnosis.³ Regular preventive screening can diagnose 800,000 unknown cases of HCV with the prevention of 120,000 death with proper treatment. Previous studies suggest that HCV screening can be increased by regular education, email reminders, monthly meetings, conferences, posting informational posters and automatically triggering reminders via electronic medical records.⁴

Study limitations include the single site, small sample size and short study duration. We found that baseline screening rates were low, and that inadequate knowledge about screening indications was common. When universal screening was implemented, 2 out of 300 patients had active HCV infection, consistent with findings that baby boomers are at high risk of HCV infection.

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