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Wednesday 29 August 2001

Journal des débats (Hansard)

Mercredi 29 août 2001

Standing committee on justice and social policy

Subcommittee report

Portable Heart
Defibrillator Act, 2001

Comité permanent de la justice et des affaires sociales

Rapport du sous-comité

Loi de 2001 sur les défibrillateurs
cardiaques portatifs

Chair: Toby Barrett
Clerk: Tom Prins

Président : Toby Barrett
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LEGISLATIVE ASSEMBLY OF ONTARIO

STANDING COMMITTEE ON JUSTICE AND SOCIAL POLICY

Wednesday 29 August 2001

ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

COMITÉ PERMANENT DE LA JUSTICE ET DES AFFAIRES SOCIALES

Mercredi 29 août 2001

The committee met at 0906 in committee room 1.

SUBCOMMITTEE REPORT

The Chair (Mr Toby Barrett): Good morning, everyone, and welcome to our first day of regular meetings of the standing committee on justice and social policy. Our agenda for the next two days is to consider Bill 51. Our first order of business would be the report of the subcommittee. It's a full page. Mrs Molinari, would you read through that for us?

Mrs Tina R. Molinari (Thornhill): Your subcommittee met on Monday, July 30, 2001, to consider the method of proceeding on Bill 51, An Act to help save the lives of Ontarians who suffer from cardiac arrest by promoting the widespread availability and use of portable heart defibrillators in public places, and recommends the following:

(1) That the committee schedule public hearings in Toronto on August 29 and in Ottawa on August 30, 2001.

(2) That the committee commence its clause-by-clause consideration of the bill after the House comes back.

(3) That the clerk place an advertisement on the Ontario parliamentary channel and on the Internet. If possible, an advertisement will also be placed in the major English and French newspapers in Windsor, London, St Catharines, Sudbury, Sault Ste Marie, Thunder Bay, Ottawa, Kingston and Hamilton. In Toronto, an advertisement will also be placed in the four major daily English newspapers and an attempt will be made to place it in the largest French newspaper.

(4) That groups be offered 20 minutes in which to make their presentations, and individuals be offered 10 minutes in which to make their presentations.

(5) That everyone interested in making a presentation be scheduled. If scheduling problems arise, the Chair will provide direction.

(6) That each party may submit a list of people interested in making a presentation to the clerk by August 22, 2001. If the agenda is not full, additional names can be added after this date.

(7) That the deadline for making a request to appear before the committee be August 22, 2001.

(8) That the deadline for submitting written submissions be August 30, 2001.

(9) That the Chair pay reasonable requests by witnesses to have their travel expenses paid.

(10) That the Minister of Health and Long-Term Care and/or appropriate staff be offered 60 minutes in which to make a presentation. Following the minister's/ministry's presentation, each party will be offered 10 minutes to make statements and ask questions.

(11) That the research officer prepare a background paper containing information on the technology and on programs in other jurisdictions. The background paper will also include information from relevant ministries. The research officer will also prepare a summary of recommendations.

(12) That the clerk be authorized to begin implementing these decisions immediately.

(13) That the information contained in this subcommittee report may be given out to interested parties immediately.

(14) That the Chair, in consultation with the clerk, make any other decisions necessary with respect to the committee's consideration of this bill. The Chair will call another subcommittee meeting if needed.

Mr Chair, do you need a motion to accept the report?

The Chair: Yes, thank you.

Mrs Molinari: I so move.

The Chair: We have a motion to accept the report of the subcommittee. Those opposed? Seeing none, carried. I declare that order of business closed.

PORTABLE HEART DEFIBRILLATOR ACT, 2001

LOI DE 2001 SUR LES DÉFIBRILLATEURS CARDIAQUES PORTATIFS

Consideration of Bill 51, An Act to help save the lives of Ontarians who suffer from cardiac arrest by promoting the widespread availability and use of portable heart defibrillators in public places / Projet de loi 51, Loi visant à contribuer à sauver la vie des Ontariens qui souffrent d'un arrêt cardiaque en promouvant la disponibilité et l'usage généralisés de défibrillateurs cardiaques portatifs dans les lieux publics.

MINISTRY OF HEALTH AND LONG-TERM CARE`

The Chair: Our next order of business will be a presentation from the Ministry of Health and Long-Term Care, and for the information of the committee, I would

ask the gentlemen at the witness table if you could, in a fairly loud voice, and please use the microphone, identify yourself and your department or area of expertise.

Mr Malcolm Bates: My name is Malcolm Bates. I am a director of emergency health services from the Ministry of Health and Long-Term Care.

Mr David Vusich: My name is David Vusich. I work for the emergency health services branch of the Ministry of Health and Long-Term Care and I'm the manager of education services.

Mr Dennis Brown: Good morning. My name is Dennis Brown. I'm the manager of land ambulance programs with the emergency health services branch.

The Chair: Thank you, gentlemen. If you wish to proceed with a bit of a briefing for our committee.

Mr Bates: This morning we'd like to present to the committee a technical overview of public access defibrillators, or PAD as it's otherwise known publicly.

We hope to bring you some facts relating to PAD that may assist you in your deliberations on Bill 51. We have provided a series of slides for your review, but before reviewing those slides, I'd like to provide a short background of advanced life support in Ontario. A long-standing basis of the Ministry of Health and Long-Term Care has been a policy that the effectiveness of a new medical skill or a new program must be proven before it's implemented province-wide. It is this policy that led to the carefully timed implementation of a defibrillation program for paramedics and the announcement of the Ontario Prehospital Advanced Life Support Study, otherwise known as OPALS.

In the 1990s, after receiving study results which were convincing, the ministry trained over 4,000 paramedics in the life-saving skill of defibrillation. I am pleased to tell you that every ambulance in the province carries a defibrillator.

Ontario leads the world in paramedic research. The OPALS Study, commenced in 1994, evaluates the health benefits of advanced-care paramedic services to patients. We are showing what paramedic skills, whether it be defibrillation or advanced airways, will help victims of cardiac arrest in an outside-the-hospital environment. This study will involve more than 25,000 patients by the time it is completed.

A major part of the OPALS Study is the optimization of pre-hospital defibrillation by the emergency medical support system in Ontario. This optimization has resulted in the improvement of overall survival of patients from 3.9% to a current 5.2%. In essence, defibrillation works and it also can be optimized under the right circumstances.

I think another important point I should mention is that effective January 1 of this year, responsibility for land ambulance delivery was transferred from the province to the municipal level. This was a smooth transition that has resulted in the enhancement of local decision-making in the provision of emergency medical services such as defibrillation.

This then leads me to a set of slides that we have provided for the committee, and I hope you all have your copy in front of you. Again, this is related to public access defibrillation, and it's a technical overview.

I refer you to page 2. On this page are the areas that we will elaborate upon. We have a defibrillator available with us today and, with your agreement, we'd like to provide you a practical display of what a portable heart defibrillator does and how it works. On page 2, in the next hour we're going to be looking at Bill 51 requirements: what is a portable heart defibrillator; how they work; some facts relating to PAD in Ontario and PAD in other jurisdictions, costs associated with PAD, training issues and some potential risks, as we see them.

Moving on to page 3, we see the requirements of Bill 51. Bill 51 requires of the public and private sectors the implementation of automated heart defibrillators in all public buildings and selected private buildings with public access, such as shopping areas, stadiums, casinos, gaming facilities, airports and recreation centres.

In particular with respect to the Ministry of Health and Long-Term Care, it calls for the development and publishing of guidelines for portable defibrillator use and maintenance in conjunction with emergency service stakeholders, and the development of a training program or protocol in the use of portable defibrillators, with, of course, stakeholder input.

Page 4 indicates what a portable heart defibrillator is. While it's a machine, of course, it's a machine that is capable of monitoring heart rhythms and recognizing a cardiac arrest when a cardiac arrest has occurred in the patient. It determines, without intervention from an operator, whether defibrillation should be performed. It gives automated voice instruction—and you'll hear that this morning—to the operator of a machine to administer an electric shock to a victim's heart. The shock will hopefully restart the victim's heart to allow resumption of blood flow to the body.

With us is Mr Vusich. Mr Vusich has been working in the emergency health field for a number of years. He's our education and training manager. He's fully conversant with defibrillation and the utilization of defibrillators. So I'll pass it over to Dave, and Dave will go through how a portable defibrillator works and show you what it's all about.

Mr Vusich: Thank you for this opportunity. As Malcolm mentioned, I did bring along a portable defibrillator with me. I would just like to preface this with making mention that this is one particular model of defibrillator. As you're aware, there are several different manufacturers of defibrillators in the market today. The one we have brought is not to say that we are endorsing one and not to say that we have a preference for one over the other; it's simply that this was one we could bring along as an example for you.

Slide 5 talks about the portable defibrillators. I'd like to go through, first of all, slides 5 and 6 and talk our way through them. Then, if the committee would like, we could actually see the defibrillator and, if you wanted to

hear it, we could run through a simulated scenario to give you that understanding.

In a sudden cardiac arrest situation, the responders who have access to a portable heart defibrillator would arrive at the patient's side, and it's very important that a responder would be able to assess and acknowledge that the patient is unresponsive, that there is no breathing and that there is an absence of a pulse. That is important. The rescuer then would initiate CPR on the victim. CPR is still a very important link in this chain of survival and CPR is certainly an important part of public access defibrillation programs.

If there was more than one rescuer, CPR could continue while the second rescuer was able to open the defibrillator to turn it on and connect it to the patient. That means a connection of two electrodes on the chest of the patient, and then the cables, by a wire, would be connected to the defibrillator itself. Once that is in place, everybody must stop making contact with the patient. CPR would cease at that point.

The machine would then do what's called analyzing. At this particular point in time the computer software within the machine is actually able to read the electrocardiogram or the electrical activity of the heart and analyze that particular rhythm. It is important that it is looking for two particular rhythms that will allow the machine to actually shock the patient. These electrical cardiac rhythms are called ventricular fibrillation, or V-fib for short, or ventricular tachycardia, known as V-tach for short. Specifically, it is looking for V-tach over 180 beats per minute.

Once the machine is connected to the patient and analyzing has occurred, you will notice, on slide 6, that one of two things may happen. The machine will analyze and it will either direct the rescuer to a shock situation or that there is a no-shock situation. If the machine interprets one of these two rhythms that I mentioned—V-fib or V-tach over 180—the machine will advise as to a shock. It will automatically charge and then prompt the rescuer to push the button to deliver the electrical shock to the patient, at which time the rescuer would have to push a button to deliver that energy. It's crucial that no one is making contact with the patient at that time.

0920

After that shock is delivered, the machine will wait a few seconds and then it will analyze the heart rhythm again. If appropriate, if the patient is still in V-fib or V-tach over 180, it will again recommend a shock. It will charge and allow the rescuer to push a button and deliver a second shock. Again, it will follow with another analysis and, if appropriate, deliver a third shock.

Many machines, especially for public access defibrillation, have a built-in protocol. After the third shock, the machine will pause. This pause will last for one minute, during which time the rescuer is directed to check the airway, check for breathing and check for pulse and, if needed, to provide CPR. As I made mention, CPR is very important in this link of survival for defibrillation. CPR provides the oxygenation and the circulation that keeps the heart viable for a longer period of time. In fact, they have found that CPR actually lengthens the time that the patient's heart will stay in fibrillation, which increases the chances of survival.

The rescuer is prompted to check the patient and, if required, to begin CPR, and will do so for one minute, at which time the machine will again recommend that everybody stand clear. It will analyze and, again, if appropriate, will charge and allow the rescuer to deliver a shock.

There are times that, when the machine analyzes, it will not see either ventricular fibrillation or ventricular tachycardia over 180 beats a minute. If that is the case, it will not recommend a shock, it will not charge and it will not allow the rescuer to deliver energy to the patient's chest. In that case, the machine will typically direct the rescuer to check the airway, check the breathing and check for pulse and, if necessary, provide CPR.

Depending on the machine, depending on the protocol, some will automatically continue to analyze in the background, always looking for one of those two rhythms that are shockable. Other machines rely on the rescuer to analyze by pushing a button at different stages—every minute or perhaps every two minutes depending on the protocol that's built in.

That cycle of analyzing the patient and delivering shock will continue, if appropriate, in one of those two shockable rhythms or, if not shockable, it will direct the rescuer to continue on with CPR. That would be expected to continue until the arrival of the ambulance services.

Mr Chair, if you would like, I have one here. I'm not sure if the committee would like to see one or if they would actually like to hear the scenario it may go through in a shock sequence.

Mr Steve Gilchrist (Scarborough East): I think we can volunteer Mr Colle.

Interjections.

Mr Vusich: The good news is that the machine will do it with nobody attached.

Just for your visualization, to begin with, you will see that they are very small and very lightweight as public access defibrillators. They are certainly not as large as the ones you would see in hospital use or even that the paramedics would carry. They are designed specifically for the role of public access defib programs.

The particular scenario we're about to go through will take approximately two minutes. What you will hear in this example is the rescuers who have arrived at a patient. They have acknowledged that the patient is unresponsive, has no breathing, has no pulse. CPR has been initiated and now, as the second rescuer, I would be able to turn on the machine.

As it goes through, you will hear that the machine is actually analyzing. You will hear it advise to stand clear and to deliver shock. In this particular scenario, you're going to hear those three consecutive shocks in a row and then the pause for one minute for CPR. Then you will also hear how, after that one minute, the machine automatically engages again, advises to stand clear and does another analysis and shock, at which time we

actually revive the patient. So we have a winner here. We're kind of cheating. I know that he's going to win.

Automated voice: Apply pads to patient's bare chest. Have your pads connected next to flashing light. Apply pads.

Mr Vusich: Most of the pads come connected, with the wires already on. Some even have pictures of exactly where to place them on the patient's chest. Once that is in place, the connector goes into the machine.

Automated voice: Analyzing heart rhythm. Do not touch the patient.

Shock advised. Charging. Stay clear of patient. Deliver shock now. Press the orange button now.

Mr Vusich: The shock will not deliver until I personally push that button.

Automated voice: Shock delivered. Analyzing heart rhythm. Do not touch the patient.

Shock advised. Charging. Stay clear of patient. Deliver shock now. Press. Shock delivered.

Analyzing heart rhythm. Do not touch the patient.

Shock advised. Charging. Stay clear of patient. Deliver shock now. Press the orange button now.

Mr Vusich: This is the third shock, so you'll notice what it does differently.

Automated voice: Shock delivered. Paused. It is safe to touch the patient. Check airway. Check breathing. Check pulse. If needed, begin CPR.

Mr Vusich: So the machine is now in a one-minute pause for that CPR, again being such an important link. During that time, certainly the rescuer would again check the airway, check for breathing and, if necessary, give rescue breathing, check for the pulse and, if necessary, begin cardiac compressions. The machine will take you through that one minute, this particular model, and most do. It will take you through that one minute and let you know when it's over.

Just a few observations as we go along, during this one minute. Notice that the machine is quite lightweight. Mr Brown is not having too much difficulty holding it up this entire time. This particular device only weighs about five pounds. The advent of lithium batteries that are non-rechargeable, long-life, has certainly made these machines much lighter and easier to use in that way.

This particular device uses a slightly different—

Automated voice: Analyzing heart rhythm. Do not touch the patient.

Shock advised. Charging. Stay clear of patient. Deliver shock now.

Shock delivered. Analyzing heart rhythm. Do not touch the patient.

Mr Vusich: This will change a little bit, because in this particular case the patient's electrical cardiac rhythm has now changed.

Automated voice: Analyzing heart rhythm.

Mr Vusich: It is no longer in what we call a shockable rhythm. The machine can identify—

Automated voice: No shock advised. It is safe to touch the patient. Check airway. Check breathing. Check pulse. If needed, begin CPR.

Mr Vusich: So in that particular case, after the shock, it analyzed and found that there was not a shockable rhythm, and in fact what the screen was actually demonstrating there would be an electrical rhythm that was very likely generating a pulse. At that time, when it was a non-shockable rhythm, the rescuer would again check airway, check breathing, check pulse and, if needed, begin CPR. Hopefully, though, in this particular case the pulse had been restored, the beating heart was now generating a pulse, and the machine has succeeded, along with the rescuer, in accomplishing its task.

Mrs Lyn McLeod (Thunder Bay-Atikokan): What if there was no rhythm?

Mr Vusich: If there was absolutely no rhythm?

Mrs McLeod: Yes.

Mr Vusich: There's a name for that; it's called asystole, or what a lot of people would call flatline. People quite often will see on TV a demonstration where the cardiac monitor is connected and it's absolutely flatline across. That is not a shockable rhythm.

That's an important thing to make mention of with defibrillators. A lot of people, in trying to explain it to the public, will say that a portable heart defibrillator will actually jump-start the heart. That's completely wrong. When a patient is in ventricular fibrillation, there is a lot of electrical activity, but it's chaotic. It's not controlled any more; it's completely chaotic. Because all the cells of the heart are firing at their own independent stage, the heart doesn't actually compress and generate a pulse, so there's no circulation of the blood flow. When you see flatline on the screen, or asystole, there is no electrical activity whatsoever, and a defibrillator will not get that started again. You need all the extra enhancements, such as cardiac medication, that the advanced-care paramedics or hospital staff will be able to provide.

Mrs McLeod: What does the machine say then?

Mr Vusich: What does it say? It simply says, "No shock advised." There's no requirement on the rescuer's part to be able to analyze the rhythm itself; the machine does. You only get two messages from the machine: either "Shock advised" or "No shock advised." Those are the only two messages.

0930

The Chair: Is there further content in your presentation?

Mr Bates: Yes. I'll carry on, Mr Chair. I refer you to page 7 of the slides. On page 7 we have some facts relating to public access defibrillation in Canada and Ontario. It's important to note that PAD is still the subject of ongoing study by the emergency medical community. Having said that, we know that nearly 40,000 Canadians die each year from cardiac arrest. Less than 5% of the people who suffer cardiac arrest outside of a hospital survive. As I think we noticed from the demonstration by Mr Vusich, time is of the essence when it comes to cardiac arrest. For every minute that elapses between a cardiac arrest, 10% of the victims who might be saved are lost. Most victims who suffer cardiac arrest that are not treated within 10 minutes die. So it's

absolutely vital that the service—the CPR and the defibrillation—arrive at the side of the patient quickly.

Most emergency services—ambulance and fire—are not able to get to a cardiac arrest victim quickly enough. Eight to 12 minutes is about the average response time of the ambulance personnel in North American urban areas. The fire departments generally get there a little quicker if they have a defibrillation service. Twenty-six per cent of our fire departments in Ontario and 1% of our police departments carry portable heart defibrillators on their emergency response vehicles.

I should mention that much of this, the fact that fire departments carry defibrillators—a number of them, in any case—is due to the OPALS Study project that I mentioned earlier. One part of the OPALS Study was to optimize response, and that was in the selected communities that OPALS pertains to, to ask the fire departments, and they all did, to carry portable defibrillators with them, and they were trained to utilize them. That's one main reason why we saw, as I mentioned earlier, the survival rate increase in the OPALS communities.

Some estimates suggest that if made widely available in high-risk populations, portable heart defibrillators could save thousands of lives a year across Canada. I think that's why we're here today.

At page 8 we carry on with PAD in Canada and Ontario. As we mentioned, to increase the survival rate from cardiac arrest, access to a defibrillator must occur as soon as possible. As we heard from Mr Vusich and we heard through the defibrillator demonstration, rapid defibrillation also requires that cardiopulmonary resuscitation, or CPR, be provided to a victim.

Rapid AED is one of the essential links in what's called the chain of survival that's adopted by the Heart and Stoke Foundation. I see on the agenda that you'll hear from the Heart and Stroke Foundation later today. That chain of survival includes recognition, calling 911, CPR, defibrillation and advanced cardiac life support. As Mr Vusich referred to with respect to the asystolic rate, you need advanced cardiac life support medication as well.

The Ministry of Health and Long-Term Care staff, I should mention, are in fact working with the Heart and Stroke Foundation and other stakeholders on a report on automatic external defibrillation, and I expect you'll hear from the Heart and Stroke Foundation in more detail later today.

Three Ontario programs in communities in Ottawa, Windsor and Toronto have implemented PAD programs targeted at select groups of individuals and public locations. These programs, I understand, will also be presented to the standing committee today or tomorrow.

It's important to think about and review what has happened in other jurisdictions with respect to public access defibrillation. I think it's important to note each one of the things that we have on page 9 and page 10. There is a major effort underway to study and determine the value of PAD in 21 US cities and metropolitan areas and six Canadian urban centres, primarily, however, Vancouver, Calgary and Edmonton in Canada. This is through the National Heart, Lung, and Blood Institute in the United States and the American Heart Association. It's a two-and-a-half-year study. It commenced last year. It's underway at the present time. We're awaiting the results of that study.

