



## References

1. Gordon M. A system worth saving. *CMAJ* 1996;154(9):1395-6.
2. Rafuse J. Private-sector share of health spending hits record level. *CMAJ* 1996;155(6):749-50.
3. Conrad DA, Maynard C, Cheadle A, Ramsey S, Marcus Smith M, Kirz H, et al. Primary care physician compensation method in medical groups: Does it influence the use and cost of health services for enrollees in managed care organizations? *JAMA* 1998;279:853-8.
4. Janknegt R, Steenhoek A. The system of objectified judgment analysis (SOJA). A tool in rational drug selection for formulary inclusion. *Drugs* 1997;53:550-62.
5. Donald JB. Prescribing costs when computers are used to issue all prescriptions. *BMJ* 1989;299:28-30.
6. Dimfeld V. The benefits of privatization. *CMAJ* 1996;155(4):407-10.

## Emergency stroke care

The supplement article on emergency management of acute ischemic stroke in Canadian hospitals, by Corinne Hodgson,<sup>1</sup> contained some apparent discrepancies.

The article states that "For both the urban and rural hospitals, the median time [between admission to the emergency department and] examination was 9.7 hours." However, data presented in Table 2 of the article indicate the 56.4% of all patients were examined within 3 hours of arrival. This suggests that the category "< 3 hours" must contain the observation identified with the 50th percentile. It follows that the median time to evaluation must have been less than 3 hours.

I also have some concerns about this treatment of the data. It would be reasonable to calculate the proportion of patients seen within 3 hours on the basis of the patients whose time to examination was known (i.e., 303/312 or 97%). However, the method of analysis offered assumes

that every patient in the "unknown" group had examination times in excess of that for the patients for whom data were available.

Data for the interval between arrival at the emergency department and CT scanning indicate that the mean for urban patients was 4.5 hours and for rural patients 15.0 hours. One can infer that 165 (48.7% of 339) of the urban patients and 22 (11.1% of 198) of the rural patients underwent CT imaging, for a total of 187 patients. Combining these figures  $([165 \times 4.5] + [22 \times 15])/187$  yields an average wait of 5.7 hours, which appears inconsistent with the average time of 15.1 hours reported in the article.

Larry M. Picard, MD  
Toronto, Ont.

## Reference

1. Hodgson C. Emergency management of acute ischemic stroke in Canadian hospitals. *CMAJ* 1998;159(6 Suppl):S15-8.

## [The author responds:]

Dr. Picard has uncovered 2 unfortunate errors in this article.

The numbers in Table 2 are correct, but there was an error in reporting the mean time from arrival at the hospital to examination. The mean (not median) time to examination for both urban and rural hospitals was 0.7 hours (not 9.7 hours).

The second error concerns the waiting times by type of hospital. What is given as the mean waiting time (15.0 hours for rural patients and 4.5 hours for urban patients) is in fact the median. Nearly half (43.6%) of the urban patients underwent CT scanning within 3 hours of arrival in the emergency department (Table 1).

Among rural patients, the proportion was 31.8%. Although 48.7% (165/339) of urban patients underwent CT scanning, for rural patients the proportion was much lower (22/198 or 11.1%).

There is also a typographic error in the paragraph on waiting times. The mean time between arrival and CT for ward patients should have been reported as 42.9 hours.

I apologize for the inconvenience caused by these errors.

Corinne Hodgson, MA, MSc  
Corinne S. Hodgson & Associates Inc.  
Pelham, NH

## Psychobiology of stroke: a neglected area

The editorial by Antoine Hakim and colleagues<sup>1</sup> provides a comprehensive review of the human and financial burden of stroke on the Canadian health care system. The article also draws attention to the current state of disorganized stroke care in Canada and suggests remedies for this problem. However, we are concerned that both the editorial and the accompanying supplement<sup>2</sup> fail to address the psychological consequences of stroke and the importance of integrating psychiatric services into the treatment of stroke patients.

The prevalence of post-stroke depression in 2 rehabilitation hospitals in Canada was estimated at 36% to 50%.<sup>3,4</sup> Given that at any given time approximately 300 000 Canadians are suffering the consequences of stroke, at least 100 000 of these may be disabled by depression. Furthermore, depression after acute stroke was the only treatable condition independently associated with limitations in physical functioning.<sup>5</sup> This finding emphasizes that early recognition and effective treatment of depression after stroke may optimize rehabilitation potential and thereby reduce the hu-

**Table 1: Time between arrival in emergency department and CT scanning**

Hospital setting	Waiting time; no. (and %) of patients			Total
	< 3 hours	3-6 hours	> 6 hours	
Urban	72 (43.6)	38 (23.0)	55 (33.3)	165
Rural	7 (31.8)	0 (0)	15 (68.2)	22