	House of Commons CANADA
	Standing Committee on Health
HESA •	NUMBER 028 • 2nd SESSION • 40th PARLIAMENT
	EVIDENCE
	Thursday, June 18, 2009
	Chair
	Mrs. Joy Smith

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# **Standing Committee on Health**

Thursday, June 18, 2009

#### • (1530)

### [English]

The Chair (Mrs. Joy Smith (Kildonan—St. Paul, CPC)): Good afternoon, ladies and gentlemen. I want to welcome our guests. It is delightful that you could be here today at such short notice for our discussion on such an important topic.

Before we begin our committee, I would like to speak to the committee members for a moment. We have a motion to consider before we start, and that is the budget in the amount of \$5,500 for the study of health implications of the supply of radioisotopes.

Could I have this motion adopted?

(Motion agreed to)

The Chair: Now we will proceed.

As you know, guests, we have each organization give a sevenminute presentation. Following the seven-minute presentation, there are two rounds of questioning. The first one is seven minutes as well, for both questions and answers, and the second one allows five minutes for both questions and answers.

We will begin with the University of Ottawa Heart Institute. Who would like to start with that? Who would be the first speaker?

Dr. Rob Beanlands (Director, National Cardiac PET Centre, Chief of Cardiac Imaging, University of Ottawa Heart Institute): I can start.

The Chair: Please go ahead, Dr. Beanlands.

**Dr. Rob Beanlands:** I'm very pleased to be here on behalf of the University of Ottawa Heart Institute. I'm the chief of the cardiac imaging program. We also have in our facility a cyclotron that makes PET isotopes.

First and foremost, I think the main goal for all of us is for the care of our patients to be given in a timely manner and for this timely care to be provided to the best of our abilities.

Part of why we're here is to look for solutions. There are shortterm, medium-term, and long-term solutions.

There are already some initiatives in place to evaluate some longterm solutions. There's a plan for a workshop and a program to look at some of these very seriously in the fall, and we're very pleased to be part of that initiative.

We heard about medium-term solutions from the Minister of Health earlier this week, when she spoke about the CIHR grant program to try to look at alternatives to technetium. Short-term solutions are things that we are doing on-site in the heart institute. For example, in cardiac imaging in our facility we have switched to a tracer called thallium, which can be used quite reliably to image the blood flow in the heart. We also have acquired—I think Dr. Ruddy can speak more to this—a scanner that uses less technetium. That's a new technology. We also have access to PET imaging for blood flow agents, and we do PET imaging of the heart as well, so we have been able to adapt with those situations.

In addition, our staff are working extremely hard. Many of them are coming in on the weekends to help deal with the situation.

All in all, because of our planning and our local teamwork, we've been able to weather the storm, if you will, and none of our patients are waiting significantly longer that they were before the Chalk River reactor shut down.

I should add that in the heart institute we are also helping with the production of sodium fluoride. This is thanks to the foresight of Dr. McEwan, whom you'll hear later, the University of Alberta team, and the McMaster group as well. We worked with them to submit a proposal to Health Canada, which was rapidly reviewed and approved. We will now be ready to provide sodium fluoride as an alternative in bone-scan imaging in Ottawa. We'll supply it to the Ottawa Hospital. The Heart Institute will also provide access to our cameras so that if there is patient overload at the Ottawa Hospital, we'll be able to do some on our system as well.

I think one of the key things here is that we are working together within the city and with the Ottawa Hospital. The University of Ottawa Heart Institute is also working with the other cyclotron facilities across the country and with the nuclear medicine community to try to find solutions for the problem we now face.

I should add that we were recently at the Society of Nuclear Medicine meeting, and many of my colleagues in the cardiac imaging field commended us on the initiatives that we've taken already to solve this. We're proud of that. I think we've been working together very well to try to achieve that.

That's where I'll stop, Madam Chair.

• (1535)

**The Chair:** We have a few more minutes, if you have anything else to say, but if that's the end of your presentation, that's great too.

We'll now go to Jean-Luc Urbain from the Canadian Association of Nuclear Medicine.

Dr. Jean-Luc Urbain (President, Canadian Association of Nuclear Medicine): Madam Chair, members of the committee—

[English]

The Chair: Excuse me. Dr. Ruddy wants to use the rest of the seven minutes.

Please go right ahead.

Dr. Terrence Ruddy (Professor, Medicine and Radiology, Chief of Radiology, Director of Nuclear Cardiology, University of Ottawa Heart Institute): I'm Dr. Terry Ruddy, head of cardiology at the University of Ottawa Heart Institute and director of nuclear cardiology at that site. I'm also head of nuclear medicine at the Ottawa Hospital, so I look at business from both ends.

In the cardiac world we're doing well. It's more or less business as usual, but not exactly. When we switch to thallium from the technetium compound, we're actually using a compound that has a less favourable symmetry and less favourable imaging characteristics. It's adequate, but sort of borderline adequate. It's a band-aid solution that works okay, but something you wouldn't really want as a long-term solution.

So we need either our technetium compounds restored in a way that we can count on them, or we need to go into PET imaging to a greater degree. Technetium-labelled compounds for cardiac imaging are adequate or borderline adequate compared to PET. PET diagnostic accuracy is much greater in cardiac disease than SPECT technetium compounds. You can look at this as an opportunity to move more toward PET. That means more PET cameras across Canada and more development of cyclotrons so we can use a superior alternative to technetium, get away from the concern about technetium, and actually have better diagnostic imaging.

In nuclear medicine, bone scans are an essential test in about 50% or so of patients. The other 50% can be moved to other tests that may be similar or may not be exactly similar—sort of like apples and oranges. There is a significant population for whom there's really no alternative to a bone scan. Bone scans can be done with either technetium or a PET tracer, the way Dr. McEwan has developed the sodium fluoride.

To offset future shortages, having more PET cameras across the country would be very desirable. It would also be very desirable for the bone scans that are at risk with our technetium shortage.

The Chair: Thank you, Dr. Ruddy.

Now we'll go to Dr. Jean-Luc Urbain from the Canadian Association of Nuclear Medicine.

Dr. Jean-Luc Urbain: Thank you very much.

#### [Translation]

Madam Chair, honourable members of the committee, on behalf of the Canadian Association of Nuclear Medicine (CANM), I would like to thank all of you for giving us the opportunity to appear in front of your committee.

The Canadian Association of Nuclear Medicine was founded in 1971. The CANM is the national voice of nuclear medicine physicians across Canada and the two million patients that they serve every year.

Since the first dramatic shutdown of the NRU reactor in December of 2007, the Canadian Association of Nuclear Medicine has worked relentlessly on the ad hoc health experts working group constituted by the Ministry of Health to mitigate the effect of the isotope shortage on the well-being of Canadians.

In May of 2008, the ad hoc health experts working group on medical isotopes published and submitted to the Ministry of Health a report detailing the lessons learned from the December 2007 shutdown of the NRU reactor. In that report, the working group emphasized the need to: ensure efficient and effective communications with the medical community and the public; in decisionmaking, ensure a balance between the health and safety of the public and the health outcomes of individual patients; assure appropriate physician participation and input into the decision-making process; and establish a clear and appropriate alignment of authority and accountability for the management of medical radioisotope supplies.

Among other recommendations, our working group proposed that the Government of Canada: secure a "made in Canada" solution for the supply of isotopes, particularly molybdenum and technetium 99m by expeditiously commissioning the MAPLE 1 and 2 reactors; work with its international partners to review global capacity to produce medical isotopes, encourage the development of international protocols and remove current barriers or obstacles to international movement of radio isotopes during periods of shortages; actively engage in developing and approving other medical isotope technologies, such as positron emission tomography.

On May 16, 2008, and while we were finalizing our report in open consultation with Health Canada, the federal government made the unilateral decision and announcement to abandon the MAPLE 1 and 2 reactors project. Since May 2008, the medical community has gone through five or six isotope shortages.

Upon the May 18 announcement that the NRU reactor had to be shutdown again, this time for one month due to a leak—and we now know that it will be for at least three months—the CANM expressed major concerns regarding the ability of its members to deliver 21<sup>st</sup> century medicine to Canadians.

Over the past four weeks, our community has maximized and overstretched the use of personnel and equipment resources to service patients with totally unpredictable and unreliable supplies of technetium. We have cancelled on-call service to spare the technetium that we had and have turned toward the less desirable thallium isotope to perform cardiac stress tests. Pediatric patients have been given priority for technetium imaging tests when available.

#### • (1540)

#### [English]

Positron emission tomography, also called PET, as mentioned before, uses medical isotopes that characterize extremely well the physiology and pathophysiology of the human body, such as cardiac diseases, most cancers, and neurological conditions like Alzheimer's disease. Most of the nuclear medicine tests performed on cancer patients with technetium-99m can be replaced with PET procedures. The absence of availability of the PET technology and isotopes throughout Canada severely impact our ability to diagnose and offer expedited treatment to our cancer patients.

Our community is very confused and frustrated by the recent announcement from the Ministry of Health to allocate a total of \$28 million for research projects aiming, at least in part, at developing methods to produce technetium with alternative technologies that, to our best understanding, have failed in other parts of the world. In the best-case scenario, these methods would not yield any results for at least three to five years. Based on the cancer registry throughout Canada, we estimate that Canada needs about 125,000 PET studies per year for cancer patients. With \$28 million, one could perform about 28,000 of those PET studies and provide adequate diagnosis and treatment today and over the next three to four months to cancer patients across Canada, while securing a reliable source of technetium.

So we are very confused. Patients across Canada need solutions today, not five years down the road. The Canadian Association of Nuclear Medicine would like to recommend that this committee and the government urgently consider the following aspects.

One, the decision to abandon MAPLE 1 and MAPLE 2 should be immediately and thoroughly revisited by an international experts panel.

Two, the federal government, through Health Canada, should expeditiously approve the use of positron-emitting isotopes and their radiopharmaceuticals. This is based on preclinical and clinical trials performed in Europe and the United States over the past 20 years and the criteria established by the United States and the European Union regulatory agencies.

Third, we'd like to recommend that for a period of five years the federal government work with the provinces and territories to support and subsidize the recent increased cost of technetium-99m and the cost of deployment of the PET technology.

Fourth, the Ministry of Natural Resources and Health Canada should work formally and expeditiously with their international counterparts to secure a reliable and affordable supply of technetium-99m until the NRU is restarted or the MAPLEs are commissioned.

Fifth, the Ministry of Natural Resources and Health Canada should clearly define the processes by which they're engaging the relevant medical organizations, and the Ministry of Health should define the mandate of the special advisor that was just appointed.

The CANM strongly believes that the current challenges still represent a unique opportunity for Canada to salvage its nuclear industry and to reaffirm its leadership and prominence in the world. It's also an opportunity to update the Canadian health care system with the 21st century nuclear medicine diagnostic and therapeutic tools that Canadians deserve.

The Canadian Association of Nuclear Medicine would like to reiterate once again its offer to provide its ongoing support, experience, expertise, and testimony to achieve these goals.

Thank you very much.

• (1545)

The Chair: Thank you, Dr. Urbain.