All PAD programs are based on the chain of survival that we previously mentioned. In November of 2000, then-President Clinton in the United States signed into law a bill to encourage the use of AEDs in public buildings and to limit liability for those who use them. That set the stage. Other states had already been passing into law various pieces of legislation related to public access defibrillation, but the national stage was set by President Clinton last year.

In all US states but one, AEDs are classified as medical devices and require the oversight and authorization of a physician for use. All known public access defibrillation programs are targeted—the word "targeted" is important, we believe—at using specific groups of persons or workers, such as civic workers, security personnel, public safety workers, customer service employees, as first responders.

There have been two major research studies in the last two years that have been completed in the United States. They both used targeted workers. One was with respect to American Airlines, and they trained 22,000 flight personnel to utilize portable heart defibrillators. Another was with respect to a series of casinos in the United States where they trained security staff. In that case the security staff were no more than three minutes away from all parts of those casinos they looked at, and they were able to show a high survival rate for most people who were in fact defibrillated during the study period. Most PAD programs are targeted at specific public facilities with a track record of cardiac arrest incidents, such as casinos.

Moving on to page 10, all PAD programs require that AEDs be used by individuals with proper training and certification to use such devices. US jurisdictions have made CPR training a prerequisite for AED implementation. All require a maintenance plan for ensuring availability and performance of AEDs when the public has access to the building.

As I mentioned, jurisdictions with PAD programs generally have all established legislated liability protection for responders and building owners, sometimes termed "Good Samaritan" legislation. Some jurisdictions, such as Wisconsin, require that AED owners register with local emergency medical services.

I think I can see from the other jurisdictions that, first of all, we're very early on the lifespan of the PAD programs. The small patient pools, such as the airline and casinos, that have been completed are relatively very small in terms of research: 200 or 300 patients on the airline, for instance, versus, as I mentioned, in the OPALS Study we're looking at 25,000 patients. So there's been limited research on the most effective use of PAD. Plus, it's not been ongoing for more than two years, and

generally major research such as OPALS requires at least three years of data on cardiac arrest patients.

Having said that, there is strong support for the argument that public access defibrillation and portable heart defibrillators represent an important addition to pre-hospital cardiac arrest care.

0940

It's important to note as well that there are two possible approaches to a public access defibrillation program. I mentioned the targeted responder. We went through and indicated, in effect, all the US jurisdictions basically say they must have targeted responders, whether it be flight attendants, casino security staff, civic workers and the building security staff in Queen's Park. Whatever the case may be, they are targeted first responders who are properly trained.

There is also the off-the-wall or fire-extinguisher approach that is a possibility as well. Anyone walking into a building might have access to a defibrillator. It's not difficult to use, but nonetheless one has to consider the training aspect of it.

As we read Bill 51, it provides for both training and the use of defibrillation by visitors to buildings.

Slide 11 discusses briefly some of the costs associated with PAD. It's difficult to assess the overall costs that we might experience in the province at this point in time, but we can tell you that there are some basic costs that we know would be incurred: the cost to install and maintain AEDs in each building, including recapitalization. One of these defibrillators generally costs about $5,000 or thereabouts. The expected lifespan of such a defibrillator is seven to 10 years, regardless of use. The pads that Mr Vusich showed you cost $35 a pair. They have a shelf life of about two years, regardless of use. The cost to train staff or others as responders to always be available while the public have access to the site: the cost of training for CPR and automated external defibrillation service is about $200 per person. Something to remember is that we're going to have an annual staff turnover no matter where you are. Whether it be a casino or a public building, the staff will turn over and there will have to be a continuous training program.

Training issues are briefly discussed on page 12. PAD and AED responder training programs and protocols have already been developed and adopted by the Heart and Stroke Foundation of Ontario. Once more, you will probably hear about that later today. Training programs are already being delivered by the Heart and Stroke Foundation, the Red Cross and St John Ambulance, and there are a variety of private first aid and CPR training businesses, some of which I think you will also hear from today or tomorrow.

Finally, we list for you on page 13 some of the potential risks that should be considered. Risk and liability potential related to PAD and AED use may occur in the following areas:

Of course, the maintenance and replacement of an AED; it's very important that each one of these machines is maintained properly.

That availability of replacement batteries and pads is ensured by someone who is authorized for it.

Responder training and the maintenance of skills.

The easy identification and access to equipment and trained responders.

There is the possibility of injury caused to a bystander arising from the use of an AED.

It could happen that an AED could be used on a person not in cardiac arrest.

The long delay, of course, from collapse to initiation of use of an AED is something that is a potential risk. As we've said, it's very important that cardiac defibrillation be applied to a patient within three or four minutes.

AED malfunction could occur during application.

Loss of AED by theft. You'll find that in most instances, like at O'Hare airport in Chicago—most of you will have heard of it—they have something in the vicinity of 33 portable defibrillators throughout the airport and they are all alarmed because, although they may be visible and easily accessible, theft is a potential.

A final risk might be the attempted use of an AED in the presence of DNR orders.

I might just say that in Bill 51, as we see it, there is some protection from liability as it now stands. Some jurisdictions, I should point out as well, in their Good Samaritan legislation—and you might wish to consider this—also provide the training for public access defibrillation, portable defibrillators, in those who maintain the equipment. I think those are two areas that you might wish to consider including in Bill 51.

Thank you, Mr Chairman. That concludes our presentation this morning.

The Chair: Thank you, gentlemen. I wonder, just for the purposes of Hansard, could you explain again what AED and PAD stand for?

Mr Bates: PAD is public access defibrillation; an AED is an automated external defibrillator; and DNR means "Do not resuscitate," currently in effect in many areas of Ontario.

The Chair: CPR, ECG?

Mr Bates: Cardiopulmonary resuscitation.

Mr Mike Colle (Eglinton-Lawrence): The OPALS study program: could you please outline what those letters stand for as well?

Mr Bates: Ontario Prehospital Advanced Life Support Study. It is led by Dr Stiell, who is based in Ottawa.

The Chair: And ECG, just for the record?

Mr Bates: Electrocardiogram.

The Chair: Thank you, gentlemen. At this point in the agenda, we've allocated 10 minutes per party for statements and questions. We'll begin with Mr Colle.

Mr Colle: I certainly, first of all, want to thank all members of the Legislature present today and the ministry staff present today, because I think in the province of Ontario and in this Legislature we're breaking new ground. This is the first comprehensive look at the potential to use these life-saving devices. I think you're doing a great service by presenting us with this background technical information that will be of use not only

in Ontario, as we look at this in this Legislature, but right across the country, whether it be federal or provincial. So I want to thank you for putting all that valuable information on the record which can be used to better inform other practitioners and the public and interested parties. I certainly appreciate your coming here today and the ministry allowing you to come to make this presentation.

Just before I ask a couple of questions, I think the essence of all this is that we are on the verge of a technological breakthrough in many areas of health care. I think this is one example where technology might be able to save lives and also in the long run make the delivery of emergency services and medical and hospital services much more cost efficient and much more direct.

We owe it to ourselves and to the people of Ontario to examine this type of technology and other technologies to see if it can save lives, save time and money in hospital care and at the same time support the men and women who deliver pre- or post-hospital care or emergency services, in essence deliver life-saving support. This is the essence of this legislation and why we're here today. That is really said in a very non-partisan way. As the Legislature supported Mr Gilchrist's bill earlier, the Good Samaritan legislation, I think we're legitimately examining Bill 51 as a way of really helping Ontarians who face cardiac arrest and doing it in a way that will save their lives, which is quite dramatic, as we've seen in the Woodbine Racetrack casino, where we've had up till now four or five direct saves as a result of these portable defibrillators being available and the staff being trained there. So we have direct evidence there. As you referred to in your comments, we have direct evidence of the dramatic increase in saves in the casino study in the United States. So there is a potential here, and I think the preliminary evidence and studies prompted the United States government to pass their comprehensive legislation allowing defibrillators to be available in federal buildings and also to be available in rural communities, and that's another area of great interest. The response time on average in urban communities I think is about eight to 10 minutes. Do we have any data on the response time for emergency services in rural communities?

0950

Mr Brown: In rural areas of Ontario it can range from 12 to 18 minutes on average and in remote or northern areas it can go beyond that, depending on distance.

Mr Colle: That really brings into question that 10-minute threshold, that it's critical, and the ability perhaps to provide portable heart defibrillators in some of those communities. It's literally impossible in northern Ontario and even central Ontario to get the emergency services there in that 10-minute threshold. I think that is critical in terms of looking at this potential legislation.

The other thing I want to ask: in terms of the OPALS Study, you mentioned that in some of the communities that were using or were trained in defibrillation, there was a save rate. Could you give me that again, please? Just put on the record again the improvement in the survival rate. What was that?

Mr Bates: From about 3.9% to 5.2%.

Mr Colle: Can you explain those percentages for me, please?

Mr Bates: Yes, 3.9% of the patients who suffered cardiac arrest and were attended to by emergency medical personnel, and it increased to 5.2% as a result of the efforts through the optimization of the OPALS program. A number of different actions were taken, one of which was of course redeployment of ambulances. A major part of it was the training of fire staff in the OPALS communities and their quick response. You will realize that the fire departments have a quicker response than ambulances in most communities, and the firemen who are trained in defibrillation have proven to considerably improve the survival rate. That was part of the OPALS Study.

Mr Colle: And that was with the emergency services personnel like fire—volunteer fire departments or local fire departments—and other emergency personnel having the defibrillator devices on their vehicles?

Mr Bates: That's correct, and being fully trained in the utilization of defibrillators.

Mr Colle: Right. And this would not have included the deployment or availability of defibrillators in, let's say, the local arena or the local municipal building.

Mr Bates: Generally that's right; that's correct.

Mr Colle: I guess that's the missing piece that I'm trying to include in this legislation.

I would think that the other important thing is in terms of training. Is there a need to have ongoing—you mentioned $200 to train someone in delivering defibrillation. How often do you think it would be necessary, given your experience with the OPALS program, in terms of retraining, and what intervals would be required?

Mr Vusich: If we use CPR as a reference point, the Heart and Stroke Foundation of Ontario recommends annual retraining in CPR skills for a lay rescuer. There's been no recommendation yet as far as public use of defibrillators. However, I can make reference to the paramedics in Ontario, who are recertified on an annual basis to ensure their competency is there. With lay rescuers in a PAD program, because they would not be doing this on a regular basis, certainly many programs recommend, after the initial training, a review program within six months and then perhaps on an annual basis from there.

Mrs McLeod: I have a couple of questions. I appreciate the fact that it was important to outline some potential risks as well. But I didn't understand one of the risks, and that was the fact there could be inadvertent use on somebody who doesn't need it. I thought you said the machine would not allow that to happen.

Mr Vusich: For the most part, no. The machines are very well designed and the computer software is very well developed. However, they're still machines, and you can always fool a machine. The key component to a defibrillating training program as it exists is to ensure that this is not connected to a patient who has a pulse, which implies that the rescuer must be trained and capable of assessing the patient for pulselessness. It's

especially important in light of the new changes to the CPR protocols for lay responders, what we call the general public, in that pulse checks are no longer even taught to the lay rescuer during a CPR course.

The problems that can occur from an automated external defibrillator: I made mention that it looks for two particular rhythms. One is ventricular fibrillation and one is ventricular tachycardia over 180. With ventricular fibrillation there is no pulse, so that is not a concern. But it is possible for a patient in ventricular tachycardia over 180 beats a minute to still have a pulse. That patient may or may not be conscious, but they could still be generating a circulatory flow of blood by a pulse.

The machine only reads electrical activity. It relies on the rescuer to know whether or not there's a pulse. If the rescuer does not identify the presence of a pulse and connects the defibrillator to a patient who is V-tach over 180, that machine will charge and allow the rescuer to deliver shock, which may in fact stop the heart that is currently beating. That's one potential.

Another potential is that it's important that all rescuers and all family members leave the patient, have no contact whatsoever during the analysis in the shock phase. You can fool the machine. I've actually used this in demonstrations, where I've connected the machine to myself, and by making enough contact with the pads, I've been able to fool the machine into thinking that I was in ventricular fibrillation and it actually charged. If somebody had pushed the button, I would have received a shock myself.

A third potential risk with the false shock is the use of portable radios. We train paramedics, with the portable radios that they carry, that you can receive but you cannot transmit if you're within six feet of the machine while it is analyzing. If you have a security guard or somebody else who is on the scene who actually transmits on a portable radio, it may fool the machine again into thinking there's a shockable rhythm and allow the rescuer to deliver that energy to the patient.

Mrs McLeod: You mentioned that all ambulances in Ontario are now equipped with defibrillators. Does that apply to volunteer emergency response teams as well, first response teams?

Mr Brown: Yes.

Mrs McLeod: All the volunteers.

Mr Brown: All the volunteer ambulance services are equipped as well, some first response teams have them now and more are getting them as they are prepared with their training and the community is ready to accept them.

Mrs McLeod: You would differentiate between volunteer services and first response teams if the first response team is a fire crew, for example.

Mr Brown: Volunteer ambulance services actually have an ambulance and transport a patient. The first response teams are community volunteer groups who are trained, but they would arrive at the scene and take care of the patient until an ambulance arrives, either a volunteer or paid service.

The Chair: Mr Kormos, 10 minutes.

Mr Peter Kormos (Niagara Centre): Thank you kindly. New Democrats obviously support the legislation and support the concept. I'm loath to make some of the observations that I make, because I don't want to generate sections or subsections to the legislation that make it more and more complex, that then give the government a rationale for saying, "Whoa, we'd just better back off and proceed more slowly." We heard from your data that 26% of fire departments and 1% of police departments carry AEDs in their emergency vehicles. That in itself is a shocking figure in that these are traditional and de facto first response teams and they don't even have this equipment. I think that's nuts. Again, this government, previous governments—entirely irresponsible for those teams not to have had access to that kind of equipment.

What I'm concerned about in your presentation is that there's a three-year time frame for implementation. That's pretty long in view of the fact that it seems it's not that complex a thing in the total scheme of things. I'm proposing a hierarchy in terms of how this develops, because it seems to me it should be within the first six months that every emergency response team has this equipment. So would you contemplate a hierarchy, that first you start with fire departments, full-time and volunteer, and police departments, and then you move on perhaps to provincially licensed workers like security guards? You mentioned the problem of a security guard with a radio transmitter. Why shouldn't the province require training in this particular technique for provincially licensed people like security guards? Wouldn't that be an appropriate thing to fit into a hierarchy that accommodates the time frame?

1000

Mr Bates: That's a rational approach to it. If one goes into the implementation phase, and I think a lot of discussion would have to take place before that, that is a rational approach. I only say that the fire departments are local municipal levels and, of course, you know the police departments can be municipal or provincial.

There is a buy-in in some municipalities for the service and others have not yet decided to do that. That's something that would have to be undertaken, and I think that's what you're referring to, as part of an implementation strategy.

Mr Kormos: OK. Obviously my debate isn't with you, but it's not a matter of buying in, friend; it's a matter of the province saying, "There will be this equipment in every police car and every fire department." To make that a reality the province has to accept responsibility for the funding of that, because these police and fire departments are under the gun in terms of the resources that they have to work with.

What about the need for regulations to dictate the particular models of equipment? As a number of manufacturers indicated, is it necessary for the legislation to somehow define what constitutes—it defines a defibrillator in the legislation.

Mr Bates: I think if we explain, and Mr Brown can, the standards we utilize with respect to ambulance

services—I think that's what you're referring to—we have very thorough standards for ambulance services and yet it allows some discretion at the local level.

Mr Brown: Health Canada is responsible for the licensing of medical devices, and these devices are part of that schedule licensed by Health Canada. They have very strict rules and specifications that have to be met. Any of the ones that are being brought into Canada for sale as a public access defibrillator, once they're licensed by Health Canada, are capable of meeting the requirements.

Mr Kormos: Mrs McLeod started talking—what happens if you give this shock to a person who doesn't fit within the frame of somebody who should be getting it? What are the risks?

Mr Vusich: The worst-case scenario is that you will actually stop the heart from beating. It may not go that far. It may simply harm the patient and may cause some electrical dysrhythmias of the heart, but the worst-case scenario is that you can stop the beating heart.

Mr Brown: The important thing here is the training. The box by itself does not provide the whole package. The person who's going to use it needs to understand a little bit about how they're going to use it and why, and rule out those instances when there might be a contra-indication.

Mr Kormos: Precisely, and the research in their material to us referred to that Seattle grade 6 experiment where it showed the kids in grade 6 with a modest, but very short time frame, were darned close, in terms of their response, to a fully trained professional.

Has the ministry not been asked to prepare a structure for a training program? What I'm saying is, I appreciate these comments here, but it seems to me that the government's going to support the bill and it seems to me therefore that the minister would have asked the staff in the ministry to have prepared a much more cohesive program in anticipation of the bill. You expect the bill to be passed, don't you, Mr Colle?

Mr Colle: I hope so.

Mr Kormos: You see, what bothers me is that this is fine in and of itself, and I know you can say, "The bill hasn't passed yet, so it would be premature to do that." But it seems to me that hasn't stopped various ministries in the past over the last six years from anticipating the success of the bill.

I am just wondering why there isn't a more comprehensive plan for implementing this over the three-year plan, for creating that hierarchy and for funding it—because, of course, the ministry is anticipating paying for this equipment, isn't it?

Mr Bates: We can tell you, and as I mentioned previously, the ministry's policy is to do careful research, and there must be convincing studies done prior to this. Let me read to you some of it. You mentioned some of this research. If I could just read to you a couple of points here, one of which is with respect to the airline study that we referred to and which I think you've probably got. This is from the New England Journal of Medicine.

"Our study was not designed to provide proof that public access to defibrillation improves survival in the community, although it is our opinion that this benefit will be demonstrated in future trials. We await the results of the Public Access Defibrillation Trial, sponsored by the National Institutes of Health, which should provide insight into the efficacy of programs providing public access to defibrillation. Clearly, an organized infrastructure for the support of any defibrillator program is necessary to maximize the benefit of devices."

That study they're talking about is the one that I mentioned before that's ongoing at this point in time. I can also mention to you things like—this is from the study of a casino, again in the New England Journal of Medicine:

"These results have implications for the Public Access Defibrillation Study funded by the National Heart, Lung, and Blood Institute, a prospective, randomized study of rapid defibrillation by non-medical providers. Survival rates in study sites where collapse-to-defibrillation intervals are not consistently in the range of three to four minutes may not be much higher than those with the best traditional emergency-medical-services systems; still, the results from these sites may be an improvement over those of emergency-medical-services systems with prolonged response times. Casinos also have an unusually high density of cardiac arrest in their public areas, in comparison with other public places."

The announcement by the National Institutes of Health of their study says:

"Study Launched to Test Public Access Defibrillation

"Can community volunteers be as effectively trained as emergency medical personnel in the use of automatic external defibrillators, devices that shock a stopped heart back into beating?

"To answer this question," and it hasn't been answered yet, "the National Heart, Lung, and Blood Institute, in collaboration with the American Heart Association, has funded a large multi-centre study to test the life-saving potential and the cost-effectiveness of public access defibrillation."

Mr Kormos: Fair enough. In the total scheme of things, if I were to have a cardiac arrest, a nurse and a doctor would be ideal, and then I'd settle for somebody lesser trained. He's not here, but ultimately if push came to shove, I'd even want Mr Gilchrist to administer the thing—you know, if push came to shove.

Interjection.

Mr Kormos: As I say, if that's the final—no more options left. But we're still not talking about how the Ministry of Health is responding to this bill, anticipating its passage and then preparing for that three-year time frame. Maybe I'm just off in left field.

Mr Bates: I think first of all we're here to help with deliberations, and I don't think we here, as civil servants, are anticipating passage of a bill. I think you can appreciate that. As such, we're providing you the best information that we have available. You will hear, I say again, from the Heart and Stroke Foundation this afternoon, and we are participants with that particular foundation work-

ing on this. I think they will emphasize many of the same things that we said to you here today. I think you are the people who are charged with deliberating whether or not this is a good thing and whether this bill should pass. At that point in time, and at the point in time at which the research is there, definitive, that is the point in time at which we will start doing exactly what you have said.

Mr Kormos: Thank you kindly.

The Chair: I wish to go 10 minutes.

Mrs Molinari: Thank you very much for your presentation. It certainly helped me gain a better understanding of the actual apparatus that is referred to in the bill, how it's to be used, the safety, and certainly some risks that you've highlighted in your presentation.

One question: during the demonstration, I noted that after three shocks there is a period of time that the defibrillator gives for the person administering it to check for all of the vital signs once again, and then you demonstrated a fourth shock to the victim. What is the maximum number of times that can occur? Could it go for another three times, where this patient now has received six shocks?

