antibody interfering with the live-virus vaccine, since two-thirds of the 16% of children without immunity do not have maternal antibody at the time of vaccination.[1] In addition to the immunogenicity of the vaccines used, the suboptimal response has to do with the maturity of the immune system and its ability to respond at the time of vaccination. Pools of susceptible children therefore remain after the first dose,[1–3] and this could have led to outbreaks in vaccinated children, like the one in Ontario, during the past decade. This implies that, if the first dose is given at 12 months, a second dose should be considered sooner than later. In this context, giving a second dose at 18 months appears appropriate. However, administering a second dose at 4 to 6 years of age, around the age of school entry, addresses the immediate public health concern about school-based outbreaks and is also convenient and economical. Our data indicate that 28% of children 5 to 17 years of age who received a single dose of MMR vaccine at 1 year of age have inadequate protective immunity against measles.[4] A second dose given at 4 to 6 years of age can act as a booster for those with waning immunity. Nevertheless, delaying a second dose to 4 to 6 years may not be a sound decision if the first dose was given at 12 months. A substantial proportion of preschool children would remain without adequate protection because of primary failure or suboptimal response. The question is whether these infants would form a large enough pool to allow outbreaks or simply to help sustain the transmission of measles. The alternative is to delay the first dose to 15 to 18 months to ensure a better initial response, in which case giving the second dose around school entry becomes a suitable strategy. As mentioned in the editorial, this strategy, among other factors, has been successful in eliminating not only measles but also rubella and mumps in Finland. Interestingly, the smallest Canadian province has chosen this strategy; outcomes in PEI could provide important information for the rest of the country.

Our study data also indicate that, in contrast to measles, vaccine-induced rubella immunity declines significantly only after 8 years of age.[5] In this regard, a second dose of MMR vaccine may also help prevent secondary failure of vaccination against rubella. Also, from the standpoint of sustained immunity to rubella during childbearing years, administration of the second dose around school entry or even later is likely to be more beneficial.[6] Canada is poised to achieve the goal of elimination of measles and rubella during pregnancy. Since the provinces have adopted different delivery schedules to achieve this goal, we should be able to find some answers to the question of timing in order to develop an optimal strategy for Canada.

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## Can drug companies have it both ways?

The articles by Drs. Joel Lexchin ("Enforcement of codes governing pharmaceutical promotion: What happens when companies breach advertising guidelines?" *Can Med Assoc J* 1997;156:351-6), Martin F. Shapiro ("Regulating pharmaceutical advertising: What will work?" 359-61) and Jean G. Desjardins ("The PMAC Code of Marketing Practices: Time for improvement?" 363-4) are timely and provocative, and pose some fundamental questions.

For instance, can pharmaceutical companies have it both ways? They wish to be known as "partners in the health care team" (or some similar bromide) but they do not wish to be subject to the same degree of self-regulation, bolstered by considerable government interference, that is now enjoyed by the established self-regulated professions.

A second issue is the complaints process. It is inadequate to depend on complaints from professionals, who are mostly but not exclusively physicians, because it is well known that physicians often do not complain. This is not due to a conspiracy of silence but to simple inertia and heavy involvement with other matters. In the same vein, it seems ridiculous to accept complaints about a company from a rival company: the various companies would simply abuse the regulatory process for personal gain whenever possible. This is human nature, and pharmaceutical companies are run by humans.

A third issue is "direct-to-consumer" advertising, which appears to be here to stay but points to a total

lack of consistency. Certain drugs are available only by prescription because it has been decided that a professional is needed to make appropriate recommendations about them. In direct-to-consumer advertising, however, patients are persuaded to override the professional's opinion. If it is truly in the public interest to promote a specific drug directly to consumers, then that drug is perhaps safe enough to be available without prescription.

The final issue concerns access to drugs. If Canadians were told that a patient with apparent appendicitis may have access to the surgeon's opinion but must pay for the surgery, there would be a revolution; in psychiatry the patient is entitled to be diagnosed "for free" but often cannot afford the treatment. And with the emergence of admittedly superior antidepressant and antipsychotic drugs, this problem is making a mockery of medicare. Yet pharmaceutical firms can appropriate from their profits the amount of money it would cost to set this right and spend it on advertising, much of which is suspect. The point of all this: How can one of the "partners in health care" abrogate responsibility for delivering the health care whereas the others would be jailed if they acted in the same way?

I close by praising all 3 authors. Desjardins' brief explication was pointed and balanced and Lexchin's careful accumulation of evidence was up to his usual standards. However, Shapiro was correct to suggest that Lexchin's suggestions for reform are not sufficiently radical. That was not my opinion 5 years ago, but that is progress.

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## Osler was good, but . . .

I enjoyed the brief article "Finding pleasure and history in the *Index Medicus*," (*Can Med Assoc J* 1996; 155:1327-8), by Dr. A. Mark Clarfield. However, I wonder whether perhaps Clarfield has not given Osler a little too much credit. I do not believe that he wrote articles in Italian or German, for example. In those days of casual copyright rules it was extremely common for journals to reprint articles from other journals, and to translate them if the other journal was published in a different language. The articles he cites certainly were published over Osler's name, but that is not quite the same thing.

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**[The author responds:]**

As I read this letter, I realized immediately that I did not have an answer to your correspondent's comments. I also knew where I could find the answer: I could write immediately to Dr. Charles Roland.

In all seriousness, I thank him for his comments and agree that in my hero worship of "The Chief" I may have been a bit gullible about the extent of Osler's linguistic abilities.

**A. Mark Clarfield, MD**
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