We'll now go to the Quebec Association of Nuclear Medicine Specialists, with Dr. Francois Lamoureux, president.

[Translation]

# Dr. François Lamoureux (President, Quebec Association of Nuclear Medicine Specialists): Thank you, Madam Chair.

I thank the distinguished members of this committee for giving me the opportunity, as the President of the Quebec Association of Nuclear Medicine Specialists, to appear before you on behalf of my fellow nuclear medicine specialists.

As soon as we learned that the shutdown of Chalk River would continue, we knew that there would be a crisis, because 18 months ago, we had a problem and we knew that it would happen again.

Last week, I heard a heart-breaking story from a young 21-yearold patient suffering from thyroid cancer. She was plainly terrified by the possibility of not getting her iodine-131 treatment for her cancer. She was also worried about the other patients.

In Canada, there are 5,000 new cases of thyroid cancer, 75% of which are women. The chances of surviving for 10 years, if the cancer is properly treated, are more than 95%. If these patients can no longer access this treatment, what will their future be like? This week, we were supposed to receive some iodine-131 from South Africa for treatment purposes. However, there was a problem and we were not able to use it this week. So our cases must wait until next week. Every day, we have to explain to the patients why tests are delayed and why their treatment is delayed.

It is also a fact that one woman out of nine in Canada will develop breast cancer. Today, to treat these patients, we use a nuclear medicine technique called a sentinel lymph node procedure. This consists of giving injections around the tumour, and when the patient arrives in the operating room one hour later, the surgeon tries to detect whether tumour cells have moved to any lymph node. If so, he removes the node, a pathologist studies it, and if there are no malignant cells, the surgery is minimal. If there is a spread, the treatment will be more extensive, sometimes involving a mastectomy, which is a much more radical procedure. If we can no longer get technetium, we can no longer provide this service to our patients, and the surgeon has to find all the lymph nodes in the area, as many as 10 or 20. This has a terrible impact.

The same happens with melanoma or skin cancer, the incidence of which is rapidly increasing. We treat it with the same technique. As for diabetes patients, the situation is almost turning into a pandemic. These patients are often prone to heart attacks or heart disease, and 15% of them will spontaneously die of their first attack. The cardiac perfusion tests, as Dr. Ruddy and Dr. Beanlands explained, are preventive tests that we carry out for these patients. We even use them at the pre-operative stage for elderly patients before a serious procedure.

This shows you how these tests are used; they cannot be replaced by any other tests.

Patients are really concerned. On a daily basis, with our technicians and our secretaries, we are in the tragic situation of having to explain to the patients that their treatment will be delayed again and again. Patients need to know the truth about the current situation. The government first has to take appropriate steps to help these patients. A patient does not much care what could happen in 3 years, 5 years, 10 years or even in 18 months. The research projects that are being advertised with full page ads in the papers are not what the patients care about. Nor do we, for that matter. Our concern is more immediate, we have to answer the patients' questions and provide them with the treatments and the care that they need.

In Quebec, as soon as we learned about this problem, we worked together with the Quebec government to develop our response to a potential crisis. We are working very closely with Quebec's Department of Health and Social Services and with the Association of Nuclear Medicine Specialists. We have implemented all the measures mentioned by my colleagues from the Heart Institute. Moreover, Quebec has an advantage over the rest of Canada: we have 15 clinical positron emission tomography scanners in our hospitals. They are accessible to all patients in the province, because they are situated in most regions of Quebec. Let me add that this service involves no costs either for hospitals or for patients. We also extended the hours. It does not matter which hospital has the equipment; patients can access it according to their clinical condition. The hospital where I practise in Montreal does not have a positron emission tomography scanner, but every week, I send about 20 patients to another hospital, either to the Montreal General Hospital or to the Maisonneuve-Rosemont Hospital where they can have access to the technology. I think that it is a pity that other Canadians have no access to these essential and very important services.

# • (1550)

In France, cancer is the number one priority. They have 80 PET clinics and they are going to open 40 more, for a total of 120. So the situation in Canada is inexplicable. We have not explained the importance of this technology clearly enough to our decision-makers, a technology that also allows us to conserve technetium and use it for other purposes.

For us, this situation was kind of predictable. We are still asking ourselves, with no answers when our patients ask us, what the government did 18 months ago. We keep asking ourselves the question. We read all kinds of things in the newspapers: that the MAPLE reactors are operational, that they are fine. As recently as today, our patients could read that in the *Globe and Mail* and then they ask us the questions. My answer is that I do not have the expertise to answer. But the government has to be able to answer. They want to know how come they do not have access to technetium when there are people falling all over themselves to publish full pages in newspapers saying that everything is working. I do not have this expertise, and the people do not trust what the government says. The government says that it wants an independent international committee of experts to answer this question.

As to the number of PET tests done in Quebec, it currently stands at about 30,000 per year. So, as Dr. Urbain said about the forecast of 120,000, this might be more or less equivalent to what is likely done everywhere.

We also use sodium fluoride, which we get from the University of Sherbrooke, for the same purposes.

In Quebec, therefore, we fully support the Canadian association's assessment, and we are ready to cooperate along the same lines.

Thank you, Madam Chair.

## [English]

The Chair: Thank you, Dr. Lamoureux. There will be time for questions very shortly. Thank you so much.

From the University of Western Ontario, I'd like to hear from Dr. Albert Driedger.

**Dr. Albert Driedger (Emeritus Professor, University of Western Ontario):** Thank you, Madam Chair.

I would like to approach my comments here from two levels. The first level comes from something someone said to me earlier: "It seems we're trying to do surgery with boxing gloves on."

The development of the technology to produce isotopes is one that takes a long time and requires a lot of exacting technology, so we need a long-term plan to come to a renewed stabilization of our supplies. We also need short-term solutions. We've been hearing a little bit about both of them, and I think they need to be clearly separated in an operational sense.

The second issue I want to raise is one that's been bothering me a long time, because I'm not getting clear answers about the MAPLEs. I have worked much of my life in the milieu of reactors and I at least know some of the words, if not all the physics. Every power reactor in Canada operates with a positive void coefficient, which is shorthand for the reason why the MAPLEs were said not to be licensable. I don't have a clear answer as to whether there was a change in the regulations that made positive void coefficients untenable in new reactors or whether there really is an operational problem.

The second part around this, which I see is in today's *Globe and Mail*, is where the president of MDS Nordion says the MAPLEs are safe to operate and that if they could be operated at half of full power, they would produce as much molybdenum as the NRU is capable of producing. So perhaps, in the short term, we have a solution, if we could get all the documentation on the table and examined by experts, as Dr. Urbain was suggesting.

I was speaking yesterday to a senior oncologist in our centre who told me how all of the clinical trials are now in deep disarray, because the protocols for what would be done to and for patients had been written a long time ago. Now there were deviations from protocols that made it difficult to evaluate, for a time, the direction that patients' treatments are taking, especially when these are in any sense experimental treatments. He was quite dismayed about what was happening, sort of one step away from us in that regard. This is one of the knock-on effects that we are beginning to see. I'm sure this is a factor in clinical trials in many parts of Canada.

The final thing I want to say is that I am, for the most part, a thyroid cancer doctor. I've been keeping an eye on the supply of I-131, and I was assured, until the beginning of this week, that there would always be an adequate supply of I-131. But in the last two days I've been receiving a lot of e-mails telling me that the supply is in difficulty. It takes a long time to prepare patients for treatment, and it's costly to get them prepared. It's a major disruption if one is not, at the end of the day, able to deliver the radioiodine treatments, so there is some impact beginning to be felt at that level.

Thank you.

• (1555)

The Chair: Thank you, Dr. Driedger.

We'll now go to Dr. Sandy McEwan, who is here as the medical adviser to the minister.

Dr. Sandy McEwan (Medical Advisor to the Minister of Health, As an Individual): Madam Chair, thank you, and thank you for the invitation to speak to this committee.

By way of background, I am a nuclear medicine physician who works at the Cross Cancer Institute in Edmonton. My clinical interests, as are Dr. Driedger's, are patients with thyroid cancer and also patients with neuroendocrine tumours; both conditions use radioactive iodine as part of their treatment.

My current role is as chair of oncology at the University of Alberta, and I am also a past chair of radiology at the same university. I am a past president of the Canadian Association of Nuclear Medicine, the Canadian Society of Nuclear Medicine, and also the American Society of Nuclear Medicine. I am now two days into being the society's past president.

I have been a member of the ad hoc regulatory working group, and since the beginning, along with Dr. Urbain, I have also been a member of the advisory group working on medical isotopes.

A few days ago the minister asked me if I would agree to be her special adviser on medical isotopes, and I was honoured and pleased to accept, because I do think I have some skills that may be of use to the medical community and to the minister in moving this forward.

I was particularly encouraged by the words of endorsement and encouragement from the president of the CMA, speaking on behalf of both nuclear medicine organizations in the country. As I said, I have worked with Dr. Urbain on the working group for 18 months now, and I am really looking forward to working with him in the future to help us move forward solutions on this issue. My role in this position I think is going to be increasingly complex. I will obviously be working closely with my colleagues on the ad hoc working group, and in particular working to understand what is happening in other provinces. In Alberta we have different challenges from the ones Ontario has and the ones Quebec has.

I will obviously be providing updates on the clinical situation and on the effect on patients as the process moves forward, and in this I'll obviously be working very closely with my clinical colleagues and Dr. Urbain to make sure that the best advice and the best information is going forward.

I hope I will also be able to advise the minister on how to deal with provincial and territorial issues and ensure that there is information flow backwards and forwards from the different levels of government. It's important that I am able to provide some background information in terms of communicating the impact to the minister and allowing her to be able to do that to her colleagues in cabinet and in Parliament.

It's important to recognize that the community, that is, Health Canada and the medical community, has been working for 18 months on this. When the problems arose in 2007, it was clear that this was not going to be something we could pass by, and that we should look forward to some proactive planning. The working group has come forward with a guidance document. It's a draft guidance document because we regard it as a living document that will need modification. I think we have provided effective communications to our clinical colleagues.

We've also come forward with a toolkit that I know is in use in many centres, helping triage, helping look at alternatives, and also ensuring that we maximize the use of the technetium that comes out of the generators.

One particularly encouraging thing to me has been the speed with which we have been able to get special access program approvals through for radiopharmaceuticals. And in the light of Dr. Driedger's comment about iodine, I think it's particularly encouraging that special access program approval has been given for radioactive iodine for South Africa, whilst the regulatory approval process is going forward to enable DRAXIMAGE to offer that as an approved product.

The clinical trials application process has been streamlined significantly. It took me under a week to get approval for the use of fluoride to replace bone scanning. At the Cross Cancer Institute on July 2 we will be substituting fluoride for all technetium bone scans at our institution and making it available to the hospitals in Edmonton, Calgary, and Winnipeg. This has been a collaboration with McMaster University, with the University of Ottawa Heart Institute, and with colleagues in Winnipeg.

#### • (1600)

The minister announced on Tuesday of this week that CIHR will make available \$6 million to look at research to replace technetiumready pharmaceuticals. The terms of these grants call for a rapid introduction of these new products into clinical practice. The expectation is that this will occur within one to two years. I believe we have strategies to ameliorate the short term as well as the long term. We are now depending on the working group that Minister Raitt has established to look at the alternative methods of producing technetium. So I believe there are short-term, medium-term, and long-term strategies.