1010

Mr Vusich: It depends on the protocol that is developed and on the machine and what it is actually programmed to do, and it varies. The American Heart Association has their recommendations and they've been adopted by the Heart and Stroke Foundation of Ontario. The protocol that Ontario paramedics have used for a number of years is that you deliver a maximum of three shocks consecutively, and if you delivered three consecutively, you must stop for a minute of CPR, and the most shocks that you deliver to a patient in a pre-hospital setting without a return of pulse is nine.

Some machines perhaps may be programmed to allow no more than nine shocks; other machines don't. They would in fact continue to allow the rescuer to deliver shocks as long as the patient was found to be in one of those two shockable rhythms.

Mrs Molinari: One of the things that comes to my mind when I'm listening to the presentation, the demonstration and thinking about the bill—and Mr Kormos talked about how he as a very last resort would even have Steve Gilchrist administer it—as I'm trying to put myself in a position that, were I to be in that type of need and someone had access to the defibrillator and were able to use it, my biggest concern would be, is it being used if I don't really need it? Now you're thinking, would I rather be there and wait for an ambulance or would I rather someone used it if they're not trained and I really need it? So my assurance would be that those who are going to be administering it have all the necessary qualifications to be able to administer it and not to have that type of risk. As you said, the machine can be fooled into thinking that there's no pulse. You've also indicated that those with CPR training are not trained to check for a pulse.

So the three main things, that they have to be unconscious, not breathing and not have a pulse, are things the person administering it would need to make sure are in fact the case before even attempting to use the defibrillator. The training in individuals involved in that: I also appreciate the comments made of the necessity of the targeted responders and people in various places that would be specific to being able to use defibrillators.

But if it's in public access areas in shopping malls or wherever and available to anyone—I guess like the fire, what they'd have to do is break the glass to get the fire alarm going—what type of encasement, I guess, would there be to not have it that accessible where anyone could just feel, "Gee, it's available. Let me see if I can save this person"?

Mr Brown: The vast majority of programs we've looked at are what are referred to as targeted programs, and with a few exceptions the defibrillators themselves, the AEDs, are actually kept out of sight. Security guards, office staff, retail workers—they're kept in a position where the people who are trained to use them have ready access to them and can get to them quickly and get them to a victim quickly. The ones that are hanging on the walls, such as the example that was used earlier, the Chicago O'Hare airport, every one of those devices is alarmed. So if somebody pulls it off the wall, the alarms start to go off and trained responders from within the airport staff descend on the location of that alarm. Any one of the alarm sites or of the defibrillators in O'Hare airport is only about 30 seconds from a responder. In the areas where they have them hanging on the wall, it requires targeted responders to be close by to use them if somebody grabs them off the wall or to come and assist a trained responder who may know how to use one and takes it off the wall for its use. Generally speaking, most of them are out of sight of the general public but readily accessible.

Mrs Molinari: So any establishment, then, would have to ensure that a targeted responder would be on staff at any one given time. They'd have to have several people who would be called as targeted responders and as persons who would be able to use it, and it would be incumbent upon them to have someone on staff all the time to be able to respond to that.

Going to some of the costs associated with this, the expected lifespan of an AED is seven to 10 years regardless of use. I suppose that those used more would need to be replaced more often. Is that a fair assumption, that if it's one that's used on an ongoing basis, several times, then it would need to be replaced more frequently?

Mr Brown: The technology right now is so new that this is an estimate based on previous models of defibrillators. It would not appear at this point in time that numbers of usages would affect the actual device. It definitely will affect the battery, and the battery would have to be replaced after a certain number of usages. But as far as the device itself is concerned—and you may hear more from other presenters who will be presenting their own specific devices later today or tomorrow.

Mrs Molinari: That leads to my next question, then. Someone would need to ensure that all of this would take place, that if a battery needs to be replaced—especially if

it's something that is not used. So even though it's not used, it's there and you forget about it. But if it's used on an ongoing basis, there's more of an impetus to make sure it's working. But when it's not used for a designated period of time, then it would be incumbent upon the establishment that has one to make sure that someone is responsible for checking it on an ongoing basis. That would be a requirement as well.

The defibrillator pads, you indicated, are disposable after one use, but after two years regardless of use. So they're disposed of after one use, but after two years, regardless of use, then you would need to have the pads replaced. Correct?

Mr Brown: That's correct. The pads themselves have self-adhesive edges to allow them to stick to the patient's chest, and the adhesive dries out after approximately two years, and the conductivity or the ability of the shock to travel through the pad is reduced or negated. That's why the shelf life. They probably last beyond that, but to be absolutely sure, you don't want to have them go much beyond that.

Mrs Molinari: Do I still have a few more minutes?

The Chair: Half a minute.

Mrs Molinari: I was interested to hear your comments about the first response teams, the volunteer response teams that are available, other than St John's Ambulance. I've run a soccer tournament and we have hired or taken on the services of Priority One, I think that was the name of the response team, who are trained in emergency response. Would they also be people who would carry defibrillators and be able to administer the service needed to a victim?

Mr Brown: The organization you refer to is a private company that provides first aid response services to events and public places, and certainly within this program they would be able to carry a defibrillator such as this or something more sophisticated. Today that framework would normally happen with them being targeted responders with some kind of medical oversight or training from one of the recognized public access defibrillation training organizations that are out there. So they could do it.

Mrs Molinari: My concern would be that they could purchase a defibrillator but that they wouldn't necessarily have to be trained to use it, that they'd purchase it and have it. I'm trying to get into the whole thing that if you buy it, you have to be trained to use it, especially organizations like this one.

Mr Brown: Most of the organizations, in fact all the organizations we're aware of, that sell these devices also include an educational package with them. You'll be hearing more from some of these people today and tomorrow, and I expect them to be outlining what they're offering as part of the package that comes with the device. We would certainly expect that these devices should only be sold if there's some assurance of the training.

Mrs Molinari: That's what I'm saying, that it would be a requirement, the training, not just to offer the possibility of training in the service but to make it a requirement in order to obtain one and actually be able to use one.

Mr Brown: One of the issues in the United States right now which is being considered in a number of states is the fact that with a doctor's prescription you can walk into a retail outlet and purchase one of these devices and there's no attachment to the training. This concerns us considerably.

The Chair: Thank you, Mr Brown. I think we've wrapped up, Mrs Molinari. I wish to thank the staff from the ministry on behalf of the committee. At this stage, our committee is in a position to receive delegations. Each delegation has a 20-minute time period.

1020

PHILIPS MEDICAL SYSTEMS

The Chair: Our first delegation is Philips Medical Systems. I would ask representatives from Philips Medical Systems if they wish to have a seat at the witness table. Good morning. I would ask you, if you wish, to give us your name and position, and then we'll launch into your time allocation.

Ms Yvette Dumont: My name is Yvette Dumont, and I'm with Philips Medical Systems.

Dr Noel Kerin: Good morning, Mr Chair. I'm Dr Noel Kerin. I'm an independent physician with no financial interests in any of the companies that sell these devices.

The Chair: Welcome. If you wish to proceed.

Ms Dumont: Good morning, everybody. As I stated, I'm Yvette Dumont. I sell medical equipment for Philips Medical Systems, a portion of which was recently acquired through Agilent Technologies. I'm here to make an offer to you that will be the best offer of my career, and it's an offer that you can't refuse. I'm not going to say a word about Philips products, if you promise not to tell my manager. Unfortunately, she is here today. But in all seriousness, none of us are here for our Philips sales pitch; we're here to talk about doing the right thing for the people of Ontario. So today I'd like to thank you for the opportunity to discuss saving lives.

I have brought along a brief video about early defibrillation; it captures the experiences of health professionals, cardiac patients and community leaders such as yourselves. We have edited it today to fit the time frame. Please note that it is an American video. It is our hope that someday we'll have a Canadian version to share with the people of Ontario. What you're about to see in here regards an opportunity we have to save Ontarians, and it speaks far more clearly than I could. I have also asked Dr Kerin to make a few comments after the video, and then we'll be glad to entertain questions.

Audio-visual presentation.

1030

The Chair: Thank you. If you wish to continue your presentation, we have until a quarter to 11. You may wish to entertain questions as well.

Dr Kerin: As a community physician for many years, I was at the other end of this tragedy as it played out in our communities in the Port Hope area. Having to walk out to tell a family that their father was needlessly dead is something that is painful beyond belief for everybody involved. So very early on in my thinking, I felt that the first link in the chain of survival and sudden death—which has nothing to do with cardiac patients; it can happen, as the video says, to anybody—is that you have an ability to do something at the time, and that simply means you have to shock the cardiac muscle. If you don't do that within five minutes, the survival rate drops off so dramatically that it's probably a waste of time. With the present system, five out of every 100 cardiac arrests survive—only five out of 100.

This technique is so simple that it could be taught to grade 6er. The New England Journal of Medicine has done a very detailed study of this and shows quite eloquently that grade 6ers can learn the technique. It actually trains you to go through resuscitation and defibrillation. It walks you through the system.

In my more recent experience at Ontario Power Generation, we instituted an early intervention system, a rescue system, and installed, I believe, about 72 defibrillators throughout the province. There were some skeptics at the time who felt this was probably overkill. Well, the overkill was put to rest very suddenly one afternoon as one of the senior engineers at the Bruce nuclear facility was walking out to go home. He didn't feel particularly well and was walking by the guardhouse and collapsed. They had an AED at the guardhouse, and he was resuscitated. That will be published in the journals—just absolutely lay people taking care of themselves. So this community of employees feels this is the right thing for them.

There are other stories I might tell you, but suffice it to say that I congratulate you on having taken on this issue. It's not particularly something that's going to win elections, but it's going to save lives.

The Chair: Thank you, Dr Kerin. Any further comments, Ms Dumont?

Ms Dumont: None at this time.

The Chair: I will now entertain questions or comments. We'll start with the Liberals. I think we have about two and a half minutes for each party.

Mr Colle: Just briefly, one interesting question that my colleague, MPP Molinari, asked is the fear of using these machines when the patient doesn't need them or could be harmed. How great is the incidence or what are the chances of doing this? In other words, I'm asking how smart is the machine and what are the chances that the use of this machine, the technology, the defibrillator, in good faith, could possibly harm the patient? If you've got any information or background, I think that is something that would be really helpful to the committee.

Ms Dumont: There's an ongoing collection of information, and there are minimum requirements for accuracy, through the American Heart Association, for these devices to pick up certain types of heart arrhythmia to be able to shock, and not to shock rhythms that are not clinically required to be treated. Also, as a manufacturer, we've always encouraged our customers to share information. We publish data on out-of-hospital uses of our equipment, even with lay people, and we've shown 100% sensitivity and specificity. So we are able to completely recognize rhythms that require shocking and those that don't require shocking, which could even be someone who has a pulse.

The new CPR guidelines for non-medically-trained people state that if you have a defibrillator on site, and you establish that someone is unconscious, not breathing and there are no signs of life, they're actually recommending that you not worry about checking for a pulse. If you know there's a defibrillator on the scene, the goal is to apply the defibrillator and let the defibrillator make the decision whether to shock or not shock.

Mr Colle: So in many ways the machine might even help in terms of delivering that first aid, because it's sort of an on-hand technical aid to that first responder.

Ms Dumont: The feedback we've received from non-traditional responders is that it's like a coach. On the scientific side, it's like there are three cardiologists in there making those decisions for the layperson. They need to know to put it on the victim and turn it on.

Mr Colle: That's very helpful.

Mrs McLeod: How crucial have you found the CPR piece to be? I'd be interested in how much training—can I refer to it as Hydro? Did you say OPG or Hydro? I'm trying to place the timing when you installed those. Did you train the employees? When you said lay people were using it, were they actually lay people who had some training, either in the use of the defibrillator or in CPR or both? I guess I'm trying to make the linkage: if the defibrillator is pretty easy for anybody to pick up and use, and the CPR piece is critical, are people at least being trained in the CPR that goes with it?

1040

Dr Kerin: The training for the defibrillators is actually quite simple. They have shown that as low as grade 3s can activate the system and work it successfully. But grade 6ers can respond and achieve the targets and time in the same range as advanced, trained paramedics. So the training is very simple for the AEDs and, of course, anywhere you have them, you do expect there's a certain level of competency. But basically, it's opening the machine and putting two pads on the chest, and it walks you through a crisis. Of course, in a crisis you're going to freeze, so it actually prompts you to do the steps in a very simple fashion.

Mrs McLeod: As we heard the machine, it said, "Administer CPR." If you weren't trained in CPR, how crucial is that in terms of that missing piece?

Ms Dumont: Can I respond to that? There is a requirement that people have CPR training before they go on to be trained in using a defibrillator. Part of that is that the CPR course also encompasses signs and symptoms of a heart attack, which is only one portion of the population that could succumb to sudden cardiac arrest. So if some-

one is ignoring chest pain and treating it as indigestion, they are at risk of sudden cardiac death, but that's only about one twentieth of the population.

The CPR foundation is to help institute accessing 911, knowing to call for help, anticipating there's a need to respond, and also how to approach somebody to establish if they're unconscious and not breathing—those are under the indications for use of a defibrillator. So that's why there is that requirement.

The Chair: I'll go to Mr Kormos.

Mr Kormos: I just want to make sure: is the state of fibrillation and cardiac arrest what we generically call heart attacks?

Dr Kerin: No. It's cardiac arrest. A heart attack is only one cause of cardiac arrest. As the lady in the video demonstrated, she was 33 years old and just dropped dead. The kid on the baseball diamond hit in the chest by a baseball could actually go into ventricular fibrillation. So heart disease is only one cause of sudden death.

Mr Kormos: OK, a heart attack is included but is only one segment of the whole broad class.

Dr Kerin: Yes.

Mr Kormos: OK, that's important for me.

I was surprised and shocked to learn earlier today that only 26% of fire departments and only 1% of police departments have this type of equipment in their emergency response vehicles. My goodness, here we are talking about putting these in public places for the public to access and our emergency response teams don't even have them yet. Haven't you been visiting those jurisdictions and those communities with this video tape? What's going on?

Ms Dumont: I have. I try to do my sales job very well, I really do.

Mr Kormos: I have no quarrel with that.

Ms Dumont: This video is very new—that's one thing—but part of it is that the fire departments that do not have defibrillators are mostly volunteer and rural services. So there's an issue of fundraising. There's also an issue of who is going to manage the program and take charge of it. Thirdly, in a rural situation, how beneficial is it to call in your volunteer service, who leave their homes, go to the fire station and then bring the defibrillator? There's a big lag time. In those situations, perhaps it would be more applicable to go with having them in the community centre, having more community people take charge of the program or even their police service. Police are seriously looking at this as an extension of serving and protecting. It's a matter of time and education and putting in the resources to maintain the officers with the equipment and tools.

Mr Kormos: So a good first step would be to make sure these police departments have the resources to purchase this equipment and invest in the training. If we were serious, we'd make sure that happened first, wouldn't we?

Ms Dumont: You will see that in community programs it's all-encompassing. They'll include the local police, the municipal centres and the public places all in one. It's like a moving target. Where can we predict where the next sudden cardiac arrest will occur? If we can cover off where we work and where we play, we can really make a difference. As you can see from some of those statistics, some of the cities that were cited had small populations.

Mr Kormos: I come from a small—from Welland, which is a wonderful community but it's not Toronto.

Ms Dumont: That's right.

The Chair: Ms Molinari?

Mrs Molinari: In your presentation you ended with the comment that this is going to save lives, and I think it's safe to say that I can speak for everyone in this room that any legislation that would do that would be supported by all of us if it were only that simple. We've heard a presentation from the Ministry of Health this morning, and I'm anxious to hear the rest of the presentations throughout today and tomorrow to see some of the similarities.

One of the things I learned through reading the material was that there are three important things before a defibrillator is used: that the patient is unconscious, not breathing and has no pulse. Yet you have indicated it's not necessary to check for a pulse, that the machine will actually do that for you. I'd like you to comment a little more on that. My biggest concerns are the risks in using it when a patient doesn't need it and that it could actually cause the heart to stop.

Dr Kerin: I think a very fair comment is that trying to make a decision about whether or not to intervene with an unconscious patient is always a dramatic event. Finding a pulse is difficult even for qualified personnel, so they're tending to drop that requirement in the new guidelines. If a person is unconscious and not breathing, you apply the pads, and it will walk you through the steps you're required to do to resuscitate that person. It actually is a coach for CPR.

I think Mrs McLeod spoke to this earlier on when she asked, "What value is CPR in the whole chain of events here?" It actually is small. The only thing that's useful in a critical condition where your heart has stopped beating is a defibrillator. Nothing else works. CPR actually just extends the time to death by a couple of minutes. If you don't get to shock within five minutes, the person is effectively dead. This is why we say that only five out of 100 survive, and it's a totally unacceptable death rate from a very preventable incident.

Ms Dumont: I guess your concern is if you were to put it on someone who had a pulse. Then the unit would advise of no shock. It would say, "Check airway; check breathing; begin CPR." So the worst-case scenario is that you might end up doing CPR on someone who maybe doesn't appreciate the fact you're doing CPR, because they have a pulse but it may be a very weak pulse and they're going to end up having cardiac arrest. The goal is to give people tools so they will intervene and feel confident.

The Chair: That wraps up our time.

Mrs Molinari: Just one last question; I think it's important. There isn't any danger in administering CPR, but there is a danger in using a defibrillator when you can't use it. That's what I—

Dr Kerin: The defibrillator will not discharge until it recognizes the death rhythm, which is ventricular tachycardia or fibrillation.

Mrs Molinari: And it can't be fooled?

Dr Kerin: It can't. The data to date is 100% accuracy in interpreting and responding.

The Chair: Thank you very much for that presentation, Dr Kerin and Ms Dumont.

1050

LAERDAL MEDICAL CANADA

The Chair: The next presenter on our agenda is Laerdal Medical Canada. Would the presenter approach the witness table and introduce yourself.

Mr Larry Beyak: My name is Larry Beyak. I'm with Laerdal Medical Canada. My presentation today is more a reading presentation. There is no video and there are no action shots, so I ask you to bear with me.

Honourable members, I'd like to thank you for the opportunity to speak on Bill 51, the Portable Heart Defibrillator Act. I'm here today not only to represent Laerdal Medical Canada but as well to fulfill my obligation as a citizen in the honourable Tony Clement's riding.

For the past 12 years I have worked for Laerdal Medical Canada. Laerdal is an internationally recognized and respected member of the medical community. Laerdal introduced the world to cardiopulmonary resuscitation, or CPR, through the medical community with the introduction of the Resusci-Anne CPR manikin in 1960. Laerdal specializes in the manufacture and distribution of resuscitation products. These products are used primarily in emergency, life-threatening situations. These devices include portable defibrillators, which Bill 51 is intended for.

I am a 39-year-old, college-educated professional who began my health-care-based career in 1983 as a paramedic in Toronto. Over the next eight years, I would tend to patients in immediate need of help. In 1986, I was one of the initial paramedics in Ontario allowed to perform defibrillation therapies on patients in cardiac arrest.

It is with great honour that I speak before this committee. Today I could speak to you as a businessman interested in opening markets. I could speak to you as a scientist providing statistical information for or against the implementation of portable defibrillators. Instead, I have chosen to allow my words to reflect as a citizen, appreciative of the work of agencies such as the Heart and Stroke Foundation of Canada which provide us guidance through the volumes of research and international briefings they attend. I speak for the emergency care providers who strive to retrieve life so quickly extinguished, knowing that intervention would have helped. I hope to speak for those families who have lost loved ones suddenly, without the benefit of saying goodbye one last time.

Today, you will hear about the chain of survival, the important eight minutes, new technologies and enough statistical information to bring the Stanley Cup back to Toronto on its own. I would like to take 10 to 20 minutes of your time, though, for the humanity side of this debate. I will draw on my 20 years of clinical and business experience in emergency medical care to discuss with you the virtues of Bill 51, the Portable Heart Defibrillator Act.

In the fall of 2000, Mr Michael Colle contacted me. Mr Colle expressed an interest in public-access defibrillation and portable defibrillators and asked me to meet with him to consult on these issues. Soon a small working group was struck. Soon afterward, legislation was developed and this group was again convened to review the legislation. I must admit that there was some initial skepticism when I was first consulted, but I am a firm believer in the commitment and dedication Mr Colle has exemplified in carrying this bill forward.

Currently, Ontario's health care system is under critical review, with an emphasis on hospital care. One major area is being overlooked in this review. This is the science of pre-hospital care medicine prior to hospital arrival, which is the traditional patient entrance into the Ontario health care system.

What is clearly not understood is the impact that emergency response and field treatment of patients has made in decreasing dynamically patient mortality and morbidity. Since the 1980s, a critical emphasis has been taken in the training of emergency medical personnel. Traditionally, these have been fire and ambulance personnel. This has resulted in a decrease in patient admissions, and outcomes have dramatically improved, except in one area: sudden cardiac arrest. The main reason for this is that in many cases traditional response groups, fire and ambulance personnel, are unable to reach sudden cardiac arrest victims with sufficient time to resuscitate.

