Letters

- Number needed to treat and baseline risks
- Fostering public engagement
- Testimonials for vaccine-preventable illnesses

Number needed to treat and baseline risks

I agree with Finlay McAlister's analysis of the number needed to treat.¹ However, I believe there is a missing issue associated with the use of the evidence-based terms we are so accustomed to using. Consider the following 2 scenarios.

In the first scenario, a drug reduces the risk of dying from a myocardial infarction from 3% to 2% over 2–3 years: the relative risk reduction is 33%, the absolute risk reduction is 1% and the number needed to treat is 100. In my experience, many people do not consider this drug to offer sufficient benefit to justify taking it. In the second scenario, a drug reduces the risk of dying from a myocardial infarction from 100% to 99%: the absolute risk reduction is 1% and the number needed to treat is 100. It is likely that many people would take this drug given that the risk of death without treatment is 100%.

These 2 scenarios demonstrate that terms such as relative risk reduction, absolute risk reduction and number needed to treat do not provide patients with any idea of their baseline risk. I have moved away from using these terms when trying to explain the benefits of drug therapy. Instead, I first use a variety of risk estimation tools to provide patients with a rough approximation first of their baseline risk (say 10%) of having an event (e.g., a myocardial infarction or fracture) in the next 5–10 years and then of their risk while taking drug therapy (say 8% assuming a relative risk reduction of 20%); I remind them their risk will not be reduced to 0%. I also outline the

side effects and cost of drug therapy and then support them equally whether or not they decide to take the drug.

Most people understand this approach. It removes the need to do mathematical calculations and, most important, it provides people with an idea of what would happen if we do nothing. This is important because people typically believe their baseline risks are higher than they really are. The terms number need to treat, relative risk reduction and absolute risk reduction rarely enter my discussions unless I have to show people why the 20% benefit that they have heard about for a particular therapy translates to only a 2% absolute risk reduction for them.

James P. McCormack BSc(Pharm) PharmD

Faculty of Pharmaceutical Sciences, Therapeutics Initiative, University of British Columbia, Vancouver, BC

Competing interests: None declared.

REFERENCE

1. McAlister FA. The "number needed to treat" turns 20 — and continues to be used and misused. *CMAJ* 2008;179:549–53.

DOI:10.1503/cmaj.1080110

Fostering public engagement

I read with interest the article on public engagement in setting health care priorities.¹ As the chief executive officer of Canadian Blood Services, an organization that emerged from the tainted blood tragedy of the 1980s, I can attest to the value of engaging the public in decision-making.

The Commission of Inquiry on the Blood System in Canada set the stage for engagement;² however, owing to a history of mistrust, stakeholders and the public were reluctant to participate in decision-making about the blood system. Canadian Blood Services met this challenge by establishing 1 national and several regional standing committees, for which the founding members participated in defining the terms of reference. Initially the national commit-

tee was to report to the chief executive officer, but the committee members were not confident that their input would receive genuine consideration by decision-makers. Once the reporting structure was modified so that the committee reported to the board of directors, the committee members' trust increased exponentially.

Experience has taught us that several critical success factors must be present within an organization to ensure effective public engagement: integration of public engagement into the business, establishment of formalized principles for engagement, commitment to building and maintaining trusting relationships with the public and stakeholders, and willingness to consider and act on their input. There must also be direct access of the public and stakeholders to the decision-makers, transparency with regard to the process and goals of engagement, openness to sharing all information relevant to the issue, an inclusive approach to identifying and involving the public and stakeholders, timely engagement at a point in the decision-making process when input can genuinely influence outcomes, and meaningful ways of recognizing stakeholders and the public for their contributions.

As a recent example, Canadian Blood Services has accepted the mandate to develop an integrated national system for organ donation and transplantation in Canada. In September, about 130 stakeholders contributed to setting priorities for the new system. These stakeholders will continue to be at the table as the system evolves because we firmly believe that operating in an open and collaborative manner is essential to ensuring a safe health care system and maintaining trust in that system.

Graham Sher MD PhD

Chief Executive Officer, Canadian Blood Services, Ottawa, Ont.

Competing interests: None declared.