That doesn't mean we're not affecting our patients and our clinical colleagues in a significant way. This is a serious situation. I know that my clinical colleagues are frustrated by our inability to provide the best care. Patients clearly are worried. I think we need to recognize that staff in nuclear medicine departments across the country have been working above and beyond the call of duty to ensure that care is provided to patients in the best way.

With this appointment, I think the minister has recognized that there are a number of important issues that we have to address. I believe I bring the necessary skills and the necessary links to my colleagues in the community to ensure that the minister, cabinet, and Parliament are getting the best advice.

I'm looking forward to working with Dr. Urbain, Dr. Driedger, Dr. Lamoureux, Dr. Ruddy, and Dr. Beanlands to ensure that we can ameliorate the situation across the country. There are clearly wide regional variations, which I believe are often related to the geography of the country. I think the situation in Alberta is more easily manageable than it would be in, say, Quebec or Ontario.

I'm looking for advice and guidance from my colleagues, the committee, and my clinical colleagues in cardiology and oncology. But at the end of the day, we have to remember that this is a situation of great concern to our patients, and that everything we do in the working group as individual physicians and in our communications with the minister and this committee must reflect that priority.

Thank you.

The Chair: Thank you, Dr. McEwan.

Dr. Bennett.

• (1605)

# Hon. Carolyn Bennett (St. Paul's, Lib.): Thanks very much.

Dr. McEwan, in January I believe you said it would be "criminal" for Canada, which had been such a leader in nuclear medicine, to get out of the business or not be where it is. According to today's *Globe and Mail* and testimony we've heard here, MAPLE could be a solution. Will you be asking the two ministers to revisit this decision and have a look at a made-in-Canada solution?

**Dr. Sandy McEwan:** I made those comments before the establishment of the international expert working group by Minister Raitt and before the decision was made. I believe we have an opportunity in working with the Minister of Health, and that is my mandate. It would be unwelcome if I moved beyond that mandate. I believe my job is to ensure that the Minister of Health has the best advice on how to deal with short-term issues and with replacement-

ready pharmaceuticals. We need to ensure that technetium is employed to the best effect, that we can facilitate clinical trial applications and SAP processes, and that our colleagues have access to the pharmaceuticals they need.

**Hon. Carolyn Bennett:** I think there's been some concern that it would be problematic if you were to speak for yourself and not on behalf of the associations of nuclear medicine. Are you saying that you disagree with the Canadian Association of Nuclear Medicine's first recommendation, which is to set up the international committee and explore the commissioning of MAPLE 1 and MAPLE 2? What happens when you disagree with your professional organization?

**Dr. Sandy McEwan:** I rarely disagree with my clinical colleagues. We are usually unanimous in our views. At the Society of Nuclear Medicine meeting in Toronto yesterday and today, there was a meeting with the NEA, which is the OECD nuclear energy authority. The meeting, which also included producers, members, and some government agencies, looked at integrating supply across the world. I will remind you that I have been president of all three associations. I am aware of the responsibilities of an association, and I am also aware of my responsibilities to my clinical colleagues.

**Hon. Carolyn Bennett:** One of the problems we've had is that nuclear medicine is available in 245 places across Canada. Their alternatives are not. Certainly, with thallium it's a little bit different, even though it's not as good. But because of the patchy coverage with PET scanning across the country, it seems that it's going to require some triage that may actually cross borders. There's a PET scanner in Gatineau, but as yet there's not one here that is being used clinically.

Do you see your role as helping to form a triage system that even the Prime Minister has now agreed is necessary? Would you be prepared to stand up at the Health Canada operations centre and figure out the patients who need it and how long they're waiting?

I have yet to see a map that shows, of the 245 sites across the country, where the sources are, because even in Newfoundland, two of the clinics get it from Chalk River and two of the clinics get it from Holland. Obviously, in Alberta you're way better off because you get yours from Holland and you have secure contracts, like B.C. does. How are you going to share across the country if this 70% drop, the global shortage, happens in July, and how are you going to make sure—for example, for the kids—there is access to PET scanning across the country? Turning the Ontario research ones into clinical ones, and perhaps even exploring the portable PETs that seem to be available in the United States on 18-wheeler tractor trailers, ready to come north if we need them...are these the kinds of things you will be doing?

**Dr. Sandy McEwan:** I think those are important elements of the advice that I would be expected to give and to pass on as feedback from my clinical colleagues in the societies. If I can use the Alberta example, the fluoride that is made in Edmonton supports three cities. We are using our PET scanners to maximum—

**Hon. Carolyn Bennett:** But you're skipping across Saskatchewan, which has no capacity at all. So what are you going to do for them?

# HESA-28

#### • (1610)

**Dr. Sandy McEwan :** We are routinely in Edmonton, Madam Chair, performing PET scans for patients from Saskatchewan until they get capacity there. There is already interprovincial collaboration in developing protocols to enable...because obviously every PET scan that is done for a bone scan frees up technetium.

**Hon. Carolyn Bennett:** Seeing that they don't have bone scans now and are going to have to have PET scans instead, this is a very different thing, and as you know, you can only do 10 PET scans where you could do 40 bone scans. Do you think the federal government should pay for the wildly increased cost of this, in terms of both transportation and isotopes, seeing that it's a mistake they made?

**Dr. Sandy McEwan:** Madam Chair, perhaps I could just go into the mechanism of producing a bone scan. A bone scan is produced on a gamma camera; a bone scan with fluoride is produced on a PET camera. A gamma camera doing bone scans all day would not be able to do more than 10, maybe 12 bone scans in a day. A PET scanner with current technology can do something between 10 to 15 scans in a day—that's with modern technology scanners. Therefore, a department that is doing 40 to 50 bone scans a day would have typically five scanners dedicated to bone scans. It would then have scanners dedicated to all the other work and the cardiac work.

I'm not aware of any centre in Canada that is capable of doing 50 bone scans a day. Certainly we do bone scans flat out, and we do 15 to 20 cancer patients a day on two cameras.

The Chair: Thank you, Dr. McEwan.

Monsieur Malo.

[Translation]

Mr. Luc Malo (Verchères—Les Patriotes, BQ): Thank you very much, Madam Chair.

As you know, the MAPLE reactors were designed to replace the old NRU reactor that is near the end of its life. That meant that we needed a reliable source for the production of radioactive isotopes.

When the government decided to put an end to the MAPLE project, it did not invest a penny in trying to find other ways of producing isotopes.

And today, Dr. McEwan, you are rejoicing about the \$6 million provided to find a long-term solution. It seems to me that we are a bit late in trying to find solutions. What I hear is physicians in the trenches telling us that they have to manage this situation on a dayto-day basis.

What will this money, which you were so pleased to announce today, do to stop these physicians from having to manage this situation, which is so worrisome for the patients, on a day-to-day basis?

I heard Dr. Urbain mention this. It was a very interesting comment. The physicians have come to the end of their rope. The health care specialists, the nurses, the entire staff, they have all come to the end of their rope.

What answer do you have for those people today? I do not think I found the answer to these questions in your presentation.

# [English]

The Chair: Dr. McEwan.

**Dr. Sandy McEwan:** Madam Chair, I am not trying to minimize the problems we face in the very short term. I agree that we have issues in supply. I do believe, however, it wouldn't be responsible to not look at resolving the medium term as well, and I believe this is one way of addressing that.

In terms of addressing the short term, I believe the conversations yesterday, as I mentioned, between the producers are leading to international collaborations. There is approval for molybdenum from Australia. Their program is ramping up, and they will soon become a significant supplier to the Canadian market. I do know that there are conversations with NTP on expanding their submission of medical isotopes to those suppliers of the Canadian market. I believe those are very important initiatives that will ensure that they will be an element of short-term reaction.

The toolkit that we put out from the working group is I think an important guide to hospitals. Where it is possible—for example, this has happened in B.C. and Alberta, where I have my clinical base and where I see my patients—we have worked out mechanisms to ensure sharing, to ensure that the central radiopharmacy can, for example, make available spent generators to sites that don't need such large volumes of molybdenum.

I believe we have opportunities to learn from what we've done in Alberta and to offer suggestions to the other provinces. We certainly have opportunities in Alberta. I would be grateful to hear...and I have already spoken to some of my colleagues in Ontario on how they've been dealing with it.

I'm not minimizing the short term. I'm not minimizing the need for our patients now. What I am saying is that if we don't start addressing the medium term now, then in 18 months, when I come back and see you, you'll be asking me the same question. I would like to be able to say that we started those activities now.

#### • (1615)

The Chair: Thank you, Dr. McEwan.

You have a few more minutes.

#### [Translation]

**Mr. Luc Malo:** Madam Chair, I would also like to hear from doctors who work with patients on a daily basis about what Dr. McEwan just told us.

**Dr. Jean-Luc Urbain:** The first thing I would like to comment on is the percentage that you mentioned, Ms. Bennett, the 10 PET scans as opposed to the 40 bone scans. You have to understand that the difference between the number of PET scanners and the number of bone scanners is less than 10%. That means that we do not have the positron capacity to carry out these bone scans.

The second thing concerns what you said about the untenable situation on the ground. Technicians are working 16-hour days and so are secretaries. In the medium and long term, they simply cannot keep up that pace. I should also point out that isotopes are rather like ice cubes in the sun: they must be used when the sun is not out. That means that we have to use them as soon as we have them, and then they are gone. So often, practically speaking, a week's worth of work is compressed into two or three days.

We need solutions now. I agree with Dr. McEwan that we need medium- and long-term solutions. But the best medium- and longterm solution is to receive an official response about the MAPLE reactors as soon as possible.

[English]

The Chair: You have another two minutes, Mr. Malo.

[Translation]

Mr. Luc Malo: I believe Dr. Ruddy wishes to speak.

[English]

The Chair: Dr. Ruddy, go ahead.

**Dr. Terrence Ruddy:** I think you have to realize that there's going to be technetium during the shortage. It isn't zero; it's a reduction. Right now we're reduced to about 75%. We're okay, because we're using thallium, which is sparing some of the need. We'll go down to about 40%, or something in that ballpark, and we'll have problems at the end of July or the beginning of August. Then, at some point, the Petten reactor will come back on and we'll go back up to 75%.

So we have two weeks, four weeks, where there's a problem. Sandy McEwan's solution with the PET will help. We'll be able to handle the 40% to some degree. Patients will be postponed a bit, but I think that will be okay. The patients who desperately need their bone scans will get their bone scans.

So it isn't a crisis; it's a problem. The crisis is that this is a recurrent problem. We need a long-term solution. Either the MAPLEs get turned on—that would be a good long-term solution—or we get into PET in a big way and build PET centres at another 10 or 20 sites, which is more money. We could take the operating costs now for SPECT cameras and move them into PET so that the financial hit wouldn't be that hard. We'd actually end up with a better clinical solution for our patients. We'd end up with PET across the country. That would be tremendous. We'd still have technetium in there so that we'd have some cheap scans, which would be used for screening scans, but for the ones where we need real diagnosis, we would do PET.

