## **LETTERS**

## **Association versus causation**

McAlister and colleagues are to be congratulated on an important study.¹ They concluded that "a province-wide program to promote team-based primary care is a feasible and effective way to reduce use of emergency departments," which suggests a causal association between primary care networks and reductions in the use of emergency departments. Their study was cross-sectional, and, although it controlled for a number of relevant factors, it did not examine pre-existing patterns of use of emergency departments.

In a study published in 2009,<sup>2</sup> our group found substantial differences in the use of emergency departments between physician payment models in Ontario; however, on examination of an earlier time period before the models were implemented, we found the patterns to be pre-existing. Self-selection of physicians into particular models of care appears to involve important differences in physician and patient characteristics,

some of which may not be measurable using existing data.<sup>3</sup>

Without a longitudinal design that accounts for baseline patterns of care, conclusions about causation may not be warranted.

## Richard H. Glazier MD MPH

Family physician and health services researcher, Institute for Clinical Evaluative Sciences, Toronto, Ont.

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