Our major concern is the assumption that increases in the number of physicians lead to commensurate and therefore adequate services. Other factors that must be taken into account include the choice of individual physicians as to whether they will work with elderly patients; geographic distribution of physicians;[2] the "feminization" and greying of physician ranks, both of which may affect "full-time equivalent" values;[3,4] and the reality that, as the elderly cohort ages, the old old will require more physician services per capita than the young old (people over 80 years of age represent the fastest-growing segment of the population, and the number of frail elderly people,[5] who are most likely to need health services and physicians' time, is growing disproportionately).

Despite its title, the article by Roos and colleagues is limited to discussing physician numbers and does not address meeting population needs, an immensely broader, more complex issue in the elderly population. Although the authors recognize the limits of "purely technical means" to determine optimal physician numbers, the question of physician resources for elderly patients cannot be answered by this study.

Najmi Nazerali, MD
Susan Freter, MD
Sylvia Windholz, MD
José Morais, MD
Yves Bacher, MD
Sylvie Jones, MD
Jirair Kuyumjian, MD
Allen R. Huang, MD
Division of Geriatric Medicine
McGill University
Montreal, Que.

References

1. Buske L. Projected physician supply. *CMAJ* 1998;158(11):1584.
2. Ryten E, Thurber AD, Buske L. The Class of 1989 and physician supply in Canada. *CMAJ* 1998;158(6):723-8.
3. Rieder MJ, Hanmer SJ, Haslam RH. Age and gender differences in clinical productivity among Canadian pediatricians. *Pediatrics* 1990;85:144-9.
4. Dauphinee WD. Medical workforce policy making in Canada: Are we creating more problems for the future? *Clin Invest Med* 1996;19:286-91.
5. Rockwood K, Fox RA, Stolee P, Robertson D, Beattie BL. Frailty in elderly people: an evolving concept. *CMAJ* 1994;150 (4):489-95.

While thought provoking in delivery and content, the article by Dr. Roos and colleagues does not spell out several important caveats. The period of review was before the 10% drop in medical school enrolment, a change that will undoubtedly affect the future number of physicians and the population they serve. Equally important is that approximately 25% of specialists were excluded from the analysis, including anesthetists, who make up the fourth-largest specialty group after "other medical specialties," psychiatry and pediatrics.

In 1986 and 1996 the Canadian Anaesthetists' Society did direct tallies of the number of specialist anesthetists in Canada. Over the 10-year period, this number increased by 10%, whereas the general population increased by 18%. The Society believes that the current shortage of anesthetists will worsen as the number of elderly people (over 65 years of age) in Canada's population increases. Given that the delivery of surgical services is inextricably linked to the number of anesthetists, it is difficult to agree with the conclusion that care to our aging population will not be compromised.

Quality research into the issues of physician resource planning is clearly needed in Canada. However, it is essential that limitations in methodology and interpretation of data be provided in articles such as this one.

Neil Donen, MD
Chair, Physician Resource Committee
Canadian Anaesthetists' Society
Toronto, Ont.

The article by Dr. Roos and colleagues represents an important contribution to discussions about physician human resource planning. However, its conclusions must be regarded with caution, given that the database upon which the calculations are based is inaccurate.

Two years ago, the Canadian Neurosurgical Society reported a significant discrepancy between the number of neurosurgeons in clinical neurosurgical practice and the numbers in databases that were being used for physician human resource planning.[1] For example, on Dec. 1, 1994, there were 174 neurosurgeons in active clinical practice in Canada — not the 211 used in this study. The numbers for other specialties and for the year 1986 are likely also inaccurate.

Research and policy development on physician human resources is hampered by such discrepancies. In this era of specialization, databases of physician numbers should include definitions of specialties and domains of practice, including proportions of time allocated to clinical activities in several subspecialties if necessary, to allow accurate description of what the numbers represent and determination of present and future physician resources. The database of the Canadian Institute for Health Information does not discriminate between practising neurosurgeons and retired certified neurosurgeons. Furthermore, for the purposes of research and policy development on physician human resources, certified surgical specialists who confine their practice to research or disability examinations should not be counted as "practising surgeons." If they are, the number of physicians in clinical practice will be overestimated.

Herman Hugenholtz, MD
Division of Neurosurgery
Dalhousie University
Halifax, NS

Reference

1. Hugenholtz H, for the Canadian Neurosurgical Society. Neurosurgery workforce in Canada, 1996 to 2011. *CMAJ* 1996;155 (1):39-48.