

## LETTERS

### Hepatitis C testing in Canada: don't leave baby boomers behind

The emergence of direct-acting antiviral (DAA) therapy to treat hepatitis C virus (HCV) infection has brought renewed optimism in controlling the HCV epidemic.<sup>1</sup> Recent price reductions and the consequent expansion of access to these safer, shorter and highly effective regimens in Canada have made this a tangible goal.<sup>2</sup> As a result, the scale-up and roll-out of HCV testing is now an important consideration. Therefore, it is of concern that the Canadian Task Force on Preventive Health Care's recently published guideline in *CMAJ* failed to acknowledge that people born between 1945 and 1975, commonly referred to as "baby boomers," are a population with a higher prevalence of HCV infection and should be screened for HCV infection.<sup>3</sup> The recommendation against screening for HCV in asymptomatic patients in this population is also inconsistent with guidelines from several international health organizations.<sup>4,5</sup>

Baby boomers are a key population within the HCV epidemic in Canada. In British Columbia, recent estimates suggest that about 66% of people living with HCV are baby boomers.<sup>6</sup> Importantly, previous studies have shown that baby boomers are up to five times more likely to be affected by the consequences of chronic HCV infection than the general population.<sup>7</sup> Contrary to a popular misconception that these individuals contracted HCV infection from past high-risk practices (e.g., needle sharing, high-risk sexual practices), there is established research that has shown that many baby boomers who contracted HCV before 1992 did so as a result of nosocomial or iatrogenic practices (e.g., reuse of needles) in health care settings and via donated blood and organs before screening.<sup>8</sup>

Baby boomers may often be unaware of past health care transmission risks for HCV infection: this advocates for screening based on both demographic and risk factors. Because HCV infection is typically

asymptomatic for many decades, unscreened baby boomers living with HCV infection may never have sought testing or treatment and are vulnerable to substantial liver-related complications, including cirrhosis, hepatocellular carcinoma and premature death. Indeed, baby boomers have the largest proportion of advanced liver disease with decompensation and liver cancer.<sup>7</sup>

In February 2017, the pan-Canadian Pharmaceutical Alliance negotiated substantial price reductions for DAAs with pharmaceutical companies that allowed Canada to advance universal coverage for HCV drugs.<sup>2</sup> In response, many provinces have outlined a strategy to remove all restrictions on DAA treatment by 2018, including barriers to access based on comorbidities (e.g., HIV co-infection) and disease severity (i.e., METAVIR fibrosis score of F2). Although prior restrictions would have resulted in challenges for treatment of the entire population with HCV infection, this will no longer be the case in the near future. Therefore, the recommendation put forward by the task force to limit HCV testing for baby boomers is outdated; their rationale against screening this population because of treatment ineligibility and the potential for increased health inequity owing to affordability is not valid. If left untreated, the estimated lifetime cost for an individual living with HCV infection in 2013 is \$64 694, and lifetime future costs range from \$51 946 for a patient with chronic infection and a fibrosis score of F0 to \$327 608 for a patient requiring liver transplantation.<sup>9</sup>

The task force's recommendation also contrasts with many international guidelines that proposed one-time HCV screening for baby boomers. The American Association for the Study of Liver Diseases, Infectious Diseases Society of America, US Centers for Disease Control and Prevention, and the Canadian Liver Foundation have all strongly recommended one-time screening for this population.<sup>4,5</sup> Among others, a key advantage to offering one-time HCV testing to baby

boomers is that it neither requires health care providers to identify risk nor for individuals to recall past exposures that may lead to underreporting. Routine offers of one-time screening also hold promise for decreasing stigma associated with HCV testing, and potentially opens new discourses in clinical and public settings to destigmatize HCV.<sup>8</sup>

The task force's guideline also fails to acknowledge consistent and high-quality evidence that one-time screening for baby boomers, followed by appropriate treatment for HCV infection, is cost-effective. Although many of these studies were conducted in the United States and analyses were based on local treatment costs and epidemiological conditions, we expect that the findings would apply in Canada. Similarly, one study in Canada found that birth cohort screening followed by treatment resulted in an incremental cost-effectiveness ratio of up to \$44 034 per quality-adjusted life year gained compared with no screening.<sup>10</sup> Given recent Canadian policy changes associated with DAA costs, it is likely that there will be higher net benefits.

The task force emphasized the potential for "unnecessary anxiety and/or false reassurances" owing to false-positive and false-negative results for testing for HCV infection. Although the potential for false positives and negatives exists for HCV antibody and uncommonly for HCV RNA, the available HCV infection tests in Canada have been shown to be accurate and reproducible for HCV blood screening.<sup>11</sup> These tests have been effective worldwide for enrolling patients in therapeutic registration trials. Therefore, potential harms associated with HCV screening for HCV infection are arguably overstated, especially given that without screening, diagnosis of curable HCV infections would be missed.

Corresponding with the increase in treatment availability, the opportunity to alter the way testing for HCV infection and treatment services are offered to patients is now possible. Unfortunately, the recommendations put forward by the task force will not only hinder access to needed HCV treatment for key popula-

tions but will also perpetuate the health and financial burden imposed on society by untreated HCV infection.

The argument that lack of access to DAA treatment is a reason for withholding testing for HCV infection from baby boomers is inconsistent with current guidelines. Because Canada is one of the few countries to have moved toward universal coverage to treat HCV infection, we have an ethical obligation to treat those burdened by this preventable and curable disease. We suggest that this guideline should be revised immediately to incorporate evidence-based screening for HCV infection in asymptomatic baby boomers. As written, the guideline constitutes an impediment to the control of HCV disease in Canada.

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