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Hepatitis C Virus Testing of Persons Born During 1945–1965

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TO THE EDITOR

Recommendations by the Centers for Disease Control and Prevention (CDC) (1) have expanded screening for hepatitis C virus (HCV) from those at increased risk for infection to the entire age cohort born during 1945–1965. This recommendation was based on the relatively high risk for infection in this group. Consideration was given to benefit versus risk for the individual patient as well as a cost analysis for screening the age cohort population (2). However, the cost analysis should have been performed for a different population: the group that was added to the screening recommendations—those in the age cohort who are not at increased risk for infection.

This age cohort has a relatively high incidence of HCV, but a large portion of the infected persons is derived from the relatively small group of those who are at high risk. Although numerous risk factors are listed, an earlier study (3) reported that one half of the risk for HCV infection for persons between the ages of 20 and 59 years comes from the 1.1% who had ever injected illicit drugs. Adding the 3.4% who received a transfusion before 1992 and the 6.1% with 20 or more lifetime sexual partners accounts for three quarters of the risk for HCV infection. If persons with an elevated alanine amino-transferase level are also tested, 93.5% of the HCV-infected population would be identified.

In justifying the new guidelines, the CDC states that the accuracy of patient recall of risk behaviors decreases over time, but this assumption is based on a meta-analysis about HIV-infected patients that compared 1-, 3-, and 6-month recall (4). Of interest, for “heroin use” and “number of sex partners,” 6-month recall was the best. This assumption of poor recall for healthy patients being considered for HCV screening is not adequately evidence-based. I, for one, born in 1956, am confident that I would remember if I had ever injected drugs, received a blood transfusion, or had 20 or more sexual partners.

If the high-risk group is excluded from the age cohort, the result is a large population with a low risk for infection. I suspect that a cost analysis of screening for HCV of this low-risk population would find it not to be cost-effective. In addition, the benefit versus risk of screening this low-risk population would need to be considered.

The key point is that the CDC has added this large population—those born during 1945–1965 who are not at increased risk—to their recommendations for HCV screening. This

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recommendation would result in the screening of millions of additional persons and cost billions of dollars. Before this step is taken, cost-effectiveness studies and benefit-versus-risk analyses should be done for this low-risk population. At this point, what screening should be recommended to an individual patient who reliably claims not to be at increased risk for HCV is unclear.

References

1. Smith BD, Morgan RL, Beckett GA, Falck-Ytter Y, Holtzman D, Ward JW. Hepatitis C virus testing of persons born during 1945–1965: recommendations from the Centers for Disease Control and Prevention. *Ann Intern Med.* 2012; 157:817–22. [PubMed: 22910836]
2. Rein DB, Smith BD, Wittenborn JS, Lesesne SB, Wagner LD, Roblin DW, et al. The cost-effectiveness of birth-cohort screening for hepatitis C antibody in U.S. primary care settings. *Ann Intern Med.* 2012; 156:263–70. [PubMed: 22056542]
3. Armstrong GL, Wasley A, Simard EP, McQuillan GM, Kuhnert WL, Alter MJ. The prevalence of hepatitis C virus infection in the United States, 1999 through 2002. *Ann Intern Med.* 2006; 144:705–14. [PubMed: 16702586]
4. Napper LE, Fisher DG, Reynolds GL, Johnson ME. HIV risk behavior self-report reliability at different recall periods. *AIDS Behav.* 2010; 14:152–61. [PubMed: 19475504]