The implementation of defibrillators in 1996 to all Ontario ambulances and the acquisition of defibrillators by some Ontario fire departments has seen patient survival rates increase from 2% to roughly 10%. While you may consider a fivefold increase in survival extremely impressive, consider that nine out of 10 patients will not go home, consider that nine out of 10 will not go back to work or organized activities and consider that nine out of 10 will not pay taxes.

Can this be changed? That is one of the questions I will attempt to answer. As you may be aware, a few years ago defibrillators were implemented in Casino Windsor. The security staff teamed with the medical staff to coordinate a deployment plan under the medical auspices of Dr Curtis Fedourk. Their deployments were so successful that eight of their first nine responses saved patients. Their immediate response with a defibrillator is the only reason that these people survived. Recent statistics show that this casino alone has a survival rate of 65% to 70%. In 1999, the Bruce nuclear generating station in Tiverton,

Ontario, implemented defibrillators on-site. Their location is roughly 20 minutes away from the response of fire or ambulance personnel. In early 2001 they used their defibrillator on a member of Atomic Energy Canada, who was vital signs absent, successfully. This patient survived after being defibrillated and regained consciousness soon after arrival at the hospital. The Bruce nuclear station enjoys a 50% survival rate.

In 2000, updated international guidelines for cardiopulmonary resuscitation and emergency medical care were brought forward. These guidelines are updated every four years. In 2000, it was stated, and I quote from this textbook, which is the updated guidelines textbook internationally, "The relative value of early defibrillation in reducing the interval between adult sudden cardiac arrest and first defibrillatory shock by one to two minutes does more to improve the probability of survival for an individual patient than all the medications, airway interventions and newly designed defibrillator waveforms combined."

In answer to my above question, yes, with wider implementation of defibrillators many more lives can be saved. This is an internationally viewed opinion.

Another question you may ask is if this legislation may improve the overall long-term health of sudden cardiac arrest victims. The short answer is yes. Study after study has proven not only that quick response with a defibrillator will save the victim's life, but also that the promptness with which this treatment is initiated will affect the overall health outcome of the patient in the long term. All survivors return to the same lifestyle they enjoyed before this event. That is the definition of a save.

Advancements in technology, the co-operation of the Canadian and provincial colleges of physicians and surgeons, dedicated efforts of agencies such as the Heart and Stroke Foundation of Canada and the American Heart Association, professional medical responders and co-operation between manufacturers have allowed for the research and development of current easy-to-use defibrillators. The promptness which government agencies such as the Food and Drug Administration and Health Canada have accorded these devices has allowed for wider implementation since 1992.

It is my professional opinion that the legislation as laid out in Bill 51 will only enhance efforts of the above-said groups while concurrently highly impacting citizens suffering cardiac arrest. These survivors will go back to their previous level of activity and in the long term will maintain or improve their long-term health.

I would like now to address what I believe is a common misunderstanding. Sudden cardiac arrest and heart attacks are not the same medical event or etiology. Although patients suffering from myocardial infarction or heart attacks may enter into a cardiac arrest, sudden cardiac arrest victims are seldom succumbing to heart attacks. Heart attack events are accompanied by secondary underlying disease processes. Sudden cardiac arrest in many cases may have no underlying coronary disease. Sudden cardiac arrest is experienced at any age, under any circumstance, in otherwise healthy individuals. The common denominator to the survivability of a patient is the use of a defibrillator; that is, the life-threatening heart activity that 80% of sudden cardiac arrest patients are victims of is only reversible with the use of a defibrillator. The only treatment is defibrillation.

The use of a defibrillator is so vital that in 1992 the American Heart Association published a statement recommending all first responders be equipped with a defibrillator. In 2000, defibrillation is elevated as the preeminent therapeutic intervention. I quote: "The use of defibrillation now transcends both advanced cardiac life support and basic cardiac life support." To also quote, "Remove barriers. Constructive efforts to remove state and local administrative regulatory barriers to the use of AEDs by lay responders are strongly encouraged."

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It is our, as well as your, job to remove barriers that negatively affect our cities and communities. It is the small steps we take that will result in allowing humanity to continue to create through technology and science. We are now at a place where science and technology will allow us to understand and appreciate what we have accomplished.

It is never easy to address the financial impact of such a program. While this bill will not generate global funds, should that automatically mean the demise of such legislation? The program will cost the taxpayers of Ontario. You can raise figures of between $3,000 and $5,000 per device. Cost breakdowns per life saved can be and have been calculated. As a taxpayer, I feel that this is a short-term financial risk. I conclude this for a few reasons that I will share with you.

The most outstanding is that public access defibrillation is becoming an expectation or is becoming a standard of care. International consensus on the importance of early defibrillation treatment, market manoeuvering by large corporate manufacturers, local emphasis and corporate-initiated defibrillation programs will make this a priority standard in the near future. This could leave provinces and municipalities liable.

The copious amounts of research and the educated public point directly to the need for this intervention over traditional CPR. Our current health care system will demand the need for practical interventions in place of more skilled practitioners that are disappearing from our system for various reasons, including retirement.

Finally, pre-hospital intervention simply saves lives and costs society much less than acute and long-term care and rehabilitation of people.

It is doubtful that this concept will go away. We are all aware of the dramatic impact on safety and life that programs such as fire prevention have had on our communities. That program, like this, is not designed to generate funds but has saved countless lives and millions, if not billions, of dollars simply by making citizens aware and educated. I feel that the Portable Heart Defibrillator Act will have the same impact in time.

The next obstacle could be implementation of such a program. I believe I have the answer for that already. It is in fact somewhat written into the body of this act. Emergency officials are trained, educated professionals with unique ties to their city and community. Together they have formed alliances with physicians, professional agencies, political authorities and community organizations. These alliances will help provide funding, training, ongoing medical authority and all other roles and responsibilities required in promoting, implementing and maintaining defibrillation programs. Ontario ministry officials in the Solicitor General and emergency health services branches have the ability to develop and control both mainstream and training programs locally. Therefore, we have the box ready to go; what we need are the parts to make the vehicle run.

So where does that leave us? Have I touched on all issues? On the contrary, I've only scratched the surface of this debate. However, I have been able to carry your attention for this period of time. This is significant. Why is that? Please hold your breath and think for a minute. In the time I've taken, any one of us could have experienced a cardiac arrest. Think to yourself in this span of time all of the events that would have to take place in downtown Toronto, at Queen's Park, that would initiate a prompt, four- to five-minute emergency response to get to your side with a defibrillator to resuscitate you. Think of the time that could be saved if somebody simply ran to the corridor, grabbed the defibrillator and resuscitated you, then put into place the chain of events required to get you a proper response. That is what this bill is all about. It could happen to you, and nobody is prepared. I ask that you consider how this legislation will affect you, those you sit beside and, all importantly, those you represent. Thank you for your time.

The Chair: Thank you, Mr Beyak. We have about a minute and a half for each party.

Mr Colle: Thank you, Larry, for your help and kind words. I guess the thing is that we are lay people here and we represent a lot of people in Ontario who don't have the technical expertise.

Just to re-emphasize again, if a person has cardiac arrest, essentially the only way you can save that person is with defibrillation.

Mr Beyak: Yes.

Mr Colle: We're talking basically about a very definite differential between that and heart attacks, right?

Mr Beyak: We're talking about a very set set of circumstances in which the only care is defibrillation.

Mr Colle: Right, and if the other set of circumstances are the ones that are apparent in the patient, the machine will not activate.

Mr Beyak: If the machine is deployed properly, the machine will not activate, correct.

Mr Colle: So that's the difference, I think. We lay people have to try to understand this is about cardiac arrest, and it's a particular—

Mr Beyak: I think the easiest way to differentiate is that the person you are dealing with is cold and your idea is to make them either colder or warmer. If they're not cold, then you shouldn't be applying the device.

Mr Kormos: Laerdal is the manufacturer of this equipment?

Mr Beyak: Yes.

Mr Kormos: How many manufacturers are there in Ontario, Canada?

Mr Beyak: There are roughly three manufacturers.

Mr Kormos: Then there are other sources beyond Canada?

Mr Beyak: No, there are no manufacturers in Canada.

Mr Kormos: But you said you were a manufacturer.

Mr Beyak: My company is a manufacturer. We're a Norwegian company. All corporately based manufacturers build outside of Canada.

Mr Kormos: I'm still confused. You heard my shock and dismay at only 1% of police departments and 26% of fire departments having these, and then somebody a little while ago said, "No, in the total scheme of things…." They left the impression that you're better off putting them into the community rather than in the hands of the emergency response teams. My advice so far—I'm about to change my mind maybe—is that I want these guys, for instance, fully stocked before we start moving along. Where do you stand on that sort of tension between those two positions?

Mr Beyak: It's not really a tension of two positions. The concept is that time is of the essence, period, and whoever gets there with whatever device—and I'm sure that my paramedic friends would agree that whoever gets there with a defibrillator, we're not going to stand there and argue about who does it; just do it. That's the concept: do it and get this thing going, save this patient's life so that these gentlemen can come in and carry on, because if we wait, then these gentlemen will have nothing to do. I've seen it time and time.

Mr Marcel Beaubien (Lambton-Kent-Middlesex): You mentioned that if the machine is deployed properly the machine will not activate. Is that correct?

Mr Beyak: If it's deployed properly, yes.

Mr Beaubien: The bill, under "Defibrillators to be installed and made available," says in section 2, "Portable defibrillators shall be installed in a readily accessible and highly visible place in the following locations…." If I go to paragraph 3 it says, "Privately owned buildings to which the public has general access." That means anybody, trained or untrained, probably could use the equipment.

Mr Beyak: I have to interject there. We do have medical guidelines and we have international and national guidelines that stipulate that people must be trained before these devices are initiated into the public. That has to be understood. It's not a matter of a company going out to an apartment building and dropping off a defibrillator and saying, "Good luck." You will hear over the next two days that there is the framework in place for training agencies on a national and provincial basis that will make sure that people are trained and that they do have medical authority to implement that.

Mr Beaubien: I'm glad that you've clarified that, but that's not what the bill says. The bill says, "Privately owned buildings to which the public has general access." It doesn't mention trained people or qualified people; it just mentions where these—

Mr Beyak: Defibrillation is still a medically delegated act in the province of Ontario. For somebody to walk around with a defibrillator is against the law. In an emergency situation, if a defibrillator is available it becomes a first-aid act and it can be deployed. An emergency situation would be a life-threatening situation.

The Chair: I'll have to wrap it up here. Mr Beyak, I want to thank you for your presentation.

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CITY OF TORONTO EMERGENCY MEDICAL SERVICES

The Chair: Our next order of business is the City of Toronto Emergency Medical Services. Gentlemen, I ask you to approach the witness table, have a seat and identify yourselves for our committee. We have 20 minutes, including questions. As far as questions and the next rotation, I'll start with the NDP.

Mr Kormos: On a point of order, Chair: Perhaps the Minister of Labour, Mr Stockwell, could be forewarned that there's a paramedic in the building.

Mr Ron Kelusky: My name is Ron Kelusky. I'm the general manager of the City of Toronto Emergency Medical Services. To my right is Mr Garrie Wright, a supervisor with our organization who is responsible for coordinating our public access defibrillation program. So if there are any technical questions beyond my presentation, I'm sure Garrie would be happy to address them.

I appreciate the opportunity to come and speak to you regarding Bill 51. I just want to give you a little history regarding the Cardiac Safe City program within the city of Toronto. On October 2, 1998, Mayor Mel Lastman and city council declared Toronto a cardiac safe city. This declaration meant that the mayor and city council endorsed the concept of Toronto becoming a cardiac safe city and directed its emergency medical services department, Toronto EMS, to actively encourage public involvement in cardiopulmonary resuscitation and public access defibrillation. As well, Toronto EMS was also directed by council to establish a series of pilot programs within the city that would provide a framework for future expansion of this program on all city sites.

Toronto EMS partnered with Sunnybrook and Women's College base hospital, which is our medical oversight program, as well as the private sector to promote public access defibrillation in the community and to establish the public access programs within the city.

Over the past two years we have undertaken a series of pilot projects where we have trained and certified and recertified a number of lay providers, namely, security personnel in the former city halls within the now new city of Toronto. In addition, we have expanded that to incorporate officers within the marine unit program, the Toronto Zoo and at police headquarters. The principle behind that is to provide some leadership within the community through the establishment of public access defibrillation and to endorse the participation of the private sector to become involved in this program.

In Toronto, Toronto EMS encountered approximately 2,000 cardiac arrests in 1999. Of these cardiac arrests, 16.9%, or 344, occurred in a public place. Pearson International Airport accounted for 24 of these cardiac arrests and was the most common public location where cardiac arrests occurred. In fact, the studies that have been conducted in North America had identified that the top three sites where cardiac arrest occurs are airports, jails or holding cells and shopping malls. What is interesting to note is that in our encounters with cardiac arrest within our community, the average age is 69 years old. While this particular cohort of the population represents about 12%, we know just through demographics that this is going to increase to over 20% over the next few years, and based on their health and simple age, the incidence of sudden onset cardiac arrest will increase.

According to our studies and the studies conducted by Sunnybrook and Women's College, from the time that a citizen calls 911 until the first emergency crew capable of defibrillation arrives on scene is 8.1 minutes, and that's from the time you pick up the phone to 911 to curbside.

In a study that was conducted in the city of Toronto, in cases where the patient was located in a building above the first floor, defibrillation was delayed on average two to three minutes. We know from technical studies in terms of survivability and outcome that once you reach eight to 10 minutes, the chances of survival have declined so significantly that in all likelihood the patient will not survive.

On average, 25% of the responding 911 crew's time is spent getting from the curb to the patient. For example, in large urban centres with multi-storey buildings, the time frame to defibrillation becomes very significant if you're accessing, say, the 72nd floor of the Scotia Tower. That's why advocating a controlled form of defibrillation within large buildings where there are a number of people can reduce the time to defibrillation.

It is not surprising to see that in Toronto, by the time a defibrillator is applied to the patient, only 27% are still found in ventricular fibrillation. Fibrillation is the first rhythm seen in 80% to 90% of sudden onset cardiac arrest and quickly deteriorates to a non-shockable rhythm within minutes. Shopping malls, office buildings, major transportation and terminal areas are a real challenge for 911 crews due to the distance the patient may be from the front door.

I think another factor that comes into account in terms of calculating delay is that when a cardiac arrest occurs, there is a period of time delay that's encountered while people recognize that there is a problem, sort out who's going to call 911 and then make the call.

The survival rate from out-of-hospital cardiac arrests in Toronto is less than 5%. In fact, in most major urban

centres, cardiac arrest survival is significantly compromised. A study that was conducted in Chicago about five or six years ago was titled Where are the Survivors?, because there were virtually no survivors within that city due to accessibility problems.

In Toronto, our most successful program is found at Woodbine Racetrack casino. They established a PAD program in April 2000 and have had four sudden-onset cardiac arrests. To date, three patients have survived to discharge, and in each case security personnel delivered the shock in less than two minutes. While this isn't a conclusive study, there are other studies that have been conducted in Las Vegas and other large casino areas where they have experienced 50% survival rates as a result of having AEDs.

Communities across Canada and in Ontario are pursuing public access defibrillation with some vigour. Ottawa reports having over 340 AEDs planned for their community, Mississauga over 70, and in Toronto, where the population is over 2.5 million, we probably have only 50. Other cities across North America have adopted the principle of cardiac safe cities and feel confident that this is the way to go in terms of public acceptance. The Toronto Convention and Visitors Association now tends to receive calls from people wishing to book conventions to determine whether or not it is in fact a cardiac safe city and whether there are defibrillators available. So the significance of this program south of the border seems to be spilling over.

There is the issue of trying to manage a program so it does not become ad hoc. I think part of support of a form of legislation that supports public access defibrillation ensures that there is a level of control within the system. I believe that is important.

The other thing that needs to be looked at in terms of a public access or AED program is some of the province-wide issues we have in terms of delivering an adequate level of emergency medical response within our communities, specifically in rural and remote areas and suburban areas of the cities of Ontario where accessibility to trained personnel is not always available on a timely basis.

The opportunity to provide defibrillation in a controlled manner in those areas where there appears to be a higher incidence of sudden-onset cardiac arrest can somewhat relieve the expectation that EMS or fire or combined 911 systems are the only safety net available to the public. There have been some studies that have shown that in weddings, for example, there is an equally high incidence of cardiac arrest. Again, the time delays in contacting 911 and the time delays associated with accessing the patient where there are a number of people around can usually result in a less than adequate level of survival.

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One of the things we have to ensure in this process is that there is a level of confidence in the system. I've been in this business for about 26 years, and I recall the same debate occurring over CPR. There were concerns expressed by the public that if we allowed lay people to become involved in this program, it was only going to create mayhem, liability issues and broken sternums, but that really didn't happen. It has now become a normal part of life to encourage even our children to become trained in CPR.

The debate carried on a few years later when we were talking about the evolution of advanced care within this province. Where other sectors of North America had successfully implemented advanced care or full advanced life-support paramedic programs, there continued to be concerns as to whether ambulance personnel could be trained to that level. Today we have seen evolution reach a point where we have critical care paramedics who in fact provide a significant level of intervention beyond what we would have thought only a decade ago.

We support Bill 51's three initiatives regarding public access to fibrillation, the first being that AEDs be installed in an accessible and highly visible fashion in appropriate publicly owned facilities and encouraged in privately owned buildings where the public has general access. As advocates of PAD, we have visited a number of businesses in Toronto, namely the LCBO, Royal York, correctional services, various fitness facilities and the airport authority. Private businesses are aware there is no obligation to install AEDs at their places of business; therefore there is very little incentive to initiate such a program. The concept of how this device will save lives is very easily understood and accepted by the private sector businesses we have visited. However, they are reluctant to initiate the program due to liability and cost concerns. It is our belief that if support for this program and this initiative is increased, then the cost will subside and the $4,000 to $5,000 for the device will be reduced significantly.

Where these programs have been established, many of the proprietors chose to hide the device because they believed the device would upset staff or visitors. In many cases, if there has been a collapse, bystanders wouldn't be aware the defibrillator exists and the internal emergency response system wouldn't be activated. AEDs must be placed so that they are no more than three minutes from the patient's side at any time. AEDs placed three minutes apart will result in the first shock delivered in less than four minutes. Our current research indicates that a shock in four minutes will result in optimum results. At O'Hare International Airport, I believe there is a defibrillator placed every 100 metres within that airport and that they have been used on numerous occasions.

We also support standardized guidelines in the training, use and maintenance of AEDs. Currently in Ontario, these guidelines and standards do not exist. Therefore, the fear of an ad hoc evolution of this program may evolve, and that's something we want to avoid.

We support the American Heart Association, the Heart and Stroke Foundation of Ontario and the recommendations of the Provincial Base Hospital Advisory Group regarding public access to fibrillation: having a medical director, ensuring that AED provider training meets

acceptable guidelines and that provider training and evaluation consist of a minimum of seven hours. The program content should include early CPR, indications for application of AED, recognition, and maintenance and documentation.

Within the city of Toronto, the computer-aided dispatch system we utilize has the capability of recording all the locations of automatic defibrillators that are placed within the city. In addition, it has the ability to prompt the dispatcher to identify, when a call comes in through 911, that there is an AED available within that facility. It provides the mechanism, if it was not otherwise used when the call was initially made, to notify those people that a cardiac arrest has occurred within their facility. This establishes a clear link to ensure that, regardless of the situation, we're able to identify that a PAD is available. In addition, through the training provided to emergency medical dispatchers, there is an opportunity to assist the bystander or layperson in initiating any procedures that may be required in the use of the AED.

The third point is protection from liability for the rescuer and the person who owns and operates the premises where the AED has been installed. Liability protection is the number one concern to the user as well as the owner of the facility. There have been studies carried out worldwide regarding why people do not become involved. Inherently there is a concern by a certain percentage of the population, not because they want to, but they simply avoid getting involved in these types of situations. For the percentage of people concerned regarding liability or fear, I think this legislation can alleviate that concern.

Those we have spoken to want written assurances from the government that both the user and the owner are protected from prosecution. Bill 20, the Good Samaritan Act, which was recently passed by this government, does not go far enough to specifically state that the user and owner will be protected from liability issues. Bill 51 does address this issue. Just anecdotally, stories have been told of people who have collapsed in recreational facilities in the United States where automatic external defibrillation was not available, and those have in fact been subject to lawsuits for not providing the optimum level of care that could be provided in that circumstance.

Evidence is available to show that early defibrillation in sudden onset cardiac arrest does save lives. As the person responsible for delivering emergency medical services in Toronto, I cannot always guarantee we will be there in an optimum time frame. To address some of the concerns regarding who should be responsible and how you delineate levels of responsibility when perhaps fire or ambulance, paramedics and a layperson arrive on the scene simultaneously—these are not real issues, and there can be protocols that address these issues. But clearly what we do need is to have these devices available just in case.

