

Risk-based testing in primary care missed most patients with HCV

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Risk-based testing for hepatitis C virus in the primary care setting may have missed more than 80% of patients with hepatitis C virus antibodies, according to researchers from the CDC.

“This may be due in part to the difficulty in capturing complete patient risk history (eg, injection drug use) in [electronic medical records (EMR)] to support the implementation of comprehensive risk-based HCV testing algorithms,” the researchers wrote in *Clinical Infectious Diseases*. “HCV-infected persons who are not aware of their status cannot receive further clinical evaluation, antiviral treatment, and are unlikely to benefit from preventive services or secondary prevention recommendations (eg, reduction in alcohol use and other lifestyle changes) aimed at limiting disease progression and reducing liver-related morbidity and mortality.”

The researchers evaluated EMR data from patients enrolled in the Birth Cohort Evaluation to Advance Screening and Testing for HCV (BEST-C) study to estimate how many patients with HCV remained unidentified after risk-based testing in the primary care setting. They also quantified the prevalence of HCV antibody positivity among primary care patients and determined predictors of HCV infection.

The analysis included 209,076 patients, and the prevalence of HCV antibody detection was 0.53%. The estimated expected prevalence was 2.87%, ranging from 0.84% to 4.34% across the four study sites. The researchers estimated that 81.5% of patients positive for HCV antibody were not identified with the risk-based testing strategy. Among those who tested positive for HCV antibody, approximately 75% were born in the 1945-1965 baby boomer range.

In a multivariate analysis, injection drug use (adjusted OR=6.3; 95% CI, 5.2-7.6), 1945-1965 birth cohort (aOR=4.4; 95% CI, 3.8-5.1) and elevated alanine aminotransferase levels (aOR=4.8; 95% CI, 4.2-5.6) were significantly associated with HCV antibody positivity. Other factors associated with HCV antibody positivity included black race, Hispanic ethnicity, widowed/divorced/separated status, never having been married and male gender.

“In the routine clinical environment, recent CDC and US Preventive Task Force recommendations to test patients born during 1945-1965 for HCV without the need for prior ascertainment of risk factors should be implemented,” the researchers wrote.

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