REFERENCES

1. Bruni RA, Laupacis A, Martin DK, for the University of Toronto Priority Setting in Health Care Re-

search Group. Public engagement in setting priorities in health care. *CMAJ* 2008;179:15-8.

2. Krever H. *Final report: Commission of Inquiry on the Blood System in Canada*. Ottawa (ON): The Commission; 1997.

DOI:10.1503/cmaj.1080112

Testimonials for vaccine-preventable illnesses

Rolando Ulloa-Gutierrez recently highlighted the serious issue of public misperceptions about pertussis, as well as its prevalence and effects.¹ Over 20 years of practising rural family medicine in southern Manitoba, I have sensed that my patients have become increasingly sceptical about immunizations and there has been an increasing rate of refusal to be immunized. In an unrelated letter in the same issue of *CMAJ*, Mark Diotallevi noted the differences between how testimonials and evidence affect patients' decisions regarding therapy.²

It is my impression that these two issues are linked. The rates of vaccine-preventable illnesses and of serious complications from these illnesses are so low in Canada that few physicians and few patients have ever seen a case. We are nearly 2 generations removed from the Canadians who witnessed epidemics of these illnesses: testimonials about polio, diphtheria and pertussis are much less prevalent today than they were a number of years ago.

If we are to convince patients that stories about adverse effects of vaccination are overstated or incorrect, we will probably need to use testimonials along with evidence. As Ulloa-Gutierrez pointed out, many countries continue to struggle with vaccine-preventable illnesses. If we turn to them for testimonials, perhaps more Canadians will again come to understand the importance of immunization and we will be able to avert future epidemics.

Cornelius Woelk MD

Family physician, Winkler, Man.

Competing interests: None declared.

REFERENCES

1. Ulloa-Gutierrez R. Pertussis mortality and public misperceptions. *CMAJ* 2008;179:492.
2. Diotallevi M. Testimonials versus evidence [letter]. *CMAJ* 2008;179:449.

DOI:10.1503/cmaj.1080114

Not the view of Canadian Medical Association

At the bottom of every *CMAJ* editorial there is a line that says, "All editorial matter in *CMAJ* represents the opinions of the authors and not necessarily those of the Canadian Medical Association."

Let me state quite clearly that the opinions contained in the editorial by Amir Attaran and colleagues on the recent listeriosis outbreak in Canada¹ are definitely not those of the Canadian Medical Association.

Robert Ouellet MD

President, Canadian Medical Association, Ottawa, Ont.

Competing interests: None declared.

REFERENCE

1. Attaran A, MacDonald N, Stanbrook MB, et al. Listeriosis is the least of it [editorial]. *CMAJ* 2008; 179:739-40.

DOI:10.1503/cmaj.1080111

Letters submission process

To send a letter to the editor concerning a published article, visit www.cmaj.ca and click "Submit a response" at the top right-hand side of the article. All letters submitted through www.cmaj.ca will be considered for publication in the print journal. To submit a letter that does not pertain to an article in the journal, email your letter to pubs@cma.ca with a note indicating whether or not you would like it to be considered for publication.

Letters written in response to an article published in *CMAJ* are more likely to be accepted for print publication if they are submitted within 2 months of the article's publication date. Letters accepted for print publication are edited for length (usually 250 words) and house style.

Mécanisme de présentation des lettres

Pour écrire à la rédaction au sujet d'un article publié dans le *JAMC*, rendez-vous sur le site www.jamc.ca, ouvrez l'article en question et cliquez sur "Submit a response" parmi les choix énumérés en bleu à droite de l'article. On étudiera toutes les lettres reçues sur le site web pour éventuelle publication dans la version imprimée du Journal. Si votre lettre traite d'un autre sujet qu'un article publié dans le Journal, écrivez à pubs@cma.ca et précisez si vous souhaitez ou non que votre lettre soit étudiée en vue de sa publication.

Les lettres répondant à un article publié dans le *JAMC* sont plus susceptibles d'être acceptées pour publication imprimée si elles sont présentées dans les deux mois de la date de publication de l'article. Les lettres acceptées pour publication imprimée sont révisées en fonction du style du *JAMC* et raccourcies au besoin (elles doivent habituellement compter au maximum 250 mots).