To reiterate what the previous speaker indicated, there has been a lot of success through fire-prevention programs, through legislation that has seen the placement of such things as smoke alarms, fire extinguishers, etc within public buildings. I think it would be ideal to come to a point within this province to take the leadership role and be able to show that defibrillators are an important part of our health and life safety within our communities.

The Chair: Mr Kelusky, we've wrapped up our time. I wish to thank you and Mr Wright for that presentation.

1130

CARDIACSAFECITY.COM

The Chair: I will now call on our next delegation, CardiacSafeCity.com. Good morning, sir. If you could identify yourself, please. We have 10 minutes for a presentation by an individual.

Mr Tony Battaglia: Mr Chair and members of the justice and social policy committee, I'm pleased to be here today to share with you how CardiacSafeCity.com and the Aldus Worldwide Company Ltd Web site are supporting cardiopulmonary resuscitation and automated external defibrillation for community access defibrillation programs.

ER-CPR is public access defibrillation awareness, prompting and refresher training software for Windows and Palm computers. It essentially integrates CPR skills on desktop computers for people in the workplace, for the lay public who have never seen these devices before, yet need to know how important they are and how much they can save a life.

My name is Tony Battaglia. I am the president of Aldus Worldwide Company Ltd, a Workplace Safety and Insurance Board first aid delivery organization. I'm the inventor of this Canadian software and coordinator of the ER-CPR mass-training event. This event is chaired by Jack Layton. The goal of the event is to donate ER-CPR software to every municipal workplace computer in Canada. Our target is to reach 1.3 million Canadian municipal employees, of which 365,000 are Ontarians.

Clearly our goal is to inform the lay public as to how easy CPR is and how easily it can be integrated with automated external defibrillators. As the previous speaker eloquently pointed out, they are very successful when implemented correctly through an organized and efficient system. I'd like to talk about how ER-CPR can be part of that.

Sudden cardiac arrest victims require access to critical links in the chain of survival: early access to 911, early CPR, early defibrillation and advanced life support. I will concentrate the balance of my comments on the value of implementing an effective awareness program which is designed to enhance the understanding and demonstrate the integration of CPR and AEDs in the workplace and in saving the public.

In the United States, the 106th Congress found, "Increasing public awareness regarding automated external defibrillator devices and encouraging their use in federal buildings will greatly facilitate their adoption." Clearly what they have understood through these types of hearings and through educational programs, as you are

finding out, is that there is great value in public access defibrillators. I'll also note that the 106th Congress suggested a community partnership as a foundation for implementing PAD programs, and they define it as "composed of local emergency response entities, such as community training facilities, local emergency responders, fire and rescue departments, police, community hospitals, local non-profit entities and for-profit entities concerned about cardiac arrest survival rates."

I've cited the appropriate legislation in my handout.

The science and value of CPR and AED awareness, prompting and refresher software is recognized by the president of the Federation of Canadian Municipalities and the Toronto Paramedic Association, and has been captured in American Heart Association publications. I'd like to refer to this statement: "Rescuers who used electronic CPR prompting, at the time of testing, were 2.5 times more likely to perform all of the assessment and performance skills and 4.5 times more likely to adhere to the performance guidelines," than those who relied on memory alone.

The reason I'm mentioning that is that in the past, CPR retention and the use of CPR—people have taken the course and forgotten how to do the skills. Clearly with AEDs, they are prompting. They talk people right through the rescue, right from the get-go. They are highly sophisticated in establishing pulselessness and then deliver the definitive care that they need.

ER-CPR is the most cost-efficient CPR and AED self-paced awareness/prompting/refresher software available. The goal of integrating education to the public again is to make it cost-efficient. Clearly, through software training we have utilities in every workplace so that people can understand the value of the life-saving equipment in their facilities, and our goal is to train them on what to do before the EMS and the public access defibrillators get there.

CPR enhances emergency cardiac care and AED responses and immediately increases the number of people learning and responding to sudden cardiac arrest emergencies. Recently the standards have changed for how CPR is performed; in September 2000 the guidelines changed. Our goal is to immediately, through the distribution of the software, bring people up to speed with the CPR and AED protocols.

Likewise, ER-CPR will help voluntary compliance with the Canada Labour Code. As of February 2000, they have recognized that CPR is a mandatory requirement for first aid responders in the workplace. They realize that CPR is important. I think that's the first step in understanding that CPR with a PAD implemented in the workplace is the definitive next step.

Bill 51 currently identifies the Ministry of Health and Long-Term Care, in consultation with emergency health stakeholders, to develop and issue training and educational guidelines for the use of portable defibrillators.

I would ask for your consideration. Would the justice and social policy committee consider the inclusion of language within Bill 51 and communicate to the ministry and long-term-care and emergency health stakeholders to "encourage municipalities to use CPR-AED awareness prompting and refresher training software as part of a complete community partnership public access defibrillation program"?

The implementation cost for municipalities to adopt this statement is zero. They are being donated to every municipality in Canada. The goal here is to recognize, as Mr Colle is pointing out today through this bill, that we need to be more aware of just how effective these devices are, and our goal is to let the municipalities take the lead.

As an independent and unsolicited review, Yahoo! Internet Life magazine already identified it as "an incredibly useful download" through their publication in the United States. We're hoping the response in Canada will be the same.

In conclusion, I applaud Mr Mike Colle and his dedicated staff for recognizing sudden cardiac arrest as the leading cause of death in the workplace and for creating Bill 51, the Portable Heart Defibrillator Act. They recognize that public access to defibrillators, integrated with awareness and training, is the next continuum of care available to victims of sudden cardiac arrest in public areas.

CardiacSafeCity.com partners and I commend you for your leadership in holding hearings on this important public issue. As you are the employer of over 300,000 employees, you have the opportunity to provide life-saving technology and protect from liability those who are trained to use these important lifesaving devices in your workplace.

The Chair: I realize 10 minutes goes fairly quickly, but I appreciate that concise report. Thank you, sir.

RAMESES SHRINERS

The Chair: Our next order of business is the Rameses Shriners. Could you pull up a chair and we would ask you to give us your name. We have 20 minutes until lunch.

Dr Ronald Groshaw: I assure you I won't need the 20 minutes. I was telephoned after the notice of this hearing, asking if I would appear. I had some trepidation about it until August 16 when I was the town crier at the Roy Thomson Hall seniors' jubilee concert with a capacity crowd. At about noon hour, a lady collapsed on the floor. Incidentally, I am a retired medical practitioner, having worked at Etobicoke General Hospital, Sunnybrook Hospital, and doing private practice as well as university practice. To my horror, I saw this lady collapsed on the floor and rushed over to her, but from the opposite direction the paramedics were coming with a stretcher so I felt very relieved about it.

After the patient was tended to and taken away on the stretcher, I asked the lady in charge of the operation, who was wearing a uniform of Roy Thomson Hall, why she didn't bring the defibrillator with her and she said, "We don't have a defibrillator." I was really shocked at this.

The Shriners got involved in this back in 1984 when a friend of mine collapsed on the dance floor at 3100 Keele Street and he was dead. Despite CPR, nothing helped. Incidentally, CPR is not harmless, or at least no danger with CPR was in the record, I presume. There are dangers with CPR and I just want to make that clear. But despite CPR, nothing worked, and I regretted that we didn't have the paddles, which were available then in every emergency department, and that we weren't able to apply them because he might have been living today had we had those paddles.

1140

I am the treasurer of the Shriners in Toronto—over 5,000 members—and I speak with the permission of the potentate of that group at 3100 Keele Street. I want to mention that we have been concerned about the welfare of individuals at our site, not only our members but also those attending weddings, public functions and such like. We petitioned the Trillium Foundation in 1999 to see if we could get funding to help with the training of individuals in CPR and emergency health care. We do have a number of police officers, emergency measures people, doctors and nurses who are in our organization, but we still started a training program for other members so that we would be conversant. I think the average age of our members is 64.9 years of age so we are essentially a seniors group.

We did purchase a defibrillator this year. This was from voluntary contributions. Shriners contributed—the largest donation, one Shriner gave $1,000; a couple gave $500—and we bought the unit in March. At that time I was the only one with a card saying that I could defibrillate, except for those from EMO—emergency medical services—and police and fire officers. We have not needed to use it, but I make a plea that we need help for training initially as well as continued training and updates in the use of CPR and defibrillation.

I would like to mention one other item, if I might be permitted the time, and that is with regard to the high-rise building I live in at the corner of Dixon Road and Islington. There are 26 floors there. I cannot find out the response time from either the fire or ambulance services unless I go through the freedom of information act to get that, but I have been told unofficially that sometimes the emergency response team—it's a matter of half a minute to two minutes before they even leave the place where the dispatch was received. So I am very concerned about the time constraints. I feel that living accommodations do require it, as well as public places.

The Shriners is not a public place, but it does have a lot of public functions. In that regard, as a result of our efforts, Harold Bradley from St Catharines found out about our defibrillator at the Shriners and he tells me this week that the St Catharines Golf and Country Club has just purchased a defibrillator. I think that's wonderful, because golf courses are another place where the flag is flying at half-mast too much of the time. Many of the cardiac casualties are there.

I hope I haven't been too personal in my comments, but I do thank you for this time to relate our experiences and the fact that the community at large will be behind this bill, I feel quite certain. Let's get on and do a good job of it. Thank you very much.

The Chair: Thank you very much, Mr Groshaw, for your presentation on behalf of the Rameses Shriners. In rotation, we have a little over three minutes each for questions or comments.

Mrs Molinari: Thank you very much for your presentation and for adding your personal experiences. It added to the presentation and I appreciate that.

One of the comments you made I think referred to one of my comments, and that was that there are no dangers in CPR. I wonder if you could expand on that. What exactly are the dangers in CPR? I'm certainly not aware of them. Also, in your response, could you address the comments made by Philips Medical Systems that also said that CPR serves little purpose. In the presentations that are coming, we're hearing varying views on the necessity, purpose and need for CPR in conjunction with the defibrillator, and so I'd like your views on those two points, if you would, please.

Dr Groshaw: Addressing the last one first, if I might, the fact that—no, maybe I will mention the other one. Chest compression is the most common place where complications occur, and of course that is from the fact that fractures or dislocations can occur in the rib cage, even to the point of a splinter of rib penetrating the lung and causing a lung collapse. But that is a measured risk, considering that the individual is already—one can say that they're clinically dead, because they're not perfusing their body with blood to sustain life. So that is the most common thing, and of course the complications with breathing into another person are quite evident as well: the possibility of contamination and infection being transmitted from one person to a dead person, or vice versa; saliva, for example, or vomitus.

Mrs Molinari: Further to that, then, before you respond to my second question, and I guess it would lead into the whole notion of CPR, is the necessity, with other mechanisms that are coming out into the market now that might be more suitable, more preventive of some of the dangers—so if you could comment on, I guess, the necessity of CPR with respect to the defibrillators.

Dr Groshaw: My training has always been that CPR is an integral part of defibrillation, but I beg to defer to the experts with the new guidelines that have been enunciated. I would like the cardiologist to deal with that. I feel more comfortable, certainly, with being able to ventilate an individual. Of course, when we bought the defibrillator, we bought the Ambu bag as well to prevent infection from being transmitted from one person to another. So we are cutting down the complications that way, but that's due to CPR training, and the use of various masks for getting oxygen into the body is an integral part of the CPR protocol.

Mrs Molinari: Thank you. And you're absolutely right that the cardiologist would probably be the one who

could give the best opinion on that. This was in their presentation. I believe Philips Medical Systems are manufacturers of defibrillators, and a comment was made in their presentation. So I guess that has to be taken in context with the source and where that information is coming from. I respect your comments on that. Thank you very much.

The Chair: Thank you. Mr Colle.

Mr Colle: Just to clarify the record, I think it was Dr Kerin who mentioned that CPR is of little value to people who are victims of cardiac arrest. He didn't say that CPR in general was of little value, and I just want to correct the record there. It was Dr Kerin who said that.

First of all, I want to congratulate you for taking the time and having the interest to make this contribution here today. Certainly it's typical of the Shriners in their generosity of spirit and caring for people. I do hope you pass that on to your potentate on behalf of all of us for continuing that great work you do with burn hospitals. Certainly it's no surprise that you're here.

Dr Groshaw, you mentioned a very important example, that you were at Roy Thompson Hall and essentially a person was in need of support with a defibrillator, and there was none available. To my surprise—this is what's so shocking—if you go to the Air Canada Centre, the Toronto international airport, SkyDome, the Toronto-Dominion Centre, Commerce Court—massive, massive buildings, never mind your own building on Dixon Road—there are no defibrillators. You can imagine thousands of people who enter and access those facilities, and that medical device is not available. I think that is really the danger that exists for people who might suffer cardiac arrest. I think it's scandalous that they don't have portable defibrillators available. As you know, O'Hare airport has, I think, 40; Toronto international airport, I think, had one. So I think the people of Ontario should be saying, hey, the liability should be on that side, and why aren't the defibrillators there when they could help save a life?

I think there should be an audit of all these public places where there is this potential to help people and help EMS do a better job. You, by your example of Roy Thompson Hall, really spoke eloquently about this gap that exists. Thank you so much again, and please pass on our thanks to the Shriners. This is a great opportunity for service clubs all across Ontario to pitch in and sometimes buy defibrillators. They've done that in certain communities for non-profit groups. It's a great partnership between government and the Shriners and other service clubs. So continued good luck and thanks for your interest.

Mr Kormos: Was it the Trillium fund that funded the purchase of the defibrillator?

Dr Groshaw: We made application to the Trillium fund in 1999 because we were told that money was available for training in first aid. They replied to us that this was a medical issue and it was dead in the water. A colleague of mine asked that it be reviewed. He protested their decision and we have not heard anything since.

Mr Kormos: Since 1999?

Dr Groshaw: He made the protest in 2000; it was the year 2000 when we got the reply back from the Trillium fund.

Mr Kormos: I don't come from Toronto. I come from a small town down in Niagara, and I know the Shriners down there are good. They've been great folks in the community. I'm going to tell them they were well spoken on behalf of today. All these little ethnic halls we've got down there, the Legion in Pelham and St Catharines, these people have no money. These people are barely hanging on to their halls, yet they host huge public events—the senior citizens' centres down there in Thorold and Welland.

Trillium it's disappointing to hear, but they have their guidelines. I think my folks would support a government program that, for instance, financed the acquisition of defibrillators and the provision of training programs for, let's say, the people who run the Slovak Hall, because they are there when the weddings are on. They're not at the wedding; they're working, they're serving. Do you support that proposition of broad-based—

Dr Groshaw: I certainly do.

Mr Kormos: It's going to cost money.

Dr Groshaw: Our facility has had two oxygen tanks in it for years; never been used. But we have a service representative coming in every three months to check them to make sure they're still functioning. I think the same thing should happen with our defibrillator, which we got in March.

Mr Kormos: So we should have a specific program here to enable non-profit organizations to buy defibrillators, to have some guidelines on how many they need, and some training, some support in terms of ensuring that the people who are in those halls and so on know how to use them. I think taxpayers would go for that, don't you?

Dr Groshaw: I think so.

The Chair: Mr Groshaw, on behalf of the committee, thank you and thanks to the Shriners.

I have a brief announcement before we adjourn until 1 o'clock. Our clerk has arranged transportation. This committee will be travelling to the airport; we're leaving at 4:40 at the south doors, the main doors. We recognize it's rush hour. There's a concern. I appreciate the committee helping me to keep us on schedule. I think that will be crucial this afternoon. I'm very nervous about leaving at 4:40 for the airport for a 7 o'clock flight.

The committee recessed from 1154 to 1301.

JIM WRIGHT
LYLA COMMANDANT

The Chair: Good afternoon, everyone. We can now reconvene our afternoon sitting of the standing committee on justice and social policy dealing with Bill 51.

Continuing with delegations, I would now ask for the next delegation to come forward to the witness table. Have a chair, sir. We would ask you to please identify

yourselves for our committee and for the purposes of Hansard. We have 10 minutes.

Dr Jim Wright: Thank you very much. I would first of all like to thank Tom Prins for getting this opportunity for us to come here and address the committee.

My name is Jim Wright. I'm a medical doctor and I've been in practice for 45 years in Muskoka. I also have been a coroner for over 40 years, so this is something that has been particularly brought home to me over the years. As a coroner I've had first-hand experience of the benefits which could accrue from timely cardiac defibrillation. In the early 1960s, I had the opportunity to defibrillate an elderly doctor who had preceded me in my practice. This had a profound effect on my outlook and in my attitude regarding this procedure. These procedures were in their infancy at that time, but they now have become almost routine and much more sophisticated.

As a matter of interest, in Australia, Mr Kerry Packer, who is a wealthy industrialist, was resuscitated a few years ago and he was so filled with gratitude that he made defibrillators available in all Australian ambulances. That's how much he appreciated the fact that he had literally been brought back to life.

The concerns with defibrillators you've already been discussing. The ubiquity, which means who all is going to have it and who is not going to have it, is a big problem. I feel the bill seems to be making a stab at addressing the situation.

Of course, another thing is the cost. I was checking around. I was talking to Dr Groshaw, and he showed me a cost of around $5,000. I checked at the hospitals that I am associated with, and they quoted a price of $15,000. That's quite a bit of difference. Then, of course, if you had a large number of machines being used, maybe the government could see to being a central purchasing agent and have the advantages of buying large volumes of them. You'd probably get a much better price.

There is the familiarization of people with the application of them. This would have to do with the different groups that have been talking to you today and will be talking to you later.

The possibility of volume discounting could be investigated. It might require some special committee to be established; I don't know. Maybe I'm way out on this sort of thing.

Hundreds of lives in Canada and thousands of lives in North America annually could be saved by the timely availability of cardiac defibrillation. The main cause of fibrillation is usually coronary artery disease, just to give you an idea of why it seems to be such a problem. There are other causes, of course, but this seems to be the main cause. People have heart damage and it strikes them, and maybe they don't even know they have any problem.

Lyla Commandant, who was formerly the chief of the Wahta reserve, is usually good at stirring up the pot, so I asked her if she could say a couple of words.

The Chair: Thank you, Dr Wright. Please come forward. Could I get your name again for Hansard, please.

Ms Lyla Commandant: My name is Lyla Commandant and I'm a Mohawk. I live on the Wahta Mohawk Territory. I was a former chief.

I guess when I saw this Bill 51, I thought it was such a wonderful idea and I felt it was something that my people certainly could use. I realize that this is a provincial undertaking, but I'd like to see such an initiative spread across Canada. I'm aware of a lot of the problems we have. Many of our communities are isolated and certainly could use this technology. I'm confident that Minister Nault and the Department of Indian Affairs would contribute to this worthy project. I sent a copy of this, my comments, to Robert Nault, Minister of Indian Affairs, and Andy Mitchell, our member of Parliament for Parry Sound-Muskoka; also to Norm Miller, our member of Parliament for the province in Parry Sound-Muskoka.

Dr Wright: I also have one other here from Lois Neely, who was appointed by the province of Ontario to represent seniors in Canada on the coordinating committee for the International Year of Older Persons. She asked if I could just read this very short piece that she's given to me.

"On behalf of Ontario's 3.7 million seniors, I am requesting that the committee give consideration to the requirement of said defibrillators being installed in:

"(a) all long-term health care facilities in the province, that is, licensed nursing homes and homes for the aged;

"(b) all retirement residences, assisted living facilities—whatever designation they give to themselves. They have no licensing, no regulations except those required by the local fire department. There is no list of where they are, yet hundreds of thousands of Ontario seniors are lodged in these unlicensed, unregulated facilities.

"Therefore I recommend that the local fire departments be responsible for overseeing installation of this very wonderful, life-saving equipment...."

That's from Lois Neeley.

Just to finish up my little talk here, I would like to take this opportunity to congratulate MPP Mike Colle for bringing in this private member's bill, demonstrating that the province of Ontario is a caring, forward-looking environment probably unmatched by any other territory or area in the world. Thank you very much.

The Chair: Thank you, Dr Wright and Ms Commandant. We have perhaps one minute for each party.

Mr Colle: Certainly on behalf of all my colleagues I want to thank both of you for coming all the way from Muskoka to support this initiative. I know that you, Dr Wright, as a coroner and medical practitioner have been advocating for decades. I'd also thank Lyla Commandant for passing this on to your federal member and to the Minister of Indian Affairs. That really helps and that's how we can really, as you said, Lyla, get these right across Canada. Again, thanks for letting Norm Miller know about your interest in it—I think that will help—and give my regards to Bill Grimmett for encouraging you to come down here. Thank you so much for your efforts and support.

1310

The Chair: Mr Kormos, a comment?