So think of this as a five-year problem. I think if we weather the storm, we'll be okay. But we have to fix things so that in one or two years from now we'll have PET cameras up in Nunavut, maybe, I don't know. But it will be that kind of situation.

We need, I think, to move ahead with solutions, not just band-aids.

The Chair: Thank you.

Ms. Wasylycia-Leis.

**Ms. Judy Wasylycia-Leis (Winnipeg North, NDP):** Thank you, Madam Chairperson.

Thank you very much for being here. I know you've had a lot of requests to appear before different committees, and it's taking you away from time you need to spend sorting out this problem. Hopefully out of today I think we have to get some recommendations that this committee can take to the government before we recess tomorrow at two in the afternoon. Otherwise the summer will come and go and we won't have come any closer to the solution.

I want to start with you, Dr. Urbain. You've mentioned several recommendations. You suggested that regarding the \$28 million recently announced to go into researching alternatives, there were already international studies showing that these alternatives are really not effective anyway. So you're suggesting that \$28 million be put instead into meeting the demand for about 100,000-plus PET scans in this country. Is that what you're saying?

• (1620)

**Dr. Jean-Luc Urbain:** The first thing I'd like to clarify is that Japan has tried to produce technetium with a linear accelerator and it hasn't worked. Producing technetium with a cyclotron is not very efficient. We know that has been done in Europe too. So I would encourage the government to look at those studies that have already been published.

The second thing is that for that \$28 million—\$6 million was announced yesterday, and I think it was \$22 million announced for McMaster—doing the math, we believe, based on some statistics we looked at two or three years ago in the Cancer Registry, that Canadians need about 125,000 PET scans a year. At \$1,000 per PET scan, we could provide about 28,000 of these over the next three to four months. Hopefully in the next three to four months the technetium situation will be stabilized. The other aspect to it is that—let's face it—a bone scan is a wonderful tool, but it's not enough when we take care of patients. Why not take advantage of this crisis and deploy a diagnostic tool that is critical for the diagnosis, treatment, and follow-up of patients with cancer?

**Ms. Judy Wasylycia-Leis:** Further to that, I think it's important to note that all of this money, which adds up to \$56 million, is not new money. It's coming from somewhere, presumably from other priorities within Health Canada.

Perhaps, Dr. Driedger, I could ask you for your assessment of this money going into these areas versus priorities as you see them.

**Dr. Albert Driedger:** Madam Chair, I don't really know enough about the details of what was in the grants to comment. I have read some background documentation that suggests that in three to five years we might have a model for cyclotron-produced isotopes, but I think it would still take some years beyond that for a stable robust production mechanism. I stand to be corrected if others have tighter facts at hand.

The \$22 million is a grant that's given to McMaster University. The refurbishing of their nuclear reactor was mentioned. That's a reactor that, as I recall, has a maximum power output of five megawatts, which is 50% of the output that the MAPLEs are rated to produce. If McMaster can do it, maybe there's a way of doing it with MAPLE too.

**Ms. Judy Wasylycia-Leis:** Would there be some agreement that this committee should recommend to the Government of Canada that an independent expert international committee be set up immediately to study whether or not MAPLE 1 and MAPLE 2 could be up and running as soon as possible?

**Dr. Jean-Luc Urbain:** Both Dr. Driedger and Dr. Lamoureux are on the board of the Canadian Association of Nuclear Medicine. The document that you have seen today—and we have also presented something similar to the NRCan—has been approved by the board of the Canadian Association of Nuclear Medicine. We will stand by what we put in writing.

Ms. Judy Wasylycia-Leis: Go ahead, Dr. Driedger.

**Dr. Albert Driedger:** Madam Chair, I suspect the documentation already exists. We just need to find it, read it, and be comforted by it in some way. I would be pleased to see what is forthcoming.

**Ms. Judy Wasylycia-Leis:** Could I go on to another area, and if anybody wants to jump in on this question—

The Chair: Yes, Ms. Davidson.

Mrs. Patricia Davidson (Sarnia—Lambton, CPC): A point of order for a moment. I'm wondering what document Dr. Urbain was referring to that we've seen. I don't have any document.

**Dr. Jean-Luc Urbain:** First of all, I sent the document yesterday to the clerk for translation into English. Second, the NRCan document I believe would be available to you.

# Mrs. Patricia Davidson: Thank you.

**Ms. Judy Wasylycia-Leis:** I think what you're saying, then, is that there might be some alternatives down the road, but that we're putting a lot of money into this dubious pursuit when in fact we have a crisis right now.

That was made apparent by the news. Your organization, Dr. Urbain, has been clear about the catastrophe that is looming or is with us. Dr. Driedger mentioned the question about thyroid cancer. We just had news out of Quebec showing that they've run out of iodine-131.

Today we got the report on the wait times, and it says that in fact the median time for radical cancer care is "46 days or nearly 7 weeks", and the majority of these treatments exceeded "the benchmark for curative cancer treatment of 4 weeks".

So now we have that statistic coupled with the shortage of isotopes. How bad is it going to get? Can you predict? Can you project? Can you tell us how serious it really is?

#### • (1625)

**Dr. Jean-Luc Urbain:** Madam Chair, I have the privilege and the burden at the same time to also be the co-chair of the Wait Time Alliance. That was one of the questions asked by the press. Today there is no doubt that the shortage of isotopes will disrupt the care of the patients and will prolong their access to care and also their access to treatment. This is particularly vivid in patients with cancer. We don't have that same problem with cardiac patients, as Drs. Ruddy and Beanlands said, but it's definitely a major problem for patients with cancer and for children.

The Chair: Thank you, Dr. Urbain.

We'll go to Dr. Carrie.

Mr. Colin Carrie (Oshawa, CPC): Thank you very much, Madam Chair.

I want to thank all of the witnesses for being here today. I know that all of you have been very busy. I must say that I think everybody

here appreciates all your advice and wisdom in dealing with this issue, because I think everyone around this table understands that it is a very serious issue.

I wanted to talk a little bit about solutions. I think we all realize that this is very much a global problem and will take a global solution.

Dr. McEwan, you mentioned that you're also working with the provinces and the territories. We had some discussions around the table about PET scans and coordination of these things. How advanced are these discussions with the provinces and territories? How is the government working with the provinces and territories and internationally at the present time?

**Dr. Sandy McEwan:** Madam Chair, I've been in the job three days, so if my span of knowledge is imperfect, forgive me.

I do know that the minister has had a number of teleconferences— I believe the figure is three—with her provincial and territorial counterparts on this issue. I do know that at the time of my appointment she spoke to all of her provincial and territorial counterparts as well, so I am assuming there are ongoing conversations.

I do know that in terms of international conversations the real activity is on how we access, as early as we can, alternative sources of supply. Certainly, I had been told by the suppliers of our radioactive iodine products that there was no problem with supply, so, like Dr. Driedger, I was surprised to learn that there is a problem with supply.

At the Society of Nuclear Medicine meeting, I talked to representatives of both OPAL, in Australia, and NTP in South Africa. They elegantly put it that they have buckets of radioactive iodine that they can actually make available to the supplier in Canada. The key there is to ensure that the regulatory framework is in place to facilitate that access. That is being done. I do know that there are documents from both countries that are being reviewed now. I think in the last week there have been 120 SAPs for radioactive iodine from those two suppliers.

The protocols that we've put in place really do appear to be working, i.e., we can rapidly get the regulatory approvals through to do that. I'm hoping that both the NTP and the Australian radioactive iodine will be made available to Canadian suppliers soon. I don't know what the timeline is. I don't know where it is in the regulatory process, but I do know that it's started, and I do know that until that is through, SAPs will be made routinely available.

**Mr. Colin Carrie:** You also mention that you've been in a working group for the past 18 months and you do have a draft guidance document. How successful have you been in getting that document disseminated to your colleagues?

**Dr. Sandy McEwan:** I do know that certainly in Alberta, for example, that document has been widely disseminated through the province through an Alberta Health Services working group that is looking at ways of ameliorating the crisis. I believe it's been available to all the other provinces. I do know the Province of Ontario really started the work on some of the protocols in that. So this is a real example of collaboration between the different arms of the community.

• (1630)

Mr. Colin Carrie: Okay. Thank you very much.

I have a couple of questions about some of the opening comments. Sorry, I don't have my glasses on. I think it was Dr. Beanlands and Dr. Ruddy. You said there's been no noticeable increased wait for your patients, and I think all of us as parliamentarians have concerned constituents, concerned citizens of Canada. You mentioned that, and I was wondering if you could elaborate a bit. I do know that there are alternatives to technetium. With these alternatives, is it safe to say that people will not be diagnosed, because we do have the ability to diagnose them? Is that a good comment?

**Dr. Rob Beanlands:** I'll speak specifically about the cardiovascular imaging. First of all, with the previous shutdowns we became aware that there could potentially be future problems, so we planned for this and we prepared ourselves and our staff for this type of eventuality. With careful planning, this situation has been partly dealt with.

We made a decision to switch all our cardiac scans over to thallium, as well as to utilize the PET scanner for profusion imaging, or blood flow imaging. We made those two changes when we knew we had lost the technetium, or reduced the supply—Dr. Ruddy is right that it's not gone; it's just reduced. That would allow us to enable our sister hospital, the Ottawa Hospital, where most of the cancer imaging is done, to do more bone scans. We have a formulated plan. As well, our technologists come in on Saturday mornings to do some other scans to help with the load, because the timing for the thallium scans is a little bit different from that of the technetium.

These are things we were able to. It was mentioned that the technologists and the staff are being burdened and they are working very hard. This is true, but our primary goal is to make sure the patients get the care they deserve in a timely manner. At least in the cardiac section we've been able to achieve that. We have seen no noticeable change in the wait time for our cardiac patients.

**Mr. Colin Carrie:** Dr. Ruddy, you brought forward that it's not as if we don't have any isotopes. We are getting some, and I'm glad you clarified that because some people I've talked to thought we were totally cut off.

I was going to ask how you find cooperation with the technicians. My understanding is that the technetium we have has a half-life; it deteriorates. Are we able to run the machines 24/7 and as far as capacity? Is that making a difference right now?

**Dr. Terrence Ruddy:** We run longer hours, not 24/7. We work on weekends. A generator comes, and it's hot, and it decays. Typically, it comes on a Thursday or Friday, of all days, so that means on Saturday or Sunday the technicians work, and they don't usually do that. As Dr. Beanlands was saying, there are issues. People are not burning out, but they're getting very tired. So the solution is working in terms of patient care, but there is an expense in terms of the technologists.

The Chair: Thank you, Dr. Ruddy.

We're now going to go into the second round. The second round is five minutes for the questions and answers. We'll begin with Ms. Murray.

**Ms. Joyce Murray (Vancouver Quadra, Lib.):** Thank you, Madam Chair. It's great to have such an array of expertise helping us understand this problem or potential crisis.

There are no wait times for cardiac procedures in the Ottawa facilities, but are there longer than normal wait times in other places? Are there patients not getting their treatments, and is there a way to quantify that across the country?

