

Clinical Neurophysiology Health Human Resources - A Call to Action (but What?)

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It's widely accepted that we collectively face a health human resource problem in Canada. We won't have enough doctors, nurses, technologists, physiotherapists and other professionals to maintain our current methods of health care over the next decade. Many studies have been published since 2001 documenting anticipated health workforce shortages. Typically, these reports address shortages from provider perspectives, and assume that future provider numbers should be extrapolated from current care delivery models. Future "manpower" needs are then modeled on existing numbers, anticipated workforce entries exiting training programs and estimated numbers expected to retire. Most such studies also attempt to factor in a growing and aging population and expected evolution of the burden of disease. Typically, in these reports, the future looks bleak.

Again typically, such reports are discipline or specialty-specific and don't provide any data that would permit policy makers to prioritize in allocating scarce resources. When there are "manpower" crises in nearly all disciplines, where do the payers (provincial health and advanced education ministries) put their (our) money?

Not all medical disciplines appear to be facing the same challenges. Residents exiting Cardiac Surgery training programs are struggling to find jobs in Canada and programs are limiting the numbers entering training as a result. This particular reduction in physician workforce needs reflects dramatic changes in patterns of practice in management of coronary artery disease. Neurosurgery workforce projections in Canada appear somewhat similar, although the reasons for concern about jobs for young neurosurgeons exiting training are different¹.

The state of Canadian Adult² and Pediatric³ Neurology workforces and some projections relating to future needs have been well described in this Journal. Now, in this issue, the current state of the clinical neurophysiologist and technologist workforces is comprehensively documented and anticipated shortages in these workforces are outlined in a painstaking study by Chan et al⁴. They describe an aging physician and technologist workforce, significant regional variation in the distribution of providers, and long wait times at least for EMG studies. Survey respondents identified service fees and establishment of quality assurance programs (presumably by provincial regulatory authorities) as their most important concerns, but after these, the respondents clearly identified the looming shortages of qualified neurophysiologists and, even more critically, of technologists. The demonstration of the likely shortfall in meeting workforce needs would seem to imply a call for action by the neurophysiology community. But what action?

Clearly there is a pressing need to tackle the problem of the low numbers of training positions for technologists. We can, on the basis of this report, engage provincial education ministries in establishing programs to train technologists beyond the four

programs currently in place and in funding these programs appropriately. Where provincial regulatory bodies have established barriers to "on the job" training of technologists, we need to engage the regulators to balance their responsibilities relating to both public safety and access to services.

We're on less solid ground in arguing that there should be more residency positions assigned to the base disciplines of clinical neurophysiologists (Neurology and Physical Medicine & Rehabilitation) except as part of an overall increase in residency positions across disciplines. Provincial ministries have committed to increases in medical school enrollment and to increases in residency positions to accommodate this expansion. However, these same ministries have embraced a need for more "generalists" and fewer sub-specialists like clinical neurophysiologists. Arguments that Canada needs more clinical neurophysiologists will be lost in the din of similar arguments for more family doctors, geriatricians, psychiatrists and general internists.

What about IMGs? Where regulatory authority requirements exist that mandate clinical assessments for "practice-readiness" by practicing specialists, we can take on the assessment challenge enthusiastically, knowing that we're the only ones who can do such assessments with face validity.

Finally, we can (and likely will find ourselves forced to) revisit our current service provision paradigm by developing careful utilization guidelines and access filters that, if done properly, may reduce service demand without sacrificing truly appropriate access.

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