Mr Kormos: To both of you folks, I join Mike in thanking you for showing interest in participating, and to Ms Commandant, I read your letter, along with Ms Neely's, in the package. I've been, for instance, up along the coastal reserve, James Bay, Hudson Bay, where you are talking about communities that have to be entirely self-sufficient. But then in conversations with a pile of people, this is not an isolation/dense-population issue, because you can be in the biggest city in Ontario, and if there isn't a defibrillator there, it's too bad, so sad.

I think you know that my interest here is one of how small communities, how small organizations that host seniors, that host public functions, are going to be able to afford these things. That's why I've been raising consistently the issue that there's got to be some sort of serious government funding so that communities across Ontario can access this type of equipment and the training. So thank you very much. I appreciate it.

Mrs Molinari: Thank you very much for your presentation. We all get one minute to ask you questions. I noticed that you were both in the audience and heard the presentations this morning, so you heard some of the issues that were raised. With your background, Doctor, and your experience, could you just briefly highlight some of the risks of using a defibrillator improperly?

Dr Wright: Most defibrillators, not all of them, are pretty well foolproof. They take a reading to say whether a person is really fibrillating or in cardiac arrest and they know the proper voltage; all you have to do is apply it. Even a layperson can do it. It doesn't carry nearly the danger that, say, CPR would when a great, big person would be jumping on the chest of a small, elderly lady or something like that. You can do a lot of damage there, but this won't do any damage.

Mrs Molinari: In your view of CPR in conjunction with defibrillators, do you think they're both necessary?

Dr Wright: Yes, they are, but with the cases I've had when you've managed to defibrillate them—that is, to convert them to sinus rhythm—they don't need these other things. They don't need the respiration. Usually it occurs spontaneously.

Mrs Molinari: So you could use a defibrillator without administering CPR.

Dr Wright: Yes.

Mrs Molinari: Thank you.

The Chair: Thank you, Dr Wright and Ms Commandant. We appreciate your comments.

MONTE HARRIS

The Chair: I now wish to call forward Mr Justice Monte Harris. Good afternoon, sir, and welcome to the committee. Have a seat; we have 10 minutes.

Mr Justice Monte Harris: I'm going to be less than that, I can assure you. If I'm not, just tell me and cut me off.

Thank you very much for the opportunity to address this committee in support of Bill 51 and the installation of these portable heart defibrillators in public places, and especially including courthouses such as the old city hall, as one example in Toronto. I also want to thank Mr Prins and Ms Perryman for scheduling me into a time slot so that my presiding duties today would not be significantly disrupted, even though they were.

I want to briefly discuss two things: first, why I'm interested in an issue such as this, and second, why I support this particular bill, especially in relation to courthouses in public buildings.

Off the top, even though I'm a judge, I have absolutely no problem whatsoever appearing here today in my capacity as a judge and in my capacity as a private citizen, because it should be apparent that this bill and this issue are totally non-political. It's a motherhood issue and it's totally related to health, as far as I'm concerned, and I believe as far as anyone who addresses it is concerned.

First, why am I interested in this issue or an issue such as this? I come by my interest in health issues honestly. My first undergraduate degree was referred to as a BPHE degree in physical and health education from the University of Toronto. Because health has taken on such significant prominence in the past couple of years, the degree is now referred to as a bachelor's degree in physical education and health. So they've given health a special category in that particular degree. As a result, I still try to follow health issues; a significant interest, I might say.

Why do I support this bill? I have an interest in cardiac issues and I feel the installation and use of these defibrillators can do nothing else except save lives.

Let me give you a quick rundown, or a chronology of my involvement and my very humble knowledge of this. I read a Toronto Star article in October 1999—I read the Star only because the crosswords are pretty easy; that's about the only reason I get to read that newspaper—stating that the city of Toronto was proposing that these machines be mandatory for such places as office buildings, arenas and theatres, much the same as fire extinguishers are mandatory pursuant to municipal bylaws.

As a result, I communicated with and wrote to my Chief Justice, the Honourable Brian Lennox. Just very briefly I'll read from the letter. I'm going to pass this material out; there are just three pieces of it which you might get some time to read on your way to Ottawa today.

I said this in my letter to him: "I urge you to consider recommending the purchase and installation of a machine in all our courthouses, specifically Old City Hall, which is always heavily populated, for potential use not only by the judges, but also the staff and public. The implementation of the machine may also require CPR training." That was the case at the time, not necessarily now.

"In light of the importance and significance of a defibrillator, and in relation to Old City Hall, I am quite prepared to make a financial contribution toward the cost."

In seeking his support, I made it quite clear then, and I want to do so now as sincerely as I possibly can and from the bottom of my heart, that this was never meant to be a perk for judges, who obviously work in courthouses. It was meant to be for the use of everyone who enters.

Let me provide you the example of the courthouse I'm in. I preside at the Old City Hall in Toronto. This is the hub of the administration of justice in Canada. Everybody across the country knows about Old City Hall. Hundreds of people enter that building as employees and/or public daily. Unfortunately, some do not leave, not because of cardiac issues, I might say, but because of other reasons. But besides judges there are numerous staff, the cleaning staff all the way down, as well as administrative staff, crown attorneys, defence counsel, witnesses, accused persons, visiting school classes and sightseers generally, just as they come through this building here—all sorts of groups.

Old City Hall is also peculiar because of its geographic and physical location. It's in the heart of the business and commercial community in the city of Toronto. Traffic around it, as anyone who is familiar with that part of the city knows, especially during the daytime, is always congested. Without a portable defibrillator I wager it would take a significant amount of time for an ambulance with trained personnel to get to Old City Hall. Then, irrespective of whether the issue is a cardiac issue or another health issue, it still takes a lot of time to get from the Old City Hall courthouse parking area to a hospital.

In the month of November 1999, the Chief Justice saw wisdom in my recommendation and he referred my correspondence to the assistant Deputy Attorney General, who acknowledged the correspondence and nothing more. It isn't necessary for me to review the deputy's correspondence, because it was and is of absolutely no consequence whatsoever.

In the month of January 2001, I became aware of the outstanding work of Mr Colle and I immediately communicated with my Chief Justice. I sought his opinion on the efficacy of my communicating with Mr Colle because of our relationship and our respective positions, to indicate my support as well as his own support. We both decided that this issue is not a political issue; it is a health issue, and it's a health issue of major significance. To his credit, he told me to run with it, and I proceeded to do so.

I wrote a note to Mr Colle, and I've got that as part of the little bit of material here. I just want to read a paragraph or two from it.

"I was delighted to read in a recent … neighbourhood newspaper about your private member's bill for the installation of heart defibrillators in public buildings. I am indeed hopeful your bill includes courthouses.

"With the support and encouragement of my Chief Justice, I have since 1999 been seeking and urging the installation of defibrillators in our courthouses, especially Old City Hall, Toronto, the hub of the administration of justice in Canada, and certainly in Ontario. Aside from members of the public, ie lawyers, witnesses, touring groups, and accused persons, who attend on a daily basis, as necessary, some 250 to 300 persons including judges, crown attorneys and support staff, to name but a few, are employed in the building on a regular basis.

"I enclose some correspondence showing my humble efforts. Because this is an important and obvious 'people' and 'health' issue, as opposed to a legal or political issue, I have no hesitation in offering my encouragement and support"—and this is the important part—"because it may save the life of someone dear to me or us."

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This letter probably speaks far more eloquently than I can and probably says everything I can possibly say, but I have one more submission to make before I conclude, if I may. One of the health publications I subscribe to is the Mayo Clinic Health Letter. Coincidentally, the February 2001 issue came out with an article headed "Sudden Cardiac Death," and this is with the material that I propose to distribute. You might have an opportunity to look at it. I won't say where, but you may have an opportunity to look at it. Let me just read three or four short paragraphs from that article; it's a two-pager or a page and a half, I suppose.

"Advanced care for ventricular fibrillation typically includes delivery of an electrical shock through the chest wall to the heart. The procedure, called defibrillation, momentarily stops the heart and the chaotic rhythm. This often allows the normal heart rhythm to resume.

"Typically, the only chance of survival has come from emergency medical personnel with equipment only they know how to operate. In big cities or rural areas, help is frequently slow to arrive, and people are often dead before the paramedics get there."

They talk about some statistics in the States which aren't necessarily here but may very well apply.

"But now, this care is becoming much more available. The same devices used in emergency rooms to treat people with sudden cardiac death—defibrillators—are available in a smaller, portable form and come with built-in automated instructions to ensure proper use.

"These portable defibrillators are being made available in an increasing number of public places. These include sports stadiums, train and ferry terminals, airports and airliners, casinos, amusement parks, health clubs, community and senior citizen centres and shopping malls.

"Portable defibrillators are programmed to recognize ventricular fibrillation and only send a shock when it's appropriate. It's possible to become trained in their proper use in a single four-hour course."

If I had any doubt about this particular program, which I do not, this article certainly resolves it. I assume that everyone shares the same respect for the Mayo Clinic that I do.

My rationale for urging members to support this bill is really very simple. The availability of these portable machines may save not only your life or mine but also the life of someone dear to you or me.

Many, many thanks, Mr Chair, for the courtesy you've shown and the attention you've shown in permitting me to make this submission. If there are any questions, I

assume they're going to be very simple, because I'm not too swift a guy.

The Chair: We do thank you, Justice Harris, and you have used up the 10 minutes allotted. We appreciate your report to the committee.

Mr Justice Harris: I'll leave this with Mr Prins, if I may. These are the 20 copies that I think you may require, and you may wish to take a look.

The Chair: That would be fine.

Mr Kormos: Chair, understanding my former career, do you know how much I relished the opportunity of putting one to the judge?

Mr Justice Harris: That's only fair because he appeared in front of me, not as an accused, and I had questions of him.

CITY OF WINDSOR

The Chair: I now wish to call forward the city of Windsor. Please approach the witness table and have a chair. Good afternoon. I would ask you to identify yourself for Hansard.

Mr Tom Wilson: Thank you very much. I'm Councillor Tom Wilson, city of Windsor. I've been a councillor for 16 years.

Mr Wayne Currie: My name is Wayne Currie. I'm the corporate public access defibrillation coordinator for the city of Windsor.

The Chair: Thank you. Please proceed.

Mr Wilson: Thank you very much, Mr Chair and members of the committee, and my former city councillor, Mr Dwight Duncan. It is a pleasure to be here. We appreciate being invited.

I would like to formally announce to you the city of Windsor's support of the proposed Portable Heart Defibrillator Act. I will give a brief history of Windsor's response to out-of-hospital cardiac arrest.

In 1989 Windsor provincial ambulance started providing defibrillation. In 1994 the fire and rescue service started providing defibrillation in the same year that Casino Windsor purchased defibrillators and began saving lives. In 1997-98 all major manufacturing plants in Windsor, known as the automobile capital of Canada, and additional gaming locations, namely Windsor Raceway, implemented AED programs.

The city of Windsor was one of three cities in Canada to pioneer public access defibrillation. Calgary and Vancouver were the other cities. Windsor pioneered PAD in Ontario. This was made possible due to the leadership and direction of the regional-based hospital medical director Dr Curtis Fedoruk. In 1999 the city of Windsor council passed a resolution to support PAD within workplaces and key locations with the city, as well as to promote PAD across the province. A declaration was passed declaring the city of Windsor the Cardiac Caring Community. Thus, the official municipal-based PAD program began. It was on July 19, 1999, a little over two years ago, that the resolution was passed, that the community access defibrillation program, which will provide automatic external defibrillators in workplaces and other key locations throughout the community, which will assist in improving survival rates of sudden cardiac arrest victims, be approved. That was passed unanimously by city council.

I do have a personal interest in this. In 1987, I suffered a minor heart attack. In 1999, I had two angioplasties and again in the year 2000. Since then I have been extremely lucky and have had no more heart problems, but I know that if something happens to me in the city of Windsor the PAD program is there, not only for myself but for the other constituents and visitors to the city of Windsor.

At this time, I'd like to turn it over to Mr Wayne Currie.

Mr Currie: Thank you, Tom. You have before you a booklet. I'm going to keep reference to the booklet very brief, but I will focus on a couple of areas. After that, we'll be able to take questions from you.

The first segment, and I want just to go through it briefly, is with a tab, is the standard operating procedures program for the city of Windsor. Due to the lack of appointment of a provincial authority, as part of the bill calls for, the city of Windsor had to create and develop an SOP or a working rule to establish what the guidelines were going to be for that.

On page 5 of this program, specifically 6.1.3, it identifies that AED units will be placed in city of Windsor publicly owned locations and in proximity to telephones to access 911. Some of those issues were being addressed. Also, the following point: AED units must be prominently displayed in wall cabinets throughout these facilities. Each site had to identify a cardiac arrest plan. This whole procedural guide referenced a few things: quality assurance, medical direction and, as well, training and certification, some of which I know has probably been talked about in depth today, but we do want to focus on several.

Provincial SOP: hopefully this particular model. Obviously some of the material here is in draft or it's not for external distribution. Today it's being presented before the committee. Some of the studies we've talked about are currently pending publication, so obviously the publication concern is that it stays within this committee.

The next item to talk about within this is on page 12. It identifies some of the corporate SOP. These are some of the locations the city of Windsor identified, through rigorous research, where we should place these AEDs. Phase 1 of our program trained approximately 250 employees. These were non-traditional, non-target employees. Some of them were workplace responders, but the majority were just employees within their job descriptions who volunteered to begin training in this program.

In phase 2, which is currently in the process of being completed, we've trained an additional 600 employees outside the fire and rescue service. These are police officers, other agencies, lifeguards, Zamboni operators for arenas and pro-shop clerks for the golf course. It's a wide range of staff. This SOP is lacking in the province. We understand that, and that's part of what we're going

to discuss. Hopefully this model could be utilized as a reference for our Ministry of Health to mandate to base hospitals we wish to address.

1330

The next tabbed area is one of the studies. You may have heard quite a bit of conversation about casino reports and survival rates. From 1994 to 1999, there was a published study that compared the survival rates of the Casino Windsor on-site defibrillation project to the greater city of Windsor and had dramatic findings. The on-site program at Casino Windsor had 23 patients collapse due to cardiac arrest, 15 of whom were discharged from the hospital neurologically intact. That's a survival rate of 65%. When we look at the community, the greater city of Windsor, we had 668 cardiac arrests during that same period of time, and only 37 patients were actively discharged from hospital neurologically intact. That's a survival rate of 5.5%. The chance of survival is 12.75% higher in an on-site defibrillation program than out on the city streets. That concerned us and also made us focus our concern on developing a PAD program.

The next tab is locations of cardiac arrest. This is an affirmation of community public access defibrillation programs. We do support this quite aggressively in the community, throughout the province and in North America as well. The purpose of this study was to describe the locations of cardiac arrests—to identify public locations and the annual incidence of arrests. This was to help determine optimal placement of AEDs. Again, this is lacking: there are only two other studies of this magnitude in North America, one in Seattle and one in Dallas, Texas.

The method was that we collected all the ambulance call reports from the Essex-Kent base hospital program. Again, the data collection aspect of the base hospitals cannot be overlooked. We identified and categorized 28 public locations in five categories. Fifteen percent of all cardiac arrests within our community—and that was not just the city of Windsor; it was the city of Windsor and the counties of Essex and Kent, formerly known as Chatham-Kent. We identified approximately 2,100 cardiac arrests. Fifteen percent of those were in public locations.

Section 2 of Bill 51 brings to light the possibility of mass deployment of AEDs. We do support that, but we encourage that expert advice needs to be considered to properly identify locations of cardiac arrests. Base hospitals could be utilized within the communities to identify the data they've collected through ambulance call reports, fire and medical assist reports and through the hospital network they have in place.

Just the identification of our study—we talked about provincially owned buildings. In our region, the region from Chatham-Kent down, we identified at least one cardiac arrest per year of the study, being 1994 to 2000, most being at casino locations. The average incidence of cardiac arrests was 5.7. It breaks it right down—the study is in front of you, so we're not going to spend a lot of time on it. I'd like to be available for a lot of questions.

The conclusions of some of the review of the bill itself: section 3 calls for some sort of provincial authority. The city of Windsor would like to make a recommendation that the Ministry of Health look toward the funding matrix that has been provided to Ontario base hospitals. The Ontario base hospitals are in the key position. Whether it's involvement with the ambulance, fire, community programs, hospitals and/or dispatch centres, they are considered the experts. They have the expertise, and they are the centres of excellence for continuity of pre-hospital care in the province.

Medical direction, in section 3: the reason we'd like base hospitals to be considered as a provincial authority is obviously the integration of the entire EMS system right through pre-hospital care. We don't have another committee or group that could be established. We have in place a current matrix with the Ministry of Health that could provide additional funding to the base hospitals. Base hospitals are simply mandated programs. There are 26 of them that cover every square inch of the province of Ontario. Why not use the resources available to us?

Coordination: the coordination itself and the notification of AEDs within the community is essential. We need to know if AEDs are being placed by industries, by private groups or programs.

The last thing we'd like to talk about is section 4, which talks about liability. I think we need to expand and make that a little bit broader to protect training agencies, the trainers themselves. Possibly even the medical directors need to be looked at here.

There is one final statement I'd like to make before the committee, and then I'll turn it over for questions from you. Since the PAD program started in the city of Windsor, we've had 33 cardiac arrests within PAD locations—not anywhere else, but within PAD locations. Nineteen patients—citizens, fellow human beings—have walked out of the hospital neurologically intact. That's an overall survival rate of 57.6%. That's three lives a year that have been saved due to the PAD programs at these sites. We fully support PAD. We encourage the province and this committee to push this to the next reading. Hopefully, if this bill is passed, it will provide the legitimacy for communities and mandate procedural capabilities for communities to establish programs and save lives.

Thank you for letting us speak. I'm open for questions.

The Chair: Thank you, Mr Currie and Councillor Wilson. We have two minutes per party for questions. We'll begin with the NDP.

Mr Kormos: What provoked this? What drove this in Windsor? How did it develop when obviously it hasn't in a whole lot of other communities in the province?

Mr Currie: Obviously, the reason it started was that we had a serious look at our community. We had a medical director who was not afraid to launch an innovative program that was not being endorsed or promoted by the Ministry of Health, and we were concerned about our community. We investigated CPR training. We did mass deployment of CPR, we've been doing mass

training sessions for the public for over 20 years, we have aggressive CPR training programs. We've tried every other angle. We have advanced paramedics, we're involved in the OPALS Study. But eventually we had to look at other avenues to increase our survival rate, and we looked toward this.

Mrs Molinari: Thank you very much for your presentation. It's helpful to hear from a municipality that's already in the process and has taken the initiative early on in doing this. One of the questions I have is: the OPALS Study indicated that 26% of fire departments and 1% of police departments in Ontario carry AEDs on their emergency response vehicles. What would the percentage be in Windsor? Seeing that you've taken this ongoing step, I assume, maybe incorrectly, that your percentage would be higher than the provincial average.

Mr Currie: The average that you have currently in front of you is incorrect. Right now I'm calculating, on behalf of the Ontario Association of Fire Chiefs, the actual number of defibrillators in service. It seems to be much higher. It's preliminary information at this time, but I suggest this committee try to get in contact with the Ontario Association of Fire Chiefs.

In our community we have approximately 10 fire service programs, and we have nine out of the 10 fire service programs participating. The last one is in the official stages of getting its town council involved for the approval for funding. So we have aggressively attacked those areas of our community.

Mrs Molinari: You talked about the fire service. What about the police?

Mr Currie: In the police services, currently the RCMP in our community have several units, and just shy of 450 Windsor police officers have been trained. We're in phase 2 of the city program. We'll be launching AEDs in strategic police vehicles, and they are currently available within department stations and cellblock areas.

Mrs Molinari: Just generally, and you don't have to answer if you don't know, is it safe to assume that Windsor would be higher than the provincial average? You indicated that we need to review these figures and see the accuracy of them, but is it safe to say that in Windsor they would be higher than the provincial average, given that you've taken this additional step in providing defibrillators in all public places?

Mr Currie: Are you referring to the survival rate or just AED—

Mrs Molinari: I'm referring to fire departments and police departments. I guess one would say that those are the areas that should be first. All 100% should have defibrillators. Assuming that, then you move on to public places and everywhere else.

Mr Currie: In the city of Windsor, the fire and rescue service has been utilizing defibrillators since 1994. The police will be starting to. They have had an initial program, a very small program, since 1999. They will be launching a larger scale program in the fall of this year. So we have addressed those issues as targeted responders within our community.

1340

The Chair: Mr Colle?

Mr Colle: I certainly want to commend the outstanding work done in Windsor. This is probably one of the most advanced and sophisticated programs in all North America, and I don't think we appreciate that. I hope the rest of the country follows Windsor's lead.

