

The Canadian Association of Radiologists is the national voice of radiology committed to promoting the highest standards in patient-centered imaging, lifelong learning and research.

Radiologists are an integral part of the healthcare team.



Date: June 9, 2009

Brief to: Standing Committee on Natural Resources

RE: The Canadian Association of Radiologists ready to collaborate on the isotope shortage

The CAR has been monitoring the effects of the Chalk River shutdown as a prolonged shortage of medical isotopes has implications for radiology services across the country. Patients needing nuclear medicine scans may be required to move to other imaging modalities for their diagnosis and treatment monitoring, notably CT and MRI. The effect on an already stressed imaging system with long waiting lists for CT and MRI can be significant. The availability of PET and CT/PET scanners varies widely but relatively few are available in Canada to meet the increased demand.

Provinces/territories individually manage their isotope supplies; therefore, the effect of a shortage differs across the country. The CAR is trying to monitor any increased demand for radiology through its provincial radiology organizations and no change has been detected over the past two weeks. There is a need to maximize collaboration in Canada between provincial, territorial and federal governments, health care authorities and medical associations as this shortage continues.

A national standard of care

The CAR believes that a coordinated national standard and strategy would ensure that the needs of all Canadians from coast to coast are at the forefront as we manoeuvre through a limited supply of medical isotopes. Perhaps a pan-Canadian committee might collectively manage the issue and develop strategies that address the best interests of all Canadians in the short and long term?

Such a committee would need to be comprised of representatives from, or have mechanisms in place to seek input from, provincial, territorial and federal governments, provincial and territorial health care authorities, national and provincial imaging associations, colleges and educational institutions that provide health human resources, and industries producing the isotopes.

Only through a concerted effort by governments, medicine and industry will Canada successfully navigate this critical health care situation.

The CAR is willing to play a key role in this committee.

Coordinated consultation with imaging groups

Accommodating more imaging studies in an already stretched medical imaging system will require a detailed assessment and consultation with other imaging groups. This would include groups such as the Canadian Association of Medical Radiation Technologists (CAMRT) and Canadian Society of

Diagnostic Medical Sonographers (CSDMS) in consideration of the impact of increased demand on technologist manpower and training. The CAR is willing to play a role in this kind of needed consultation.

Developing short-, mid- and long-term strategies

It is critical that Canadians have access to required nuclear medicine services. This will require immediate action. The CAR identifies numerous areas it sees as requiring attention, and in which the CAR might assist in managing the isotope shortage.

1. Assisting in a comprehensive study on the realistic impact of how decreased supply worldwide will impact Canada, to address questions like:
 - a) How many patients would be affected with no access to nuclear medicine tests?
 - b) How many of these could be transferred to radiology imaging?
 - c) What would be needed to accommodate these patients?
 - Can increased workload be accommodated within the current system? And for how long and at what degree of increased workload?
 - Can and how to expand the operating time of facilities to impact patient needs?
 - What is the impact on staff both physicians and technologists?
 - Who would absorb the new costs – capital and operating?
2. Assessing and monitoring the effect of a prolonged isotope shortage on radiology demand and workload. Adjusting workload and manpower supply to optimize use of isotopes and shifting imaging exams to other nuclear and non-nuclear modalities (e.g. CT, MRI and CT/PET) are affected by and dependent on current imaging resources now and in the long term
 - a) Specifically , there is a need to monitor and report on the system impacts including (these will be useful when planning for investment in isotope supply in the future):
 - staff (both radiologists and technologists): work hours, overtime, sick leaves, work satisfaction
 - management: nuclear medicine units, radiology units, facility level, regional level, provincial/territorial levels
 - resource use (total cost to treatment point as patients move through the system)
 - machine use/ operating time
 - wait times for nuclear medicine patients
 - wait times for other diagnostic imaging patients
 - cost overruns within radiology sections
 - b) Expand the use of the CAR evidence-based Diagnostic Imaging Referral Guidelines would be a way to prioritize patients
 - Guidelines assist physicians in ordering the best test first can have positive implications for the management of imaging health human and equipment

- resources, patient safety through reduced exposure to unnecessary radiation, and wait times
- Improved management of current imaging resources creates more capacity - the CAR has five years experience implementing evidence-based and transparent diagnostic imaging guidelines with specialists, family physicians and general practitioners, and can help expand the use of guidelines across the country
- c) Developing clinical protocols, strategies and algorithms for prioritizing patients based on local and regional resource availability – developing a special request form or format to identify these patients and a system to monitor requests must take into consideration already existing wait lists
- 3. Assisting in the development of a coordinated approach to assess radiology needs to ensure all regions have fair and equitable access to available isotopes and alternative radiology services (e.g. to potentially make recommendations to move product or patients between provinces/territories)
- 4. Assisting in the careful planning and coordination for the long term that will be required to help avoid a similar situation in the future
 - a) Studying the need to expand replacement technologies such as adding more PET/CT, CT and MRI. The CAR might assist with issues to be resolved such as:
 - What would be the actual demand over the next five years?
 - How many new units would be needed to meet the new demand?
 - How to deal with the existing wait lists?
 - How soon could there be a realistic increase in supply?
 - How can we meet the manpower needs?

Collaboration now and for the long-term

Managing the shortage of medical isotopes now and creating future supplies is a global, national and provincial/territorial issue which will require collaborative efforts within and between all levels of governments, health care authorities, medical associations and industry, now and in the years ahead.

Management of an isotope shortage in the shorter term must coincide with mid- and long-term strategies for supply. The CAR is open to continuing involvement at each of these levels in order to assist in the evolution of isotope supply and management.

The CAR believes beginning with a commitment to a national approach that considers the health care of each Canadian equally is an important first step on the journey.

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