**Dr. Jean-Luc Urbain:** Well, it's very difficult to quantify across the country. What I can tell you is we are very proud that we have the Ottawa Heart Institute as a flagship. As a flagship program, typically you have pretty much everything at your disposal to take care of your specific area.

Most nuclear medicine centres across the country, basically, are providing not only cardiac services but also oncology services. The way you handle thallium, for example, is different from the way you handle technetium, so management is not as easy as with the technetium.

Yes, we have seen some delays in the procedures because we cannot accommodate as many thallium patients as we can accommodate technetium patients, particularly also because most centres do not have access to PET scans to do cardiac studies. I don't know what the experience in Quebec is.

• (1635)

Ms. Joyce Murray: Thank you.

I heard from one of the witnesses—Dr. McEwan—that coordination across the country and making sure there's equal access in different facilities is not a problem. Do other witnesses believe more work should be done to ensure equal access and equitable sharing of the possibilities of the goods?

**Dr. Jean-Luc Urbain:** One of the problems is that the provinces are in charge of dispensing health care. So that's definitely a lot of work.

On the second aspect of it, Dr. McEwan mentioned that neuroendocrine tumours need isotopes for both diagnosis and treatment, and the situation in Ontario is pretty serious. The patients are now accusing us of providing health care based on postal codes.

The Chair: Excuse me, Dr. Urbain, but Dr. Beanlands would like to say something.

Ms. Joyce Murray: I have three other questions.

**The Chair:** You have time. You don't want to hear from Dr. Beanlands?

Ms. Joyce Murray: I want to keep going.

We've heard advice about having a special committee to look at MAPLEs. Would it be helpful to have some other mechanism to help coordinate access in the short term?

**Dr. François Lamoureux:** I'd like to add something, *madame la présidente*.

# [Translation]

I believe that a meeting of Canadian health ministers should be held, and that the federal government should provide each province with a sum of money—on a pro-rata basis—to ensure that PET technology can be implemented immediately.

The people from Alberta and Ottawa came here to tell you about excellent centres, models. But that is not what we see in the 245 centres in the rest of Canada. They do not have PET technology or options of that kind. Patients cannot be trucked from place to place. Furthermore, nuclear medical tests often cannot be scheduled: in 50% of the cases, they are urgent tests for which people cannot wait. That is where the danger lies. When you do not deal with national organizations, you do not get a global view of the problem.

Luckily, health is in provincial jurisdiction. In Quebec, we reached an agreement with our government to get an opinion from an association that brought together a number of partners rather than one individual adviser. Everyone gave their opinion on the issue and a consensus was reached. Now, our patients are better protected than elsewhere in Canada and have better access. Currently, in Canada, the best thing to do would be to hold a meeting of health ministers.

# [English]

The Chair: Excuse me, Dr. Lamoureux.

Dr. McEwan, do you want to make a comment as well?

Ms. Joyce Murray: I have another question on the name of the document.

The Chair: Ms. Murray, there are two people who want to give you some answers.

**Ms. Joyce Murray:** I'll be happy to have that input once I've gone through the key things I'd like to ask.

I'm wondering about the name of the document you referred to that you thought had already identified some suggestions.

**Dr. Albert Driedger:** I don't know the document by name, but I know that major studies have been done to look at the functioning of MAPLE. But we don't have a direct, expert opinion, given in an understandable way, on the potential for MAPLE to function. We're getting mixed messages.

The Chair: Thank you.

Dr. Beanlands is next, and then Mr. McEwan.

I know Ms. Murray wants to hear your answers.

**Dr. Rob Beanlands:** I think the issue is really a balance between providing more supply and providing alternatives. The supply needs to be available or increased in some way. There are many initiatives being dealt with to get access to OPAL, moly-99, and so on. Dealing with MAPLE may be another solution for increasing production.

The other issue is distribution, dealing with the distribution companies to help, and working with those companies to try to make a balanced view for Canada in this time of need. So there's a lot of imbalance in the way it's being supplied in different jurisdictions. I agree that is an issue. Having greater access to PET would also be a solution. For every patient who has a PET scan or a thallium scan, that's one less patient who needs to have a technetium scan. So all of these are solutions.

I also still think that the medium- and long-term solutions cannot be ignored in this balanced approach. We must have some mediumterm solutions for new things that come along, and longer-term solutions.

• (1640)

The Chair: Mr. Trost, go ahead.

Mr. Brad Trost (Saskatoon—Humboldt, CPC): Thank you, Madam Chair.

I will suggest to some of the members of the health committee who have those questions that they read transcripts from the natural resources committee. We've been covering the long-term issues and have had physicists and engineers answer some of these questions. I encourage the members to consult with other members of their parties.

My first question is to Mr. Urbain. I'm trying to understand his recommendation and the reasoning behind it.

As I understand it, you and the Canadian Association of Nuclear Medicine are arguing for putting more money into the MAPLEs and for getting them restarted. It's going to take more money for the MAPLEs, whatever we do with them, because you're going to need to work on them and do more engineering and so on. You would spend more money on the MAPLEs, which is a long-term solution, which would be great if they would work. But you're not altogether supportive of the \$28 million for other research and other methods and so on. Am I interpreting that correctly? You want to spend money on the MAPLEs but not on others.

**Dr. Jean-Luc Urbain:** You were on the Standing Committee on Natural Resources, sir. I think you are misrepresenting what I'm saying.

Mr. Brad Trost: That's why I'm asking you the question, sir.

**Dr. Jean-Luc Urbain:** Yes, that's what I'm saying. You're misrepresenting what I'm saying.

The first thing is that we're not asking for more money for the MAPLEs. We're asking for clarity and transparency on the MAPLEs. The MAPLEs might never be able to be actively commissioned. We don't know. I'm not a nuclear physicist, and that's the answer I gave you last week.

We are saying that right now we have a crisis, and \$28 million for a solution that might never provide anything, we find very frustrating.

**Mr. Brad Trost:** Mr. Urbain, I'm curious about how we could restart them without spending money.

You had said in your testimony to the natural resources committee that you were unaware of whether any international experts had been consulted. Actually, international experts have been consulted. I'm sure you've been made aware of that since you made your testimony. In fact, they were consulted and they brought back a report in 2005. I'm not sure if your association was aware of that when they made the recommendation. I think they should have been, and I think they should have done their research.

Hon. Carolyn Bennett: Did you read the *Globe and Mail* this morning?

Mr. Brad Trost: I'm not sure if Madam Bennett was at the committee.

The Chair: Order, please.

Let's just carry on, Mr. Trost.

**Mr. Brad Trost:** My next question is this. The nuclear reactors at McMaster, at the outset, could take a maximum of 18 months to get up and restarted. They've actually produced isotopes. They have a reactor at McMaster.

The Chair: Mr. Trost, could you direct your comments to the guests?

**Mr. Brad Trost:** They've actually produced moly-99 there before. They could produce in the neighbourhood of 20% of North America's supply. That's not as much as the NRU.

Why do you not think it would be prudent to spend money on something like that so that we could have a backup if the NRU went down again?

**Dr. Jean-Luc Urbain:** Mr. Trost, the first thing is that we would love to have access to the documents that have not been released by the government. That's number one, in terms of doing our own work. Yes, we do our homework.

Second-

Mr. Brad Trost: This is publicly available.

**Dr. Jean-Luc Urbain:** —you asked a question about technetium. I can guarantee you that if you develop chest pains, you'd like to have access to a diagnostic study today and not a year or two years down the road. When we have a patient coming to the ICU or CCU with an acute cardiac event or acute cardiac syndrome, ACS, we don't worry about the patient potentially developing colon cancer five years down the road. We treat the condition as it is. We need solutions today. I fully agree that we need solutions for tomorrow and the day after tomorrow. But let's worry about the acute situation today.

• (1645)

**Mr. Brad Trost:** My understanding was that, between the two committees, we were looking at the short term, the medium term, and the long term. That's where I've been going on that.

Also, I'm curious. It's been said that there's no problem with the supply of iodine-131. There are buckets of supply. I'm a little curious about that, because we had testimony at a previous committee that patients were terrorized by the thought that they might not receive their iodine-131 treatments. Dr. Lamoureux said that at a previous committee. I'm a little curious. If we have buckets of supply, why would we...?

**Dr. Sandy McEwan:** Let me be clear, the iodine provided to patients in Canada was almost entirely sourced from NRU in the past. The Canadian supplier has been sourcing radioactive iodine from other reactors. We believed that was enough, and that's what the company had told me as an individual clinician, and I'm sure Dr. Driedger had the same information. Last week we learned that there may be a problem.

The iodine that is made in Australia and South Africa is not as yet a licensed product in Canada. They hadn't gone through the regulatory process, so the special access program is being used to make that available. They have plenty of iodine. We are moving as a community as rapidly as possible through the special access program and through the ordinary regulatory process that DRAXIMAGE is doing to be able to access their supply, so there will be a recovery of supply from the normal suppliers. The special access program will be used to resolve some of the short-term issues, I understand, and I think quite soon we will have the regulatory approvals in place to enable NTP and OPAL—

Mr. Brad Trost: So there's no cause for-

The Chair: Thank you, Dr. McEwan.

Monsieur Dufour.

[Translation]

Mr. Nicolas Dufour (Repentigny, BQ): Thank you, Madam Chair.

I would like to thank our witnesses for coming to share their expertise with us today.

Mr. Lamoureux, to give us another viewpoint, you said earlier that there would be no treatment for thyroid cancer this week, given the shortage of iodine-131. In your opinion, what is the situation patients will be facing in the coming weeks?

**Dr. François Lamoureux:** We live in uncertain times. We never know whether a product will be available from one week to the next. Two weeks ago, we were supposed to receive an entire stock of generators, but they were not authorized because they were not regulation.

Remarkable efforts are being made in the Health Canada access program. That is not the problem. The problem is we are in a constant state of uncertainty. From July 14 to August 14, the Petten nuclear reactor will be shut down, and it is supposed to be closed for another six months as of January 1, 2010. There will be a crisis.

The people I work with ask me questions that I cannot answer. They ask me, for example, why the federal government has already invested \$28 million, whether it consulted the international experts who were in Toronto this week, and whether the rest of the world agrees with the solutions that have been suggested.

If the Canadian government has decided to stop producing isotopes, then why is it investing in replacement options? Why does it not let countries like Germany, France, Argentina, Australia or Holland supply us with technetium? We do not understand. It is a mystery to us. The patients are our priority at the moment. It is all very well to say that iodine is available, but we do not know whether we are going to get it. Canada is not the only country that wants it: the whole world needs it.

**Mr. Nicolas Dufour:** On June 16, you said that, to date, no one had died in Quebec since the beginning of the crisis, but that if it continued, such a thing could happen. What is your position today?

**Dr. François Lamoureux:** When we testified before the Standing Committee on Natural Resources, it was Dr. Karen Gulenchyn, from Hamilton, who said that if the amount of technetium available dropped lower than 50%, there could be deaths. So you would have to put that question to Dr. Gulenchyn.

**Mr. Nicolas Dufour:** You still have not obtained any information from the government at all. You are completely in the dark.

