must recognize that a definitive diagnosis is not necessarily required for adequate treatment and that serious diagnoses are rare in patients who present with gastrointestinal symptoms. We would also like to point out that the context for using the urea breath test in the "test and treat" approach for adult patients with dyspepsia is primary care.

Dyspepsia is extremely common, affecting 7% of patients presenting to a general practitioner's office, and it occurs with moderate severity in approximately 29% of Canadians.[1,2] It is obviously not feasible nor necessary for close to 30% of the Canadian population to undergo endoscopy. We should try to perform this procedure in the patients who would most benefit. In fact, if all patients with dyspepsia who present to a primary care physician were to have a gastroscopic examination the waiting list for this procedure would become enormous, potentially resulting in a delay in diagnosis for those patients with symptoms suggesting more significant pathology. Hence, we have to find ways to determine which patients may have significant pathology. Alarm features (vomiting, bleeding, anemia, abdominal mass, dysphagia and weight loss) and advanced age suggest a higher risk of pathology. Performing endoscopy on these individuals and simply performing a test for and treating *Helicobacter pylori* infection in those that do not have these risk factors may reduce the waiting lists for endoscopy and hence potentially increase the detection of early lesions.

Furthermore, once the urea breath test becomes more widely available, testing for and treating *H. pylori* infection would not result in a significant delay for further investigation if the patient were not to respond to treatment. A urea breath test result can be faxed within 24–48 hours and the course of treatment is only 1 week. In addition, a Canadian randomized controlled trial recently showed significant improvement in symptoms with the "test and treat" approach compared with placebo[3] and another study found this strategy to be significantly more cost-effective, without detrimental outcome, than a strategy using endoscopy first.[4]

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# Distorted spending priorities in Canada

I was intrigued by a recent news item in *CMAJ* entitled "Detecting hep C for $1.5 million a case."[1] The title implies concern about the cost of a new program to identify donors infected with hepatitis C by nucleic acid amplification testing. I am concerned about any inference that the decision of the Canadian Blood Services to implement this program was cost-ineffective. I believe it would have been morally and fiscally irresponsible to decide otherwise.

If screening for hepatitis C were not introduced, all of the carriers detected would be denied vital personal information and possible treatment. Some could donate again and infect additional blood recipients. People who received the contaminated, unscreened blood products could potentially infect others. The lives of up to 13 Canadians every year could be ruined, with far-reaching effects on their family, friends and associates. The treatment, lost productivity, early disability and death of these 13 people would actually prove to be even more costly than the screening program.

Rather than focusing solely on the short-term cost-effectiveness of our underfunded health care system, let's look at the Canadian Blood Services' decision relative to the distorted priorities of our federal government. Consider, for example, the $30 million aid package recently offered to professional hockey franchises, the $3 million Ottawa spends on fireworks every Canada Day, the $2.4 billion of the $3 billion federal job creation program that our Auditor General says was wasted and the $5 billion spent on fruitless, politically motivated attempts to bail out defunct and poorly managed industries.[2]

We need to guard against pressures that could cause a return to the administratively and philosophically challenged processes that resulted in the demise of the Red Cross blood program — and a lot of Canadians. If we do not, the worst thing about the Canadian health care system could be that we deserve it.

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## TB among aboriginal Canadians

The review by Mark FitzGerald and coworkers on the control of tuberculosis in aboriginal Canadians[1] would have been improved by a brief reference to the history of the disease among these first Canadians. Tuberculosis was recognized in aboriginal North Americans in the pre-Columbian period but only became a major problem in the latter part of the 19th century, after we and the Americans had destroyed their livelihood, impoverished them and crowded them together on reservations or in prison (as we still do).[2] Ferguson reported a mortality rate of 9000 per 100 000 in 1886, which is the highest rate ever recorded.[3] For treatment we sent aboriginal people to fill the beds of sanatoria in southern Canada, where many died. When their families came to see what had happened to them, even their graves couldn't be located.

In view of the increased incidence of tuberculosis in aboriginal populations, it is natural to consider preventive methods. Bacillus Calmette–Guérin vaccine has been administered to more than 3 billion people, but there remains considerable doubt that it accomplishes anything. In controlled studies the protective efficacy varies from 57% to more than 75%, and it is not clear that averaging such disparate results by meta-analysis is of any significance.[4] The efficacy is not, as the authors state, proven, and there is no reason to continue its wide use in aboriginal infants in contrast to the practice in the white population. Isoniazid prophylaxis in infected individuals is undoubtedly effective, but there has to be considerable caution in administering it to a population in which alcoholism and viral hepatitis are problems. The incidence of hepatotoxicity may be small, but the results can be catastrophic.[5,6] A better alternative to isoniazid might be a combination of rifampin and levofloxacin, with a minimal risk of hepatitis.

The authors worry, perhaps patronizingly, about the risks of "health transfer" — allowing aboriginal people to take over responsibility for their own health needs. Our record, at least where tuberculosis is concerned, is dismal. The best solution would be to facilitate the transfer process and provide aboriginal people with their own clinics, nurses and doctors.

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**[The authors respond:]**

We appreciate Leo Kahana's interest in our article on tuberculosis in aboriginal people in Canada.[1] He raises a number of important issues. We did not address the history of tuberculosis in Canada, as this subject had already been adequately covered by an earlier article in the *CMAJ* series on tuberculosis.[2] We indicated that the role of bacillus Calmette–Guérin vaccination in tuberculosis control is controversial. Kahana quotes reports showing a wide range of efficacy, but efficacy within Canada, which is most pertinent to our review, shows a significant benefit in case-controlled studies.[3] Many studies have shown underutilization of isoniazid chemoprophylaxis to be detrimental to tuberculosis control programs. The article by Mitchell and colleagues that Kahana cites refers to patients on active treatment;[4] one of us (J.M.F.) responded to this report with suggestions about a nonhepatoxic regimen.[5] There are no data on the combined use of rifampin and levofloxacin for chemoprophylaxis. Apart from toxicity, use of an expensive quinolone would incur significant additional costs. We are currently collaborating with the Tuberculosis Clinical Trials Consortium of the Centers for Disease Control and Prevention in Atlanta to develop a protocol to assess the efficacy of short-course chemoprophylaxis in non-HIV-infected people, which we hope will provide an alternative short-course regimen.

We disagree with Kahana's suggestion that we were patronizing in the section on health transfer. We welcome the concept of health transfer but caution that a public health surveillance system must remain in place. Our final conclusion was that tuberculosis control among aboriginal people must be "achieved in a culturally sensitive manner with a greater degree of community partnership that has been seen in the past." With this in mind, we are currently collaborating with the Institute of Health Promotion at the University of British Columbia to develop a community-based trainer program to involve First Nations people in planning and implementing community-driven and community-based chemoprophylaxis programs. By involving community members as well as health care professionals, it is hoped that we will be