

Expanded Hepatitis C Virus Screening Recommendations Promote Opportunities for Care and Cure

Chronic hepatitis C virus (HCV) infection is a major health problem in the United States. An estimated 2.7 million to 3.9 million Americans are living with HCV, and transmission continues to occur (1). Hepatitis C is the leading cause of liver transplants in the United States, and without treatment, 15% to 40% of persons living with the virus will develop cirrhosis or cancer. Hepatitis C–related mortality has been steadily increasing, with a 50% rate increase from 1999 to 2007. An estimated 45% to 85% of persons with chronic HCV are unaware that they are infected and thus do not receive needed care and treatment (1). The Centers for Disease Control and Prevention (CDC) estimates that, in the absence of interventions, approximately 1 million HCV-infected persons will die of HCV-related disease. When accompanied by appropriate care and treatment, HCV testing can reduce risk by 70% for hepatocellular carcinoma and by 50% for all-cause mortality (1).

Viral hepatitis was recognized as an important public health problem by the Institute of Medicine in its groundbreaking 2010 report, “Hepatitis and Liver Cancer: A National Strategy for Prevention and Control of Hepatitis B and C” (2). In this report, the institute identified viral hepatitis as an “underappreciated health concern” and provided recommendations to improve hepatitis prevention and control. In response, the U.S. Department of Health and Human Services (HHS) convened a Viral Hepatitis Interagency Working Group to develop an action plan (3) that provides specific HHS agencies with explicit steps to achieve viral hepatitis prevention goals, including increasing the number of persons living with HCV who are aware of their infection status.

The U.S. Preventive Services Task Force (USPSTF) recommendations on HCV screening (4) represent a critical step toward achieving the prevention goals outlined in the HHS action plan. The USPSTF now recommends HCV screening in persons at increased risk and 1-time screening in adults born between 1945 and 1965. These recommendations, which are consistent with those issued by the CDC in 2012 (5), reflect the strength of evidence on the benefits of HCV testing linked to care, treatments, and improved health outcomes. The independently derived yet similar recommendations for HCV testing from the USPSTF and CDC send a clear signal to health care professionals, policymakers, and the public that screening for HCV is effective. We can now focus our efforts on ensuring capacity for the delivery of clinical preventive services that can reduce missed opportunities for HCV diagnosis and linkage to care and treatment.

Risk-based approaches (6) have been most effective in settings providing services for persons with ongoing risk behaviors or health issues indicative of those risks (for example, HIV-infected persons and those receiving dialysis or substance abuse treatment); however, these approaches have been less effective in identifying HCV infection in the general population, particularly in persons infected in the distant past. Among persons living with hepatitis C, approximately 76% were born between 1945 and 1965; persons in this birth cohort (“baby boomers”) accounted for more than 70% of all HCV-associated deaths in 2007 (5). This cohort may have received blood transfusions before the introduction of screening in 1992 or have a history of other risk factors. However, many in this cohort do not or cannot identify any risk factors for their infection. As such, a risk-based approach may miss a substantial proportion of HCV-infected individuals who may remain asymptomatic and unaware of their infection for years.

The expanded screening recommendations are especially important in light of highly effective treatment for HCV. Currently available antiviral agents can elicit a sustained virologic response (virologic clearance or cure) in up to 79% of patients when administered with pegylated interferon and ribavirin, and the benefits of HCV treatment are expected to increase. On the basis of clinical trial data for 2 agents submitted in new drug applications to the U.S. Food and Drug Administration, future treatment regimens will comprise 1 or more antiviral agents (given either with pegylated interferon and ribavirin or as all-oral combinations) and are expected to yield similar or improved rates of viral clearance. These new regimens require shorter durations of treatment (12 to 24 weeks rather than current 24- to 48-week regimens) and are associated with fewer serious adverse events (7).

The promise of improved health outcomes will be realized with successful implementation of both risk-based and birth cohort–based strategies for HCV testing and linkage to care and treatment. Given the USPSTF’s grade B designation for HCV testing in baby boomers and others at risk for infection, the 2010 Patient Protection and Affordable Care Act (Affordable Care Act) will facilitate implementation because it requires nongrandfathered private health plans to cover clinical preventive services given an A or B grade by the USPSTF without cost sharing and provides incentives for Medicaid programs to cover these services. The law will also prohibit insurance companies from declining to sell or renew policies because of such preexisting conditions as viral hepatitis, thus increasing patient

access to care and treatment called for in the HHS action plan.

The Affordable Care Act will improve health infrastructure by fostering the development of new health information technology and health information exchanges. Implementation of standards for electronic medical records can expedite the reporting of HCV-related laboratory and clinical information to public health surveillance systems and close current gaps in screening. As demonstrated by surveillance data, 50% of newly reported HCV cases lack a positive RNA test result (8); electronic medical records can facilitate implementation of recommended HCV testing policies. They also provide an opportunity to monitor the quality of viral hepatitis prevention, care, and treatment at the public health level.

The comprehensive screening strategies from the USPSTF and CDC create new opportunities for reaching the shared goals of reducing HCV transmission and identifying persons living with HCV and facilitate the receipt of care and treatment. Passage of the Affordable Care Act has created an environment conducive to implementation of risk-based and birth cohort–based strategies. Taken together, the law and newly expanded HCV screening recommendations will help generate the momentum needed to identify millions of Americans previously unaware of their infection status, thus preventing liver disease and deaths attributable to chronic HCV infection.

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Disclaimer: The views expressed in this publication are solely the opinions of the authors and do not necessarily reflect the official policies of the U.S. Department of Health and Human Services, the Agency for Healthcare Research and Quality, or the Centers for Disease Control and Prevention.

Acknowledgment: The authors thank Rachel Wilson for her contribution and assistance.

Potential Conflicts of Interest: None disclosed. Forms can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M13-1235.

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Ann Intern Med.

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