**Dr. François Lamoureux:** I will give you an example. Our group was never consulted about the decision to spend the \$28 million. I do not believe that the Canadian, Quebec and Ontario associations— although I cannot speak for my colleagues—were consulted either.

We are specialists in nuclear medicine and we work in the area every day. For us, for patients and for the media, it is incomprehensible. If it had been me, I would have asked for an opinion, especially since experts from 70 countries were in Toronto this week. The former president of the American Association of Nuclear Medicine even said that we were in the midst of one of the largest crises that has ever threatened modern medicine. This is clearly not just a minor problem; it is a crisis. The government denied it at first, then recognized it. Now, once again, they are claiming that there is no crisis.

# • (1650)

**Mr. Nicolas Dufour:** Too little, too late. But the Minister of Health has set up a consultation group of which Mr. McEwan is a member.

What is your opinion not only on the creation of this committee, but, especially, the fact that... We felt repeatedly that you wanted to see consultation with most partners and organizations, not just with individuals, but also with organizations representing large numbers of physicians.

What is your opinion not only on the appointment of Mr. McEwan, but the general attitude we are seeing here? Because I feel that the comments and suggestions you have been making for the past few weeks are not being taken into consideration.

# Dr. François Lamoureux: May I answer that, Madam Chair...

In the province of Quebec, things do not work that way. After all, there are 7.8 million of us, we are Canadians and we work directly with our government. Since you ask, in my opinion, it is just to separate the Department of Health from I know not whom.

#### [English]

The Chair: Thank you very much.

Ms. McLeod.

Mrs. Cathy McLeod (Kamloops—Thompson—Cariboo, CPC): Thank you, Madam Chair.

I also would like to thank the witnesses for taking time out from what I'm sure are very busy schedules and joining us here today.

I think as a health committee we need to be particularly interested in the short-term solutions. I recognize long-term solutions are also critical, but again, this is the health committee.

My first questions focus on that, and perhaps I would direct them at Dr. McEwan. This is an international crisis. From conversations, do you have any sense of what other countries—because obviously they're also dealing with shortfalls—are doing in terms of solving those short-term issues?

**Dr. Sandy McEwan:** Madam Chair, to respond to that, during the Society of Nuclear Medicine meeting in Toronto, I convened a broadly representative meeting. There were members of the two Canadian societies, the European Association of Nuclear Medicine, and the British Nuclear Medicine Society. There was a member of the Australian community there, and obviously my colleagues at the Society of Nuclear Medicine. We really discussed impact across the world. We looked at what was happening throughout Europe, what was happening in the U.K., and what was happening in the United States.

I think what is encouraging is that a number of the initiatives that we have adopted through the ad hoc working group are those that are currently being adopted in the other countries or that they will now take back and start working on. Certainly, we had conversations around information for patients, conversations around how best to utilize the generator to ensure there was the maximum number of patients coming out of each individual generator, and conversations on how best to use alternative tests.

I do believe the CIHR initiative is an important one. My belief, from talking to my colleagues in the radiopharmaceutical community, is that we can probably, with this grant, find two alternative radiopharmaceuticals that can be brought into the clinic, probably within a year, to replace technetium products. I will remind you that technetium is still needed; not all tests can be done with PET. So any increase in PET services that we can provide to our patients, if you like, frees up technetium for other tests.

I believe there are a number of initiatives in place that are remarkably concordant around the world. I have to say that I think the ad hoc working group has done a remarkably effective job in doing that, and it's been a pleasure working with Dr. Urbain on that group to ensure that we really are leading the way. This meeting was interesting. I think there's no doubt that the initiatives we have put in place in Canada have enabled us to avoid some of the problems that are being faced in other countries that haven't been quite so proactive.

# Mrs. Cathy McLeod: Thank you.

If I have another minute, I wanted to know whether, in this day of computerized maps where we can show every site that does particular tests, and the volumes, we have that kind of provincial base information, or is it something you're looking towards doing? • (1655)

**Dr. Sandy McEwan:** The Canadian Society of Nuclear Medicine did a broad study, I think it was about four years ago, looking at distribution of tests across the country. I know the two associations are looking at addressing that. I agree it's something that is important to know.

**Mrs. Cathy McLeod:** If I have any seconds left, I'll ask you perhaps for some of us—is the PET scan an expensive piece of equipment? Is it a big piece of equipment? Could you just talk a little bit more about PET in terms of the actual mechanical issues?

**Dr. Sandy McEwan:** There are two scanners used in nuclear medicine: the gamma camera, which uses technetium, and the PET scanner, which uses PET-ready pharmaceuticals. The gamma camera, depending on what you get, will cost something between \$350,000 to \$700,000 or \$800,000. A PET scanner will cost something between \$2 million and \$3 million. The images you get from a PET scanner are a little different from those you get from a gamma camera. They do function in the same diagnostic manner; they give you the same broad information. PET scanners do require an infrastructure around them. They need cyclotrons within a geographic area. As I said, the Edmonton cyclotron is actually supplying two provinces directly and one province indirectly.

The Chair: Thank you, Dr. McEwan.

Now Dr. Fry.

Hon. Hedy Fry (Vancouver Centre, Lib.): Thank you very much, Madam Chair.

I want to thank everyone for coming and having to answer the same questions over and over, but I know that you are finally flushing out some of the answers. I think most of us are concerned about the immediate availability of isotopes for all of the various needs. I think we have been told by the minister that there was going to be a sufficient supply, and for those that weren't sufficient in terms of the isotopes, there would be ones that could be substituted.

I first want to ask you, are there substitutes?

The second thing I heard is on the medium and long term, because I believe we know the reactors are always subject to breakdown faults, etc., so we could be looking at this happening over and over if we depend for isotopes solely on reactors. We know PET, obviously. I must say that I heard in fact in the United States for the first time this year that they sold more PET cameras than they sold SPECT cameras, so they are seeing a movement towards PET.

I wanted to talk a bit about that sustainable supply of isotopes. We know that here in Canada we have TRIUMF, which is working on small cyclotrons that can fit into regional hospitals where you can continue to produce your supplies as you need them. We also know that, as Dr. McEwan said, while PET gives you as good a picture, or some say better, it also can have markers that can find out if a tumour, for instance, is estrogen-dependent, etc., so you can actually focus on your treatment exactly rather than guessing the treatment.

So my question is, given that we know that TRIUMF could, with \$50 million, be online and ready to produce in 2012 these small cameras using photofission, why is it that we're not talking about that as a reliable, clean source of production that would allow everyone to be able to turn on and off their cyclotrons as they need them, and

then turn them off when they don't? It's an easy turn on and off cyclotron. It could cost us more, but in the long run it also puts Canada in the driver's seat for new, alternative technology for producing isotopes. What do you think of that?

I look at everybody shaking their heads. I don't know if that's a yes or a no.

**The Chair:** Who would like to answer that? I'll start with Dr. McEwan and then Dr. Urbain.

**Dr. Sandy McEwan:** I think we need to be very clear that we understand that many of the PET—and I actually gave many talks last week around this—radiotracers that you're talking about are not in routine use at the moment. So, for example, estrogen-receptor imaging is not a routine test that will be done currently with technetium. So I think we need to concentrate on those techniques that we can use to replace the current technetium radiopharmaceuticals, or substitute for the current technetium radiopharmaceuticals. That's the intent of the CIHR award; that's the intent in our hospital of shifting to fluoride.

• (1700)

The Chair: Dr. Urbain.

**Dr. Jean-Luc Urbain:** Yes, I agree with your assessment. It's very clear that we need a sustainable, reliable, and affordable—I think "affordable" is a key word—source of technetium for the future. Reactors, as you said, break down, and that's the reason why Canada built two MAPLEs and not one MAPLE. In the mid and long term, we have to look at that.

In terms of PETs, I said, and I'm assuming that Mr. Trost will remember, I've been practising in Canada for six years—I practised before in Europe and in the United States—and I've never seen so many advanced cancers as in Canada, and the reason is because PET has not been available in Canada, so it's a drama. As I said before, let's take advantage of this crisis to bring the health care system in Canada into the 21st century, and PET is a good way to go.

**The Chair:** We'll hear from Dr. Ruddy and Dr. Beanlands. Dr. Ruddy, do you want to start?

**Dr. Terrence Ruddy:** I was going to say that PET is superior to SPECT for many things, like the diagnosis of cancer, so you're actually looking for a better test. So if we go the PET way, we actually are going towards a better test.

Going back to TRIUMF and the photofission, that's research. That's something that may or may not work out. It's sort of a speculative, almost penny-stock kind of thing, so we don't know if that will work.

We do know that PET works. PET oncology scans work right now. If you go to Quebec and you have cancer, you get a PET scan, and you are glad you have that opportunity. In Ontario, it's very limited, so right now that's an issue. We'd love to have a PET scan for cancer in Ontario.

**Hon. Hedy Fry:** If I may quickly intervene here, we know that actually TRIUMF is making the small cyclotrons that you can put into regional hospitals now. So that's a made-in-Canada solution. It's a made-in-Canada answer, to get those to get to PET. I'm not talking about the photofission right now; I'm talking fission. I'm talking about what we have now in terms of cyclotrons.

The Chair: Go ahead, quickly, Dr. Ruddy.

Dr. Terrence Ruddy: I'm just going to come back on that.

You're right. TRIUMF could help us establish cyclotrons to make PET tracers across Canada.

The Chair: Ms. Wasylycia-Leis.

Ms. Judy Wasylycia-Leis: Thank you very much.

I want to go back to my question-

The Chair: I'm sorry, Dr. Beanlands wanted to speak to this, too.

**Dr. Rob Beanlands:** It was only to add that I think TRIUMF is an excellent institution, and we have a lot of confidence in their ability as a group to develop alternatives. I can't comment on the photofission method itself, but I do think that is a long-term solution that we should definitely be investigating and considering investment in. I absolutely agree with the comments about PET, and that making PET more widely available in Canada will only serve to help our patients.

You asked about alternatives. We heard about the sodium fluoride. If I could come back to a comment made by I think Madam McLeod on the ability to monitor and evaluate—which should also come with this issue with TRIUMF turning on and off—we need a better way to actually look at who is using what. Doing a survey from the Canadian Association of Nuclear Medicine is one way to do it, but really I think that one thing the government can do is look at better ways of monitoring the use of the tracers than the ones we've had. I don't know for sure, but does Health Canada have resources to do this? Are there resources available now that could use more sophisticated means to monitor this and look at the distribution, and really look at access for all Canadians?

The Chair: Thank you.

Ms. Wasylycia-Leis.

Ms. Judy Wasylycia-Leis: Thank you very much, Madam Chair.

I'd like to go back to my earlier question about cancer and ask something to Dr. Driedger, who I believe is an expert in thyroid cancer. Someone just said there was evidence suggesting we're rolling in iodine-131. Is that true, or are you facing any kind of shortage to deal with thyroid cancer?

**Dr. Albert Driedger:** To repeat something of what I said earlier, I was assured a very short time ago—last week, I think—that there would be no shortage of I-131. In the last two days, I've been hearing that there is a shortage this week, and you've been hearing that this is true. I have had a number of e-mails from patients who are concerned and want to know the situation. It appears from what Dr. McEwan has said that this is a hiccup in the system that will iron itself out, and that we'll be okay overall in terms of iodine.

