all relevant charts, we also reviewed other diagnostic categories such as myositis, gangrene, gas gangrene and erysipelas.[1] We also reviewed all charts of children with group A β-hemolytic *Streptococcus* cultured from sterile sites during the time period of the study.

With respect to doing a sample size calculation, our goal was to collect all of the possible cases of necrotizing fasciitis at our institution over the last 16 years. Our problem was not with the sample size but with the power to discern major factors associated with necrotizing fasciitis, because of the small number of cases (8). For this reason, the reported results only suggested a trend and did not confirm it. Consequently we did not do a retrospective power calculation.

Gary Liss refers to a multivariate analysis and the fact that we were unable to obtain odds ratios from conditional logistic regression. To clarify, we did not do a multivariate analysis. Because of the small number of patients, odds ratios could not be obtained from a conditional logistic regression. Instead, we verified each estimate using a logit estimate of the odds ratio, adjusting for matching.

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First-line drugs for hypertension

In his recent series of *CMAJ* articles on choosing a first-line drug in the management of elevated blood pressure, James Wright repeatedly uses the phrase "low cost."[1–3] Unfortunately, what he is referring to is purchase price, not all-in system costs. Because purchase decisions are being restricted by third-party payers (such as the British Columbia Ministry of Health, to which Wright's Therapeutics Initiative is advisory), it is important to understand the difference.

Hypertension is well controlled for only 16% of Canadians with high blood pressure.[4] This lack of good blood pressure control has an enormous avoidable cost associated with stroke, renal failure, heart failure and coronary artery disease.

Hughes and McGuire reported that in the British National Health Service the total cost of treating hypertension was £76.5 million per annum, of which £26.9 million was attributed to the costs of discontinuation or switching of therapy.[5]

It is thus very important to recognize that there is much less persistence in actual practice than in clinical trials. Cheaper drugs that are not taken be-

cause of adverse effects may cost the system a great deal. Caro and colleagues recently reported that the choice of initial therapy influenced persistence with therapy. Among Canadian patients started on angiotensin-converting-enzyme inhibitors, persistence after 6 months was 89%, compared with 86% for patients taking calcium-channel antagonists, 85% for those taking β-blockers and 80% for those taking diuretics.[6] After 1 year, persistence was down to 78%.[7]

In a US study of drug utilization from the records of over 1.3 million enrollees in health maintenance organizations, Bloom[8] found that after 1 year persistence with the initial class of medication was substantially higher for drug classes with fewer adverse effects: 64% for angiotensin antagonists, 58% for angiotensin-converting-enzyme inhibitors, 50% for calcium-channel antagonists, 43% for β-blockers and 38% for diuretics. Persistence with any class of drug prescribed subsequently was about 10% higher for each group. This suggests that once patients experience an adverse effect from one drug, they are more likely to stop taking any other class of drug they are prescribed. I call this the "poison pill" effect.

In considering the cost of therapy, it is therefore necessary to consider not only the purchase price of drugs but also the system costs including dispensing fees, frequency of visits and cost of investigations for adverse effects, cost of switching medications and cost of downstream adverse outcomes that result from poor control of blood pressure. A silo budget mentality that is focused on restricting choice to drugs with cheap purchase prices is probably self-defeating.

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Competing interests: Dr. Spence has received speaker fees, consultant fees and travel assistance from various pharmaceutical companies as well as from provincial and federal formulary committees.

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[The author responds:]

David Spence misses the point of the series of 3 articles in suggesting that they are about cost.[1–3] These articles systematically review the best available evidence from randomized controlled trials using a hierarchy of evidence; cost is the least and last consideration. The clear conclusion from the available evidence, independent of cost, is that thiazides are the best first-choice drugs. In other words, if thiazides were the most expensive antihypertensive drug class, the conclusion would be the same.

Spence inaccurately implies that the evidence in these articles is biased. It is true that I am the Managing Director of the BC Therapeutics Initiative. However, he does not understand the relationship between the Therapeutics Initiative and BC Pharmacare. The Therapeutics Initiative assesses evidence of the efficacy and safety of new and existing drugs and provides a summary of that evidence to Pharmacare. The Therapeutics Initiative does not consider or include cost in that assessment. Evaluation of cost and cost-effectiveness evidence is the mandate of the Pharmacoeconomics Initiative. The Drug Benefit Committee of Pharmacare and the Director of Pharamacare make funding decisions on the basis of summaries of evidence (not funding advice) from the Therapeutics Initiative and Pharmacoeconomics Initiative plus other considerations.

Spence is asking us to put aside evidence from randomized controlled trials and in its place accept the conclusion from 2 retrospective observational studies.[4,5] Both of these studies were funded by the drug industry and the conclusions ratified their vested interest. In my opinion, this type of study reflects the profound influence drug companies can have on measures of drug compliance that rely on dispensed medication. The industry accomplishes this by providing drug samples (not detectable as dispensed medication) and intensive one-on-one promotion to physicians. Answering whether medication persistence differs with different drugs necessitates randomization of patients to the alternate drugs and blinding of both physicians and patients.

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Change the Canada Health Act? Why?

I am concerned about your recent editorial on the Canada Health Act (CHA).[1] It suggests that the CHA is unsustainable at current government funding levels and therefore needs to be revisited. This is equivalent to responding to an increase in the cost of prosecuting drunk drivers by raising the blood alcohol limit rather than by increasing funding for police and prosecutors. The answer lies not in abandoning the CHA's principles but in reconsidering the financing of the current system.

The editorial suggests that comprehensiveness is potentially the most unsustainable of the CHA's 5 principles, largely owing to advances in medical technology and the resulting elevation of public expectations. A natural consequence of successful research is to increase our ability to care for our patients. Not surprisingly, these advances may cost more than the technology currently available. Should we maintain the status quo in order to contain costs? Obviously, this is not what Canadians want. The cheapest solution is not necessarily the most efficient one.

Although I agree that a better method of financing — both for medicare and capital investment — must be found, I disagree that this necessarily requires re-examination of the CHA's principles. The CHA embraces, ideologically, what many Canadians feel to be essential, both for health care and as an expression of our nationality. If changes are going to be made on an ideologic basis, there should be evi-