It is an astonishing amount of work and research you have done, above and beyond the call of municipal responsibility. I certainly want to make sure you pass on our thanks to Dr Fedoruk for his aggressive leadership in this, and certainly to Mayor Hurst, Councillor Wilson and the rest of your council for taking this kind of lead. I think the material you've given us, which we're going to be able to look over and certainly hand over to Ministry of Health officials and so forth, will be invaluable for us as a committee, and hopefully for the Legislature, in terms of coming up with a program that can use the groundwork Windsor has done.

I guess the most astonishing thing you said was that the survival rate in the Windsor casinos was 65%. If that doesn't speak volumes for all the work you've done and the value of defibrillators—that's an astonishing figure compared to the street survival rate of 5%.

Has anybody been able to refute or question that or say where these figures lie?

Mr Currie: No, the study figures came from the OPALS Study. As well, the Casino Windsor study followed the template set by the study in Las Vegas, Nevada. So the study itself is bulletproof. It's gone to publication; it's passed all the peer reviews. This is factual data that we need to support and push throughout the province.

Mr Colle: Yes, and I guess it's great advertising: if you want to be in a safe place if you're going to have—go to a casino, I guess, especially a Windsor casino. We're not saying that, but it is an astonishing figure anyway.

The Chair: Thank you, Mr Currie and Councillor Wilson. We appreciate your report.

HUMBER COLLEGE HEALTH SCIENCES

The Chair: Our next delegation is Humber College Health Sciences. Welcome. Could you identify yourself for the committee, please?

Ms Nicola Simmons: My name is Nicola Simmons. I'm here today with a diverse, relevant background. I represent Humber College today. I'm also an instructor-trainer in defibrillation with the Heart and Stroke Foundation. I conduct a number of instructor courses around the province each year, as well as train providers and response teams. I have been involved in pre-hospital care for 20-plus years. So I'm here with some interest in seeing some of this go through.

There are perhaps some still-unanswered questions or concerns that have been raised through this morning's proceedings. Just very briefly to touch on a couple of those, I think we're still tossing around the question: is

CPR a relevant part of defibrillation? I think we have to look at some of the issues around that.

Without CPR as a follow-up or an interim measure if defibrillation is not immediately successful, we have nothing left to defibrillate; brain death is going to start within three to five minutes. If we don't have somebody at the scene who is trained in CPR, unless it is an immediately successful resuscitation, it's unlikely we're going to have a patient who will survive. So as we look at any training programs, I think it's certainly relevant that we make sure CPR continues to be a part of those programs.

There's a quote that may be of interest. I think any time a new initiative is brought forward, there are obviously dissenters. The quote is from high-level cardiac medical practitioners, and it goes roughly like this: while this is clearly a valuable life-saving tool with the potential to save many lives, it is also clearly a procedure that can result in potential harm and even death and must therefore be left in the hands of the medical practitioners.

That happens to be a quote from 1963 and it refers to CPR. I think sometimes, with the issue in front of us at the moment, we adopt that same approach to AEDs. We may not, as the public or as health practitioners, balance appropriately the potential risk with the potential survivability. I think if we look at things like the ambulance dispatch protocol and the Heart and Stroke guidelines, they are based on the assumption—and it's well validated in the literature—that a high enough percentage of unconscious adults are in cardiac arrest. Surely if we begin by saying that our training must teach people to recognize unconsciousness, I think some of those other risks can be minimized. I still think we need training in combination with it but certainly support and welcome anything that would take us forward.

I'd be happy to answer any questions. I don't want to get into the details. Humber is one of many places offering training, but I'm really here more to give any support I can for this kind of initiative.

I would just like to end with another quote, a more recent one, again by a medical practitioner: "One hundred years ago there were a whole bunch of things the average guy couldn't do. The average guy couldn't tune in a radio frequency. But if you build the technology into the machine, then anybody can do it."

I would suggest to you as we talk about training—and one of the things that was brought up this morning—that a worst-case scenario might be that I need someone other than a doctor or a nurse. The person I'd really like to be holding the defibrillator when I go down is my 13-year-old, video-game-playing son because I bet he could do it even without the training.

Thank you very much for your attention.

The Chair: For the comments or questions rotation I will go to the PCs.

Mrs Molinari: How much time do we have?

The Chair: I would say three or four minutes.

Mrs Molinari: Thank you very much for your presentation. Your extensive knowledge and background in this are certainly helpful to this committee as we listen to all of the presentations. What I'm trying to gather from the presenters today and tomorrow, which will be the two days that we'll be listening, are some common themes of safety with respect to the defibrillator. It's safe to say we all agree that if there is any lifesaving technique that we can implement in legislation, it's something we should all support, and that would be something I would rally for as well.

Part of the issue that comes up is that it's not quite that simple. There are some risks and some dangers. We've heard some from presenters here this morning, and I anticipate we'll be hearing others. The concern I have is someone using a defibrillator incorrectly which might cause some type of reaction that is worse than having the patient stay there and wait for an ambulance to arrive, because it's so available and accessible.

Ms Simmons: Could I just address that? I don't know if there's a part (b) to that, but I don't think we have activities that are without risk. You have to acknowledge that there is risk with anything. There could potentially be risk with me taking down a fire extinguisher and misusing it. That hasn't prevented us from making it widely available. I'm not trying to say that we should disregard the risk. I think the key is, as it is in section 3 of the legislation, that it be combined with relevant training.

You can train people away from the risk. I can teach you to use the basics of the machine in five to 10 minutes. The remaining four and three quarter hours of our program with Heart and Stroke are dealing with the safety issues and the appropriate use.

Also—and this is a personal opinion; I guess it's maybe just an observation of human nature—I'm not sure we're going to see untrained people taking defibrillators and using them. My guess is that the fear factor of the machine, until we train people away from that, will be high enough to prevent it. And I'm not talking about vandalism. It tends to be true with fire extinguishers and other equipment like that. My concern with the training we've been doing so far is more with making people familiar and not afraid to use it so that we don't end up with the same game we've had with CPR, which is that they're afraid to use the skills they may have learned.

1350

Mrs Molinari: A previous presenter stated that it can be taught or trained at a grade 6 level, and you indicated that you would feel quite comfortable with your 13-year-old son administering it. What I'm gathering is that it's fairly simple to teach the process, the procedure on how to administer it safely.

The other side to that is that how to administer it is the technical side, but there's a whole humanistic side to that as well, as to the comfort level of an individual using it and the panic factor and all those things that come into play. Could you comment on that?

Ms Simmons: I don't want to be repeating the same point, but in 20 years in the field, watching the evolution of what our comfort level is with CPR, I'm seeing strong parallels. We really did start off with, "Who could safely

do this?" and "Where might the harm be?" and "How difficult is it going to be to teach them?" We're certainly aware there are emotional factors and decision-making processes around that, but on a purely personal note I would say to anybody, "Go ahead." If I collapse, I'd much rather somebody tries it than hesitates because of their concerns.

Mrs Molinari: Then there's no danger in using it if an individual doesn't need it and someone uses it?

Ms Simmons: You can't say there's no danger about it. Certainly there are people with more specific knowledge than I have about each of the machines and what they can and can't do. I know some of them have built-in motion detectors, so that if you inadvertently jiggle the stretcher, the machine will tell you. It's a machine, though, and I suspect you can trick it. The question is, how do you work into your training program—and maybe it's as simple as making sure the legislation includes training so that those issues are appropriately dealt with.

The Chair: Mrs McLeod, and Mr Kormos has graciously surrendered a couple of minutes as well.

Mrs McLeod: Good. My first question may seem almost irrelevant, but I'm intrigued with the fact that coming under the college you're an emergency skills program adviser. Does that have you teaching emergency skills in the health sciences programs or are you an advisor to the faculty, teaching emergency skills to the faculty?

Ms Simmons: My main role is to hire our part-time faculty who would teach CPR, first aid and defibrillation. Our primary target group to date has been our students, who acquire those areas as a prerequisite to other health sciences programs. In the last few years and partly just through a little bit of internal promotion we've started to have people coming to take the defibrillation program as well, but at the moment it's more to make their application or resumé look good for certain positions.

Mrs McLeod: So you're already in the business of teaching defibrillation.

Ms Simmons: Yes.

Mrs McLeod: Does the college then have public access defibrillators that can be used?

Ms Simmons: We haven't finished that step yet. Like yourselves, we have a committee looking at it.

Mrs McLeod: That's where my question was coming from. I'm wondering how widespread that would be in the colleges. I guess what I'm wondering is, I'm hoping that the provincial government, all of us here, is going to pass this bill, I'm hoping the government is going to see that they have to provide the model of putting it into provincially owned buildings and I'm hoping that each of the municipalities will have the kind of leadership that we just heard from Windsor. I'm not sure we're all going to have medical directors who are going to pick up the causes, as Dr Fedoruk did in Windsor, but I'm wondering whether you see some ways in which that community leadership can be built. Public health units, college health sciences faculties, who do you think is out there?

Ms Simmons: We've struggled with the issue of whether the college is the target demographic for something like this. I think we heard a lot about where the majority of cardiac arrests are occurring. I've been a volunteer with Heart and Stroke in various capacities for most of that 20 years and I see time and time again in all of these fields that it's a dedicated volunteer or someone who has gone beyond their job, as Mr Currie has and as a number of speakers this morning have done. I don't know if the legislation can or should try to delegate who should assume the leadership.

Mr Colle: Thanks to Mr Kormos for giving up his time.

Again, I want to thank you for the interest and the work you've been doing, not only professionally but as a volunteer with Heart and Stroke. I guess the quote you read from the 1960s reflects the sentiments of Ron Kelusky, who is the head of Toronto ambulance. He said it's almost an echoing of the debate they had over CPR, where they said, "Only professionals should do it. Don't touch. You could hurt a person's ribs." It's something that was scary and that we should stay away from. So I think your quote really hit the nail on the head.

We're going through the same thing here. We have people saying—I even heard ministry officials saying that there are dangers with these machines.

The thing I ask you is, what are the dangers of not using them? Which is the greater danger? In what proportion are these dangers in using this technology?

Ms Simmons: Again, I reflect on a personal note. I live in a neighbourhood where purely because of the expected response time, anyone who would have a cardiac arrest in that neighbourhood wouldn't make it. When you look at a 10% increase in mortality per minute of response time to getting a defibrillator attached, those people would not survive. It's very unlikely.

If you look in the paper I distributed, the first page of an article from the Nevada casino study, you look at a defibrillator shock in under three minutes resulting in a 74% survival rate versus our current system, which allows us probably not as good as 3% to 5%, but in many communities 0%. To me, that's a dangerous path to take, when to correct it is so simple.

Mr Colle: Just one question about the training aspect. When training takes place in colleges, does the CPR training go hand in hand with defibrillation training?

Ms Simmons: We offer it as separate programs. At the moment, to my best knowledge, Humber College is the only college in Ontario running the defibrillation program. But we expect and in fact make it a prerequisite that they must have CPR training before they take the defibrillation training. So they'll come in with that knowledge and be expected to use it as part of the course.

Mr Colle: You would recommend, if the provincial government was involved in setting parameters or setting down guidelines for the use of defibrillators, that the training be combined, that they take both, that it basically be part of a package?

Ms Simmons: I think it's the only reasonable starting point, and I think it may be the best for the long run as well. I have a different perspective. Some of the speakers have been concerned about the safety aspects; I'm concerned about making sure we don't put a defibrillator into a building and say, "There it is on the wall. Use it when the situation arises," and everybody is so scared of it and of what can go wrong that nobody ever touches it.

Mr Colle: Yes. As you said about CPR, we're afraid to use it because we're not comfortable with it.

Thanks so much for your information.

The Chair: Thank you, Ms Simmons. We appreciate your comments.

ONTARIO PARAMEDIC ASSOCIATION

The Chair: I now wish to call forward the delegation from the Ontario Paramedic Association, if you wish to have a chair, and we would ask you to identify yourself for Hansard.

Mr Robert Burgess: My name is Rob Burgess. I'm the president of the Ontario Paramedic Association. I'm pleased and honoured to speak to you today on this matter. Having sat here for the last two or three presentations, I'm pleased to hear that there is a common thread that I'm going to re-emphasize. I'd like to speak to you today from the perspective of the paramedic.

Briefly, the Ontario Paramedic Association was formed in 1995 to represent paramedics in this province. In the few short years since its inception, the voluntary organization has grown to a membership of over 1,200 paramedics and 23 chapters throughout the province. The primary goal of the OPA and the membership is to promote professional issues like education, patient protection and safety, and to appeal for rigorous standards of practice. The OPA is also extremely interested in seeing advanced care paramedicine established as a benchmark throughout Ontario and continues to explore expanded scope-of-practice opportunities to creatively assist the patient population through community involvement. It's important to note that the OPA is not a labour body.

Paramedics are health professionals who practise controlled medical acts in many settings in Ontario. We work closely with emergency physicians, often by telephone patch, while administering life-saving care to a patient in the out-of-hospital environment. Paramedics are required to complete a two-year educational program at an Ontario community college to become a primary care paramedic. Primary care medics can defibrillate patients in cardiac arrest and administer medications to treat ailments such as chest pain and diabetes.

Following this, selected candidates apply to re-enter the educational process for one year to become advanced-care paramedics. This now allows the paramedic to provide advanced therapies such as intubation, intravenous initiation and medication administration, as well as emergency tracheotomy and chest thoracostomy in cases of a collapsed lung.

Our finest paramedics then continue their educational track to become critical-care medics. These practitioners can provide a vast array of medications and therapies as well as performing a number of surgical procedures. They are also responsible for monitoring critically ill or injured patients while performing inter-facility transfers.

Paramedics in Ontario work in ambulances and aircraft, in hospitals and research clinics, and are often found servicing special events.

1400

Now I would like you to join me on a call. I want you to be my honorary paramedic partner for the next few minutes.

We're dispatched to a busy shopping centre in the middle of the city during rush hour. It seems that a gentleman has collapsed while shopping for a toy for his granddaughter. I had to tug your heartstrings a bit. We race through the city streets, narrowly avoiding any obstacles. I've done this before, so you're not to worry. Why are we in such a hurry? It's time. Time is precious. As Tennessee Williams once noted, time is the longest distance between two places, and nowhere is this truer than in an ambulance on the way to a call. The fact is, time may have already run out.

We arrive at the mall and are met by a security guard who guides us up the escalator to the second floor. Suddenly an update comes across our portable radio: the patient is in cardiac arrest. Fire personnel have just arrived and are beginning to work on the patient. We continue our trek past bewildered shoppers oblivious to our presence. They don't pull to the right, either.

Finally, we are at the patient's side. The firefighters report that the patient is pulseless. They have defibrillated the patient once and are now doing CPR. I of course quickly intubate the patient while you attach our cardiac monitor and start an intravenous line. You're pretty slick. The monitor shows a flat line. That's not good. We give a number of drugs and aggressively treat this gentleman on the floor of the mall. Occasionally we take a breath, and I realize that the patient's daughter is standing nearby. I'm going to have to tell her soon.

I speak with our delegated physician at the base hospital. We give more drugs while moving the patient to the stretcher. Watch those lines, and don't lose the tube. All right, let's get going. The physician asks me to call her back once I'm in the ambulance. We walk past stores full of shoppers and I notice the fire hose mounted inside the glass case and think, "What if?" In the ambulance, I patch back to our physician. The patient is pronounced dead. I'll tell the family at the hospital.

Working a cardiac arrest is like coming up to bat in the bottom of the ninth inning with two out, no one on base, and you're down five runs. Those are the odds. Occasionally we win, and that, frankly, is remarkable. A ball club will employ any strategy that may help them win; so, then, should we.

The OPALS Study, which you've heard much about, conducted in various cities in the province, demonstrated that early access to defibrillation led to a significant

increase in patient survival. It suggested approximately 21 lives per year were saved, by the results of the study. It recommended that public access defibrillation programs be placed in centres with established EMS systems. Both the American Heart Association and the Heart and Stroke Foundation of Ontario strongly recommend that PAD programs be implemented as widely as possible. Bill 51 would do just that.

People in my business talk about the chain of survival. This chain identifies those elements that must be in place to afford a victim of cardiac arrest the best chance of survival. Interestingly, the first three links of the chain relate to the layperson and the first responder, and include early recognition of illness, calling 911, and doing CPR. The application of a defibrillator has recently been added to these early links. Conceptually, one may question the application of a medical skill by essentially non-medical people. I'll point out from the paramedic's perspective that this is not an issue, but it does require discussion about training standards and quality management. More about that in a minute, but first an historical perspective, and this is following up on what the previous speaker said.

CPR was a skill that only physicians could do as recently as the 1970s. The application of a defibrillator by ambulance attendants in Ontario was first explored in the mid-1980s. I'm not dating myself, but I happened to be one of those people. We used big, bulky units that required the operator to press the paddles against the chest, an image that was popularized by many TV shows about emergency care. These units also required the operator to interpret the heart rhythm and then decide if defibrillation was necessary. Obviously, this required training and skills that the average layperson would not have.

Fortunately, today's units are sleek and take much of the guesswork out of the procedure. The operator must know when to apply the unit and then simply follows instructions provided by the voice prompts. This doesn't mean that training is unnecessary, however. Paramedics across this province will generally be the first health care providers receiving patients who have been defibrillated by PAD providers. It is therefore important that I take a moment to discuss our related expectations.

Transferring care from PAD providers to paramedics must be as seamless and patient-friendly as possible. This means that protocols must exist to demonstrate when and how this should occur. This issue can take many forms, but in no instance is it as imperative as in the case where a patient is receiving defibrillation by the PAD providers when paramedics arrive. Similar protocols do exist now, however. Medics and firefighters have protocols indicating when the firefighter will transfer care to the paramedics at the scene of a cardiac arrest. These protocols should be consistent and followed in all PAD programs. This may seem trivial, but the process is critical from the patient's perspective.

Another issue related to the transfer of care is equipment. When the Ministry of Health deliberates about guidelines and sets standards for these programs, it should consider the need to have standardized connectors for the defibrillation pads themselves. Each type of defibrillator has subtle differences, but the one similarity should be the method by which the pads are connected to the unit itself. This would allow the PAD provider to move care to the paramedics in a much quicker fashion, alleviating the need to remove one set of pads and putting another set on, which obviously can be time-consuming. This would also result in economies of scale and reduce the overall costs to the taxpayer. Universal connectors would certainly make the job of saving lives easier.

Training is another matter that needs clear direction and consistency of approach. Please consider for a moment one of the most famous movies ever, and one of my favourites, The Dirty Dozen. Although you've heard that save rates in casinos and jails are among the highest, I'm not implying that we round up a bunch of hardened criminals from death row and test our training programs. Instead, I always remember how the convicts in the movie were trained to do their task. It was repetitive, easy to understand and attempted to consider every contingency possible. Lee Marvin ensured that his troops knew the protocols in their sleep. Training someone to use a defibrillator is similar. It will be an infrequently used skill, therefore requiring a solid initial training program and ongoing maintenance plans to ensure competency when the time does arise to use it. Provider testing must be objective and strict enough to secure patient and provider safety. Further, it is imperative that these training programs describe the importance of basic skills like CPR and initiation of emergency medical services through programs like 911. Providers must understand their limitations and recognize the importance of their role on the team.

Quality review processes must also be considered within this initiative. Each case where a PAD provider was involved should be thoroughly and objectively reviewed. To do this, good data is integral. The Ministry of Heath should make consistent and valuable data capture a priority. Data will also allow for improvements to be made in the system where necessary and provide us with a resource to describe program demographics and overall impact.

I've briefly spoken to standards of practice but now would like to expand on that thought. Practical, simple standards must be developed to ensure that all the aspects that make up a comprehensive PAD program exist and are maintained. I am an advocate of utilizing local and community expertise to assist with their development and application. EMS providers, along with the established network of base hospitals in this province, must lead this important program. This system has developed and maintained excellence in the delivery of pre-hospital medicine for people of this province and lends itself to doing the same for PAD programs. It is also imperative that paramedics are involved at every level. Obviously I offer the Ontario Paramedic Association as an organization that could assist you with the task at hand. Frankly, next to

the patient, paramedics are the group most affected by this bill.

In closing, I would like you to consider once again the call you and I did together. Think about the next time you are walking through a mall or train station or watching your favourite professional sports team. You may be in the middle of a large centre with an excellent EMS system, but look around and you'll realize just how far you are from life-saving care. Public access defibrillation will bring you closer.

The Chair: Thank you, Mr Burgess. We'll begin with the Liberals. I think we have about two and a half to three minutes each.

Mr Colle: Thank you very much for coming, Robert. I think you've given us a very real step-by-step example of what you go through. I was just thinking to myself, as you're rushing from place to place and trying to get to that person who has just had a cardiac arrest, what that must do in the pit of your stomach as paramedics try to get there. It must be very difficult to deal with on a daily basis.

One of the areas we were trying to explore and that you may have some feedback on is in terms of trying to get this technology available in rural and remote areas where there are distances for paramedics, never mind the obstacles you have in the city. Can you give us any insight in terms of the challenges in rural and remote areas of Ontario?