The advantage of iodine over technetium is that it has a longer half-life. You can stockpile it in a small way, and you can ship it longer distances with less loss. So we should be okay, I think.

• (1705)

**Ms. Judy Wasylycia-Leis:** But you do need isotopes for the diagnosis and treatment of thyroid cancer?

**Dr. Albert Driedger:** Yes, and I-131 is one of those isotopes. Technetium is also helpful at certain times.

**Ms. Judy Wasylycia-Leis:** Overall, would you say the number of people who absolutely have to have isotopes for diagnosis and treatment of any cancer or heart disease exceeds the number of isotopes available?

**Dr. Albert Driedger:** I'd have to break that down into separate parts.

For radioiodine therapy of thyroid cancer and for benign thyroid conditions, I think there will be enough, because these are not conditions that routinely present as emergencies or even as urgent. Much of our use of isotopes is as adjuvant therapy for these patients. If we come to dealing with neuroendocrine tumours, it can be another story, and for the diagnostic side, as you've been hearing, it can be, and probably is right now, at the level of a crisis.

**Ms. Judy Wasylycia-Leis:** We were told a year and a half ago, when we had a 20-day stoppage of isotope production, that unless we acted immediately and put aside concerns about nuclear safety, it was a life and death situation. Now we have a much longer period of time. Are we in a life and death situation?

**Dr. Albert Driedger:** I'd like to address that from the point of view of what we call the ALARA principle. The International Commission on Radiological Protection has written since 1928 the document on which all countries in the world base their radiation safety practices. The ALARA principle says that we should keep radiation doses to people as low as reasonably achievable. Most people stop there. But in the document there is actually a comma, and it then says, "social and economic factors being taken into account".

I was out of the country 18 months ago, but it seems to me that the issue of social and economic conditions was taken into account in what was done. Similarly, I think if we look at the operability at any power level of the MAPLES, we need to address ALARA, taking social and economic conditions into account.

**Ms. Judy Wasylycia-Leis:** Does anyone else want to address that question of how critical the situation is without some immediate movement on the part of the government?

And while you're at it, could the respond to the following. The government—or at least the Minister of Natural Resources announced on May 28, in the middle of this crisis, an expert review panel to find long-term solutions for isotope supply. I've never heard of such a committee ever being struck. Have you?

**Dr. Jean-Luc Urbain:** No, I haven't heard of that before. That said, it's a good initiative and we hope we will be consulted on it.

**Ms. Judy Wasylycia-Leis:** On the question of the crisis we're faced with right now and how we can get around it, if we were to make a recommendation to the government to take the \$28 million now allocated for research on alternatives and put it toward developing or increasing PET equipment, would that be...? Are there any other alternatives we should look at as part of that?

In particular, Dr. Lamoureux, what do we do in the case of Quebec, which apparently already has a sufficient supply of PET scanners?

**Dr. François Lamoureux:** I think in our country we must give each province a percentage of the amount of money they have a right to receive. But the deployment of PET scanners we now have in Quebec is not enough; it's just a first step. We've already used that money instead of putting it in a different field. We have used it for PET, because it was a very important thing to do for the patients. It was in fact the orientation of the Canadian Association of Nuclear Medicine. So we have already applied the money owed by the province, in fact.

We need PET in remote areas, just as we have it in the central areas. People who are in the north must have the same kind of access and the same quality of medicine. The surgeon who does surgery for cancer must also have for his patient the same access to the same quality. So PET must not be concentrated in the university hospitals or big centres, but all over the country.

The Chair: Thank you, Dr. Lamoureux.

We'll now go to Ms. Davidson.

Mrs. Patricia Davidson: Thanks, Madam Chair.

I'd also like to echo my colleagues' thanks to each and every one of you for being here today. I know this is a very, very busy and stressful time for all of you while you are trying to deal with this situation as well.

What I've been hearing this afternoon, I think, has been very encouraging, from the fact that information is flowing. I think everybody has talked about a short-, medium-, and long-term plan. I think that's extremely critical.

The issue we're facing here today at the health committee, I agree, is the short-term plan. But the short-term plan is not going to be effective if we don't have the medium- and the long-term plans to follow it up.

I think we have a tremendous amount of expertise sitting here in front of us, and I have really enjoyed hearing what you've had to say. I think we've learned a lot here today.

I want to ask a question. I'll start with Dr. McEwan and maybe then go down the row.

If there were three things you thought we should be doing as a health committee towards making recommendations, what would your top three be to move forward in the short term?

• (1710)

**Dr. Sandy McEwan:** Madam Chair, my suggestions for that would be as follows. I think the first is that there is a mechanism to facilitate the current activities. These are working. I believe they're working relatively well. I'm sure there can be some improvements. I think that's the first thing: the ad hoc working group really is the key player in that.

The second element is to develop a mechanism or to again facilitate the type of communication that we've talked about across the country so that it's much clearer where the black spots are and where the areas are that are working well. There are things to be learned from that and I think it would help us understand.

The final thing is, in the very short term, the critical role of Health Canada as the regulator in facilitating access to medical isotopes from non-traditional suppliers. We talked about the radioactive iodine, and I believe that is one example of how we can do that.

Madam Chair, perhaps I could just have your indulgence for one second. The manufacturer of the cyclotrons that go into the hospitals is not TRIUMF. It's a company in Vancouver called Advanced Cyclotron Systems, which uses TRIUMF technology.

The Chair: Thank you.

Dr. Ruddy.

**Dr. Terrence Ruddy:** I think the answer is more PET. Right now we're at about 75% of the technetium that we had, say, a year ago. We're able to cope with that because we switched cardiac studies from technetium to thallium, so at 75% we're holding our own.

Thallium is not as good as technetium. There's more radiation for the patient. If we had more PET, we could do more cardiac PET. That would be desirable. If we're going to go down to something like 40% at the end of July, at the beginning of August, that's when it's going to be bad, and the problem will be bone scans. If we could do the PET bone scans in a larger number of patients, we'd save whatever technetium we have. That would be a good short-term solution—more PET times one month, two months. It's like Dr. Lamoureux said: \$28 million going to that would be a good shortterm solution. We have a lot of PET scans.

Dr. McEwan and others have to figure out how to spread that around. So we have to sort that out, and this would be part of the cost. That would be the short-term solution. Then, at the same time, I'd still think of the intermediate solution, which again would be more PET. I see more PET centres across Canada, either remote or you have these vehicles that carry the PET camera around.

Mrs. Patricia Davidson: Can they be mobile?

**Dr. Terrence Ruddy:** Yes, PET can be mobile. It's an 18-wheeler, and they use it in the U.S. a lot right now. One state will have three or four PET cameras that move around to little places like Peterborough.

Mrs. Patricia Davidson: Dr. Beanlands.

**Dr. Rob Beanlands:** As Dr. McEwan mentioned, I think we should continue to invest in the initiatives that have already begum— the committee that Dr. McEwan has been referring to—and continue this in a balanced approached. I think we should be looking at the short, medium, and long term, really keeping all three balls up in the air. I think this has to continue.

I would agree that increasing the accessibility and availability of PET imaging would also be a priority. I think we also need better ways to be actually monitoring the usage and the distribution throughout the country, as was brought up earlier.

Thank you.

• (1715)

Mrs. Patricia Davidson: Dr. Lamoureux.

[Translation]

**Dr. François Lamoureux:** Patient must absolutely be able to trust again, and deploying PET technology is the most meaningful thing to do.

As for mobile PET units, it is absolutely a mistake to try them. They rejected them in France, the country with the most experience with PET. Quebec rejected them. It is a denial of service for those with the equipment. To those who promote them and who are so convinced of their merits, we suggest offering them a mobile PET unit to replace the one in their hospital.

In hospitals, stable magnetic resonance equipment is installed because we cannot know in advance when the tests will take place. These tests have to be programmed on a daily basis. In those conditions, a mobile PET scanner is no use; it is a waste of money. This approach was rejected because it costs too much to maintain the tractor, the motor. In France, they completely rejected it. Canada would do better to look at what is being done in France or in Belgium, because those are the countries with the most expertise.

#### [English]

**The Chair:** I know we're quite over time. We're so interested in what you have to say. But Dr. Urbain, could you comment?

**Dr. Jean-Luc Urbain:** Yes, there are three things. The first thing is that I'd like to put emphasis on the fact that the current Health Canada regulation for approving radiopharmaceuticals, which are considered as pharmaceuticals, is totally outdated and we need to expedite the approval of radiopharmaceuticals based on international standards, not on the Canadian standard.

The second thing is positron emission tomography is a must have, particularly for oncology patients.

The third thing is that I would definitely encourage everybody to talk to medical organizations, rather than to individuals.

The Chair: Dr. Driedger, do you have some comments?

Dr. Albert Driedger: Yes, thank you, Madam Chair.

I agree with the summary statements of the last few moments that we need to have a comprehensive plan for the short term and the longer term.

While I'm always in favour of research and development, and while I am hesitant to criticize what is being funded this week—because I haven't seen the fine print—with regard to the McMaster reactor, we should note that we are using a 50-year-old reactor to back up a 52-year-old reactor. The wisdom of that leaves me a little bit in doubt.

The Chair: Mr. Uppal.

Mr. Tim Uppal (Edmonton—Sherwood Park, CPC): Thank you, Madam Chair.

Thank you all for your summaries, and thank you for coming.

First of all, obviously the government recognizes the serious and challenging nature of this global medical isotope shortage. Really, even the previous government was aware of the challenges as far back as 2003, so this has been going on for a while.

I'm curious, Mr. McEwan. How are we working with other countries to deal with this global situation, and how do we compare with other countries?

**Dr. Sandy McEwan:** I've made reference to the meeting that the society facilitated between a number of different countries and medical and nuclear medicine organizations.

We are actually coping better than most and not as well as some. There is no doubt that there are a number of issues, particularly on information-sharing, where we can improve. There is no doubt about that. Clearly, and I have stated this several times, I see that as an important part of my role. I have worked with Jean-Luc and Al for many, many years. We know each other well and we are able to communicate and share ideas, and I think it's very important that the linkages within the working group—which, remember, also has oncologists, cardiologists, and access to the CMA—continue, because that's one way of ensuring that happens.

If we look at the way in which other countries have dealt particularly with problems of radioactive iodine supply, we have probably handled that better than most. As Dr. Driedger and I have both said, this short-term blip really has come at us out of left field, because the company that supplies it had assured us in the community that everything was going to be fine.

The final area where I think we are seeing real progress, real advantage, is in the way in which Health Canada over the past little while has been addressing the regulatory issues for the radiopharmaceuticals that we can use as replacements, or, more importantly, for the medical isotopes that are coming from other sources. Approvals have been quick, they've been comprehensive, and they have been facilitative and interactive.

• (1720)

**Mr. Tim Uppal:** I know you've only been on the job for a couple of days, but would part of your mandate be to help facilitate that communication that you're talking about, where that has been lacking?

**Dr. Sandy McEwan:** I would hope that both the minister and the community would see that as a really important part of my role. I clearly see it as that, and as I indicated earlier, I have already started having conversations with colleagues in Ontario so that I can really understand the issues in Ontario. Ontario and Quebec are different from Alberta and B.C. They have small communities where they don't have access to central radiopharmacies, so I need to understand those issues very well. And I'm delighted with the conversations I've had so far.

**Mr. Tim Uppal:** Dr. Beanlands, can you indicate how we're doing globally compared to other countries?

**Dr. Rob Beanlands:** In terms of the cardiac field, at the recent Society of Nuclear Medicine meeting, certainly there were comments made about how—at least in the cardiac imaging realm —we've been able to manage this both at the Ottawa Heart Institute but also nationally, in terms of being able to switch over to thallium. Many American centres haven't used thallium for a long time and they're looking to us for guidance in terms of how to make that switchover in their departments. So we've been an example that we should be proud of. It's an example of how we as a community have been able to work together to try to solve some of these problems. Certainly, with Dr. McEwan's leadership, we look forward to solving a lot of these problems as we go forward. Nuclear medicine is certainly an important community, but there are also cardiology patients and oncology patients who are being affected. These specialties also need to be engaged in the process, and I'm pleased to hear that this will be happening.

The Chair: We do have a few more minutes.

I've had two requests. I'm going to keep the time really close. I'm going to say one minute for the question and one minute for the answer, if that's okay.

Dr. Bennett, and then Dr. Carrie.

**Hon. Carolyn Bennett:** It's just a request for Dr. McEwan. Obviously, here in Ontario we have 95% of our supply coming from Chalk River usually and we have no PETs. From the Ministry of Health in Ontario we need them to come clean on real timeliness in supply. We don't get info from the feds, so we had to call the supplier directly. I think your job is very clear in terms of letting people know what's available, how it's coming, and whatever.

Yesterday, I asked the minister if she would be able to table with the committee the source and supply of all 245 sites, the alternatives that would be available to those sites, and the capacity of those sites to help somewhere else, or as you were able to do for Saskatchewan. If we could get this mapped, as Cathy has suggested.... We need to really encourage the government to come up with some money, because that's the other thing that Ontario is very clear about. In terms of incentives to be moving towards PET scanning, it would be very important for the community and for the people of Canada. As Allan Rock once said, "Geography is no excuse for inequality." If we could see if there could be incentives put in place to move to PET that would be both short and long term, perhaps you could agree to table that.

The Chair: Is there a response to Dr. Bennett's comment?

**Dr. Sandy McEwan:** Madam Chair, from my perspective, I appreciate her confidence in my ability to work with the minister and the community in the communication area. I'm encouraged and look forward to working with the chair and the committee.

Remember, there are only two suppliers of generators in North America. Those are the units that convert molybdenum into technetium. The problem is the discordance of source for those two manufacturers. I'm sure they are working 24 hours a day to try to rebalance that supply. Clearly, it is very important that those two manufacturers work as hard as they can to bring in molybdenum from Australia.

You saw the other day that Health Canada has actually approved and given an NOC to the molybdenum from OPAL in Australia. I think it's clear that we can use the regulatory process to facilitate access to molybdenum and technetium products.

# • (1725)

Hon. Carolyn Bennett: How are you going to deal with the bidding war around the world?

The Chair: Dr. Bennett, that's the last one.

Very quickly, Dr. McEwan.

**Dr. Sandy McEwan:** Technetium is an interesting product. For many years technetium was an insignificant part of the cost of a ready pharmaceutical. With the increase that is going up now, it has gone from being insignificant to being a meaningful part of the overall cost of the ready pharmaceutical test. So people are now noticing what in the past they didn't notice.

The Chair: Dr. Carrie.

Mr. Colin Carrie: Thank you very much, Madam Chair.

I just wanted to sum up, again, Dr. McEwan, if you don't mind. We heard the three things that you think are important. You mentioned the ad hoc working group that we've had for the last 18 months. You're saying it's working well, and you're recommending that we continue working with that group to get good advice, not only provincially and territorially but internationally.

The second thing you mentioned was communications. That was one of my questions earlier, to make sure that the recommendations you're making are going to be disseminated properly to the key players.

Third, you and also Dr. Urbain mentioned Health Canada as a regulator. I noticed in your comments earlier that you did praise the government for the special access program and how we are working to fast-track it, but you're saying that we can work on improving that.

Those would be the three key things that you're recommending. We continue doing what we're doing and try to expand them.

**Dr. Sandy McEwan:** We certainly should in the very short term. Those are the things that are going to make a difference for our patients tomorrow. Many of the other things we've talked about around the table will take some time to roll out. What we have to ensure is that the regulatory process is as facilitative as possible to ensure that molybdenum anywhere along the supply and production chain of radiopharmaceuticals is made as rapidly as possible. As I said, I got my approval for my clinical trial application for fluoride in under a week. It actually came faster than I was able to implement it.

Mr. Colin Carrie: I like hearing that.

I was wondering if I could make one recommendation to you in your new job. We heard a lot about the PET scanners, and it appears to be a solution. I think there's a lot of agreement on that. I was wondering if we could encourage you to work really closely with the provinces and territories, because I know Dr. Lamoureux mentioned things. We always have to be careful stepping on jurisdictional issues, and when it boils down to it, we all represent the people we represent. If we can work to get over those issues to better support our constituents, that would be wonderful.

In wrapping up, I want to thank you all. I really appreciated your being here.

Thank you very much, Madam Chair.

The Chair: Thank you.

Yes.

**Ms. Judy Wasylycia-Leis:** On a point of order, Madam Chair, I'm wondering if I could just test the floor of the committee to see if there's unanimous consent for the following motion, that pursuant to the current isotope crisis, the Standing Committee on Health recommends that the Government of Canada immediately convene an international expert panel to advise on the potential of MAPLE 1 and 2 reactors to produce isotopes within a reasonable period of time.

The Chair: Mr. Trost.

**Mr. Brad Trost:** Madam Chair, I'm not sure if Ms. Wasylycia-Leis understands the difference between the health committee and the natural resources committee. This is a natural resources motion that she was putting forward.

Hon. Carolyn Bennett: She's been here a bit longer than you.

**Mr. Brad Trost:** Yes, I do understand committees can do anything they want. But this issue is being debated. There have been expert witnesses at the natural resources committee. There have been nuclear engineers. There have been physicists there, TRIUMF. The reactor people from McMaster in Hamilton have been there. There's been ample discussion over at the natural resources committee.

As I noted earlier today, AECL actually did go outside of its own expertise and sought international expertise to consult on the MAPLEs. So I think Ms. Wasylycia-Leis should research some of those items before she moves such a motion.

Ms. Judy Wasylycia-Leis: Madam Chair, on that issue-

• (1730)

The Chair: Is there consent to deal with the motion?

Some hon. members: No.

The Chair: There's no consent.

I want to say to our guests-

Hon. Carolyn Bennett: I have one. Let me try one.

The Chair: Excuse me, I want to-

Hon. Carolyn Bennett: On a point of order.

The Chair: No, just excuse me for a minute while I say something.

I want to thank the people for coming today. You've been just—

**Hon. Carolyn Bennett:** I don't think you get to do that when I have a point of order, Madam Chair, with due respect.

**The Chair:** You know, I would like this committee to have the decorum we need to have. We don't need to do political things here right now. What we need to do—

**Hon. Carolyn Bennett:** It's not a political thing; it's that I asked Dr. McEwan if he would table or map out the source and supply alternatives and the capacity to help across the country. I think there has been consent for this around the committee. I think it would really be helpful to all Canadians to just know that there is this central place that's tracking all of this. With unanimous consent, it would be fantastic if everybody would agree that we would ask for that mapping and for Dr. McEwan to be able to do it.

The Chair: Mr. Trost.

**Mr. Brad Trost:** I'm not quite sure. Is she just asking for the gentleman to table his report that he already has produced, or is she making a motion to ask him to produce such a given item? I'm not quite sure what Dr. Bennett is asking.

The Chair: Do we have unanimous consent to table this?

Mr. Brad Trost: No, not until I know what I'm being asked. I'm opposed.

**Hon. Carolyn Bennett:** I think it's what Ms. McLeod had described. It would be very important for the people of Canada to know where the 245 sites across the country get their isotopes from and how much they're expecting over the next number of months. They should know what their access to alternatives like PET scanning would be, and their capacity—like in Quebec, for Gatineau to help Ottawa or whatever it needs to be. It's just so there is a feeling of a plan on a monthly basis, so that people can get us through this short-term time.

The Chair: Dr. Carrie.

**Mr. Colin Carrie:** I am just going to ask if she is trying to move a motion on a point of order. Is that what we're doing here?

Ms. Judy Wasylycia-Leis: She's seeking unanimous consent for the point of order.

The Chair: Yes, she's seeking unanimous consent for a point of order.

So I'm going to ask the question. Who is in favour of this point of order happening?

**Mr. Brad Trost:** I'm killing it here because I'm still not totally sure what we're doing here.

The Chair: Well, all you have to do is raise your hand and say no, then.

**Hon. Carolyn Bennett:** If you're not sure, then we can clarify for you, sir.

**Mr. Brad Trost:** I'd also like to talk with the witnesses to see if this is going to be a problem for them, if this will take a lot of effort or not. There are a few things like that.

Hon. Carolyn Bennett: It's something that's going to have to happen, Mr. Trost.

The Chair: Dr. McEwan, please.

Excuse me, let's hear Dr. McEwan, please.

**Dr. Sandy McEwan:** Madam Chair, I'd like to very quickly put this in three parts.

The first part is the supply forecast. There is a supply forecast that is given to Health Canada and I believe passed on to the rest of the country on a weekly basis. The supply forecast on June 18.... Technetium-99m, molybdenum, will be running at 100%. Lantheus, to their direct customers, i.e., the hospitals that rely on Lantheus for a generator, 70%. Lantheus radiopharmacies, 50% today and tomorrow and going forward. So this is on June 18. That will increase to 100% next week. Thallium is not produced in reactors; thallium is produced in cyclotrons. That is 100%. Iodine-131, we've heard, is low this week. It is our belief that by a combination of the use of SAP, the special access program, and the supplier coming online again, that will be resolved in the next couple of weeks. Key to the long-term resolution of that, obviously, is bringing on South Africa and Australia to provide us with their supply. That's item one.

Item two, the provinces will have, I'm sure, their own internal assessment of where the generators are coming from. Certainly I would regard it as not inappropriate for me to try to collate information as it was available, and clearly that will be part of this role in my communications.

Finally, I think it's very important to understand the production schedules of the major reactors over the coming year. That was the focus of yesterday's and today's meeting that the NEA started.

• (1735)

The Chair: Dr. McEwan, I thank you for your input to that.

The motion has been defeated.

**The Chair:** I want to thank all the guests who came today and gave your very insightful information. I know the committee has been very interested in what you have to say. You came at very short notice, so I must give you a special thank you.

This meeting is adjourned.

Published under the authority of the Speaker of the House of Commons

Publié en conformité de l'autorité du Président de la Chambre des communes

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