1410

Mr Burgess: Certainly you look at the commonalities that exist with large centres. If your goal is to place these units in areas that have large public gatherings, I think you can take the same sort of approach in any setting. It always will be a challenge to deal with rural Ontario with respect to early access to health care. A mall in any centre in Ontario is like a mall anywhere else; therefore this would help. The challenge of trying to get a defibrillator to somebody living on a farm in a remote area of Ontario isn't something I think this will help address, unless there is a trained PAD person on that farm. There was a quote once that said the best person to use a defibrillator is the person standing next to you.

Mrs McLeod: We've almost had a sense today that if you don't get there in eight minutes, there's not much point. I guess the concern I have with that is that I've looked at the response times in rural areas. There are many of them, not just in northern Ontario but in southern Ontario, where you're looking at 25 to 30 minutes plus. Is there any point in having a defibrillator on those first response teams, or should we concentrate on trying at least to get it into a mall where some people can be helped?

Mr Burgess: Certainly you can't ever know exactly what's happening on a call. In the example I used, if you recall, the crew received an update about halfway through the call that the patient was in cardiac arrest. Most times we don't know when the cardiac arrest occurred. It may occur as we walk through the door; it may have occurred hours beforehand. The whole objective behind having multiple people trained in a skill like defibrillation is the shotgun approach to things, where you use an elephant gun to shoot a fly. The more you have, the more likely it is to be successful. However, I think if you look at the demographic you're trying to deal with, with this product, you've got otherwise healthy people in mass gatherings in large buildings and public buildings. Generally those people would be the ones who would probably benefit the most by having this at hand.

Mr Kormos: I liked your reference to The Dirty Dozen, except I realize that if you were to access jails to get a team like that, you would end up with some corrupt senators instead of hardened criminals.

It's interesting, with the Windsor group—I didn't learn until afterwards that the head of the program is a seconded firefighter, which is again similar to what you do. He's out there in front-line work.

When you talk about the involvement of paramedics in the planning and development in any given community or jurisdiction, I trust, then, you're going to this issue of seamlessness, because you're the guys who come in and pick up where a layperson like me may have started. Is that right?

Mr Burgess: Absolutely.

Mr Kormos: Don't forget, I come from small-town Ontario, real Ontario, not the intersection of Yonge and Bloor. So when small towns approach this, you're talking about building a team with paramedics, perhaps with firefighters, with all the people who have to pick up the pieces after the layperson—I wish we had more time. I wish we had more time with everybody, because I was interested in how Windsor initiated this, and this linear thing, because I was concerned about the fact that police cruisers and fire departments don't have these machines. That's why I appreciated your comment, because I was sort of getting left to hang out to dry on that issue. So you're saying that if I'm going to have a cardiac arrest, it may not be a matter of me being this, and then, boom. There could be any number of intervening things that happen that would cause somebody to call 911, for instance.

Mr Burgess: Correct. In fact, one of the things I think we should emphasize in any training program is to try to prevent this from happening. If somebody is having chest discomfort, they should try to seek medical advice and help as soon as possible. But you're absolutely right: we can't really predict at what point we'll enter with that patient. We hope it's sooner rather than later.

Mr Kormos: So firefighters and police cruisers have to have this equipment as well as having this equipment in public places or quasi-public places. The two things have to happen simultaneously.

Mr Burgess: I think the Heart and Stroke Foundation made the point—and I guess the AMA, the American Medical Association, as well—that frankly if your job means you could come across people who are ill, then, yes, you should be trained.

Mr Kormos: Good. I understand it better now than I did earlier.

The Chair: Mr Beaubien?

Mr Beaubien: Thank you for your presentation this afternoon. Mr Kormos thinks he comes from rural Ontario, a small town. He comes from midtown; I come from small-town Ontario.

Mr Kormos: I've got towns smaller than your town.

Mr Beaubien: When we look at the bill, it says under section 2, "Portable defibrillators shall be installed in a readily accessible and highly visible place," and it talks about buildings under the jurisdiction of the province of Ontario and municipal buildings, and then it talks about "Privately owned buildings to which the public has general access."

Research tells me that 75% to 80% of sudden cardiac arrests occur in the home. Then you mention in your presentation some resulting economies of scale to do some things and reduce the overall cost to the taxpayer. Taking that into consideration, all these buildings and that 75% to 80% of cardiac arrests occur in the home, I have yet to hear anybody here today tell me a costing issue. We're talking about a motherhood issue here. It's very difficult to speak against it. But nobody is giving the costs. If we were to put units in all these buildings and if we were going to catch the 75% to 80% where cardiac arrests occur, how much money are we going to spend? Like you said, the taxpayer is going to have to pay for it.

Mr Burgess: I'm not the expert in that area, and I'm not trying to be evasive in any way. But there certainly is a cost to anything that is worthwhile. From a conceptual perspective, I'd certainly point out that there isn't a room in the city that doesn't have the ability to put out a fire if it starts. If you look statistically at the number of fires that occur in shopping malls and public buildings, I think it would probably be a very low number. Yet I don't think any of us would deliberate on whether we want to remove the cost of having proper fire-suppression devices in any room.

I think you have to take a similar approach to this. When you make this decision, it really is an insurance policy that you buy. It's important to the person you use it on. Putting a value on a life is very difficult for me. My perspective is patient-care centred.

Mr Beaubien: Yes, but if I use the analogy you used, and you equate this to the fire protection we have in place, we're at a certain place or level with fire protection that has been developed over a period of 100 years. It did not occur overnight.

Mr Burgess: No, but this issue has probably occurred over hundreds of years too. We're now talking about a different level of provider using a device that has been in place for a number of years. It goes back to the 1960s and probably before that. I'm not a medical history expert, but certainly this is an issue that has had decades of development.

Mr Beaubien: You've heard different presenters suggest there is some danger in using that equipment and that there are certainly some benefits. As a paramedic, how do you react to that?

Mr Burgess: You have to teach anyone who is going to use any piece of equipment respect. Frankly, I would feel much more comfortable teaching my son, who is 10 years old, to use this device rather than my chainsaw.

Mr Beaubien: So you feel that training is the key issue?

Mr Burgess: Absolutely.

The Chair: Mrs McLeod, quickly.

Mrs McLeod: To legislative research, actually, while the next speaker is coming forward. I think Mr Beaubien's question is one this committee should give some thought to. I'm wondering, would it be unfair to ask research if it's possible—I know we've got some initial studies that show, and we'll probably have to use Windsor, the number of lives saved over a given period of time. If you just took the Windsor casino study, looked at the cost of putting in the defibrillators and the number of lives saved in the lifespan of the defibrillator, which we've heard now is seven to 10 years, I think, and compared that with some other measure—for example, the cost of a heart transplant—is that an unfair research task?

Ms Elaine Campbell: I'll look into it.

Mrs McLeod: Thank you. I think there's a relevance to that. Something new strikes us as being very costly on an individual basis, but we spend a lot money saving individual lives in our health care system.

1420

HEARTSAFE EMERGENCY MEDICAL SOLUTIONS

The Chair: I now call forward our next delegation, representatives from Heartsafe. Good afternoon. Have a chair, and we ask if you would please identify yourselves for the committee.

Mr Blake Hurst: My name is Blake Hurst, corporate director of marketing for Heartsafe Emergency Medical Solutions.

Mr Glenn Burke: My name is Glenn Burke, president and director of education for Heartsafe Emergency Medical Solutions.

Mr Hurst: Chair and committee members, thank you for allowing us to share our thoughts on Bill 51, the Portable Heart Defibrillator Act. We'd also like to thank Mr Colle for the work he has done in bringing the act to this stage. He has spoken out on behalf of public access defibrillation at a number of functions we've attended, and his support for public access defibrillation has been more than commendable.

I'll tell you a little bit about our company and the perspective we hope to bring to this afternoon's discussion. Heartsafe Emergency Medical Solutions is a private sector company that provides first aid, CPR and defibrillator training and equipment. Our programs are approved by the Workplace Safety and Insurance Board, Health Canada and the Ministry of Health. All of our training is provided by paramedics.

So we go into the workplace, we do first aid training, CPR training, AED training for our clients, and the people delivering the training are paramedics who for the most part work for ambulance services in the province of Ontario.

We hope to be able to bring two perspectives to this afternoon's discussion: one of a private-sector program delivery agency and the other perspective that we hope to be able to bring to this discussion is that of our clients. I'm going to talk a little bit about our clients because I want all the members of the committee to understand the breadth and the variation in the types of clients that we're working with and the organizations across the province that have already implemented defibrillation programs because they've looked at defibrillation and determined that it's the right thing to do for their employees, their guests and the people who use their facilities.

We've also kind of done some straw polls with our clients and our prospective clients over the last few weeks leading up to this presentation to make sure that if they had any important messages that they wanted to share with the committee, that they would be able to relay them through Glenn and myself.

We work with Clublink Corp at all their private golf clubs. We also work with the National Golf Course Owners Association, many public and private clubs across Ontario. We work with Cadillac Fairview Corp and have installations at many of their shopping malls and office towers across the province, including Intercity shopping mall in Thunder Bay, Georgian Mall in Barrie and the Toronto Eaton Centre. We work with large property management companies like Olympia and York at the Scotia Plaza. We're at the TD and BCE Place. We're working with fitness clubs like the Mayfair fitness clubs. The House of Commons and the Senate of Canada are groups that we work with, and we have equipment and trained personnel at both those venues. We work with fire departments from Algoma right through to Perth—large and small fire departments—on both the equipment and the training side. We have implemented programs at the Ontario Police College and we are in discussions with several police services across the province, including the Ontario Provincial Police, at a number of levels. So we believe that we bring a breadth of experience to today's discussion.

We want to use the time today to talk about two issues, things that keep coming up over and over again. The first is that we would hope that in its final form, Bill 51 and any regulations that are attached to Bill 51 by the Ministry of Health and Long-Term Care encourage the deployment of AEDs into our communities. I guess the opposite of that would be discourage, and we'll talk about that a little bit.

So we want legislation that encourages AEDs in our community for the stated goal of achieving rapid defibrillation. I think that the way the bill sits rights now, it comes very close to that, although we have concerns about what regulations may be attached.

The second thing that we would hope, and would ask, is that Bill 51 and its attachments be the definitive and singular set of rules and regulations, policies and procedures for public access defibrillation in Ontario.

One of the concerns that we come up against in this area is that there are currently a number of municipalities that are looking at passing bylaws and that is, just really quickly to state, organizations like the delegation we heard from Windsor. The work they're doing is absolutely excellent. We just hope that everything can mesh together in one set of regulations that everyone in Ontario can follow.

So just quickly I'll go back to the first issue of encouraging public access defibrillation, as opposed to getting into an over-regulatory situation that would actually discourage private sector companies and even certain public entities from putting defibrillation programs into their facilities. These machines are easy to use. They are intuitively obvious to operate. I know that as lawmakers, you have to balance out policies that protect the public versus poorly thought out or poorly planned policies that actually endanger the public, and Ms Molinari has been very diligent this afternoon in ensuring that her mind is at ease with the danger side of things. I think that's a valuable discussion, but the machines are intuitively easy to operate. The technology has been validated.

Without asking the committee to take anything on face value, I believe we can look to the Food and Drug Administration in the United States and Health Canada as agencies that have thoroughly vetted the public access defibrillation machines that are currently available on the market. We wouldn't be here today talking about PAD if those agencies were not convinced in their minds and their hearts that these machines were safe to use by lay responders. So again, I wouldn't say take it on face value that Health Canada has done its homework, but perhaps as a research issue you could look into what Health Canada says about the public access defibrillators that are currently available. I know they are convinced that these machines are safe and effective for use by lay responders.

Training is absolutely important. We have never corporately and we would never suggest to anyone that they purchase a defibrillator and put it into a facility or on to a property without appropriate training. At the same time, we hope that training doesn't become a burden. Many of our corporate clients have gone out of their way to make time for key employees who are involved in their corporate first-response team to receive CPR and defibrillation training so that they can use the equipment safely and effectively. At the same time, we know that if they are told by law that these employees have to take two- or three-hour refresher courses every 90 days or 180 days—and we've heard some of these numbers thrown around—that would then become a barrier for them putting defibrillators on to their properties. "How often do we have to pull our guys out of work or our team out of work to recertify or retrain on the equipment?"

So we would encourage that the committee look at and later on that the civil servants at the Ministry of Health

and Long-Term Care look at the guidelines established by the American Heart Association and the Heart and Stroke Foundation of Canada and use those guidelines as guidelines that we can all live by. These guidelines have been internationally accepted. We believe that for the most part they address most of the contingencies that arise when using an automated external defibrillator, and we try to develop our training protocols in conjunction with those guidelines. The other organization whose guidelines we incorporate into our training is the Provincial Base Hospital Advisory Group. This is a group of doctors and paramedics who have put a lot of thought into public access defibrillation, and their recommendations are certainly integral to a successful program. We encourage guidelines that companies can live with on the training side.

Rob spoke very well previous to me. One thing that he brought up was compatibility. That's an issue we're not totally comfortable with, because trying to achieve compatibility could actually create barriers to putting defibrillators into the community. If the machine that a Cadillac Fairview shopping mall has is not exactly compatible with the machine that's being carried by the local ambulance, that could be a barrier. We don't believe that barrier should exist. If you want to ask me a question about that later, feel free, but the bottom line on that one is that we want to encourage people to have machines on their properties that are approved for sale in Canada by Health Canada.

So that's our discussion on barriers and on regulations that are simple and easy to follow. We believe they've already been created; they don't need to be re-created. Organizations around the world have put out excellent guidelines on public access defibrillation.

The second issue that we wanted to talk about, and I'll be very brief on this one, is that we would want to see Bill 51 and any regulations attached to it be the definitive legislation for public access defibrillation in the province of Ontario. Currently, there are municipalities considering bylaws. We think it would be a barrier to putting more defibrillators into our community if organizations had two, three or 14 sets of rules that they had to live by. When we look at a company like Cadillac Fairview, which has taken on an excellent and commendable corporate initiative to put defibrillators on all their properties, if they have a set of rules they have to follow in Kingston and a set in Toronto and a set in Windsor and a set in Thunder Bay—I think you see where I'm going with this—it becomes a barrier to Cadillac Fairview putting defibrillators on all their properties. If they transfer people from one mall to another, the skill set can be transferable if we have one set of regulations for the province. Again, I think we can look to the Heart and Stroke Foundation and the Provincial Base Hospital Advisory Group to help us shape those regulations, but we would hope that Bill 51 is the definitive piece of legislation in the province.

Just in closing, we would like to state our support for Bill 51. We think it's an excellent piece of legislation and we hope that when the final tune-up is done and the regulations are attached to it that it is a document that will encourage organizations in Ontario to put automated external defibrillators on their properties.

1430

The Chair: Thank you, sir. Comments, beginning with the NDP. We have a little over two minutes each.

Mr Kormos: Let's talk about the compatibility issue, because I was impressed by what was said and by the rationale for it. It seems to me he's talking about connectors, he's talking about consistency, let's say, in power supply so you don't have a—I don't know what they are, but you don't have a six-volt machine versus a nine-volt machine. I presume it's as simple as that, because this is complex stuff. It's like RCA connectors versus DIN. Do you know what I mean?

Mr Hurst: Absolutely.

Mr Kormos: Doesn't it come down to something that simple? We're not talking about the guts of the machine, are we?

Mr Hurst: No, not at all.

Mr Kormos: Then why can't we talk about compatibility, at least compatibility municipality to municipality, so that when my EMS down in Niagara uses a certain type—so that the places that have these defibrillators are compatible, not necessarily between Niagara paramedics and Toronto, but certainly within Niagara? What's wrong with that?

Mr Hurst: There are probably about three or four reasons. Number one might be different capital acquisition schedules, so that I buy a machine this year and then the local EMS re-equips itself two years from now and then the local emergency room re-equips itself two years after that, and I've just bought a $5,000 machine for my golf course and I've been told that it will be valid technology for a decade, and then four years down the road I find out that my local EMS has bought all new machines and they're now recommending that I buy a new machine.

Mr Kormos: But again, I'd have to know how these things are built and whether it is similar to an RCA jack versus a DIN jack.

Mr Hurst: I think another issue is just best-practices paramedicine. Do you actually want to inherit pads that were placed by a lay responder? You're a professional paramedic and perhaps it's most appropriate that when you arrive on the scene, when it is appropriate to transfer the care of the patient from the lay responder to the paramedic, that the paramedic take off the pads placed by the lay responder and put pads that they've taken from a known and trusted source on to the patient, ensuring that the pads are placed absolutely properly. Perhaps the lay responder didn't place the pad over an implantable defibrillator or didn't properly shave the patient's chest. So in taking full responsibility for the care of the patient, they start by placing their own pads on to the patient.

Mr Kormos: I understand what you're saying. You've got to understand, Frank Sheehan and I are on opposite ends of the spectrum.

Mr Hurst: It's just a thought on compatibility.

Mrs Molinari: Thank you very much for your presentation. You've obviously been here for most of the morning and listened to the other presenters and are very observant. My whole concern around this issue, of course, is life saving, and that is what we would all like to do. You touched on a couple of things, and Mr Kormos talked about the compatibility. That was going to be something I wanted some clarification on. As we go through the process with presenters, every presenter brings a whole new view and a new issue and other things for us to consider. So I'm not going to ask you to again address the compatibility, but you also talked about regulations and the importance of the regulations being the same throughout. What would you see would be necessary in regulations to address the concerns you have raised with some disparity in a variety of regulations in various municipalities rather than province-wide?

Mr Hurst: I think just to move quickly to adopt something that is based on a compilation of the Heart and Stroke Foundation guidelines and the Provincial Base Hospital Advisory Group guidelines. I think the appropriate guidelines and regulations already exist. I guess my fear would be that people try to add to them or put licensing fees and certification, and if your wallet card doesn't say that you've retested in the last 180 days, it's illegal for you to use the defibrillator. Those are the kinds of regulations that we would worry might come into existence and create barriers to defibrillation.

I reiterate that we encourage responsible training programs. I heard a person in a position of authority suggest the other day that if your wallet card was expired, it was against the law for you to defibrillate someone in the province of Ontario, and this was a person who should know better. In fact, it's actually legal for anyone in this room to defibrillate anyone else in this room right now if one of us were to drop to the ground, vital signs absent. Fortunately, Dr Verbeek's here, so the rest of us may not have to act so quickly.

Mrs Molinari: Your comments on encouraging public access—and certainly you had something—that what you want to do is encourage its use, and for that to happen and for it to be safe, the training that is involved and certainly based on your credentials, that is what you do.

Now, in having them in public places and having individuals have access to them, some presenters talked about having a group of people who would be specifically trained, and these would be the people who would be using the defibrillator. There may be varying times where in some places they're used often, in other places possibly never used, and then there's the whole factor of the updating of the battery and all of those things that are necessary to be looked at so that it's in a working state all the time. The training as well, then, would have to be ongoing. I would like you to comment on that. For someone who receives the training but never actually puts that training into practice for an extended period of time, would there not be a need to have ongoing training, a refresher on how to administer? If there were to be changes in the—not changes in the actual defibrillator. If you've got that once, certain use, and that's just the way you would use it.

But the other thought that comes to mind is the whole thought of the confidence level of the individual using it, and the fear factor and the panic factor that may come in. "Gee, I was trained in this about eight months or a year ago, and now here I have to use it, and I'm not sure I remember everything." Can you comment on that?

Mr Burke: Certainly in any type of emergency medical training environment, the fear factor is probably the largest obstacle that we have to overcome as facilitators. When we train people in CPR and defibrillation, the big challenge is not so much teaching them how to use a defibrillator; it's teaching them how to do CPR, which is something we've been teaching in the public for 25 years. We still haven't got it to a point where it just rolls off the tongue and the hands and the lips of the people we teach it to.

Certainly as a minimum, people should have a structured CPR and defibrillation course. It probably should be in the length of six to eight hours in their initial program, and then as a minimum to that, they should recertify annually for sure, no doubt, CPR and defibrillation. Then you have to ask yourself, well, in between day one and the one-year recertification, how often will we expect this corporate person, this shopping mall to pull all the people out of work to recertify before it becomes cumbersome and a barrier? So typically now we recommend that at least at the six-month mark they do a two-hour refresher, and then we recertify them on a yearly basis. If they're using the defibrillator more frequently, then they should probably recertify more frequently.

The Chair: I'll go to the Liberals.

Mr Colle: Thank you very much, Glenn and Blake. If I look at this list of clients you mentioned, ClubLink, Cadillac Fairview, Olympia and York, they're pretty reputable international corporations. So why would they spend this money, make this effort to train staff, to buy the defibrillators, and the majority of other shopping malls or some private golf courses? I understand almost every golf course is probably going to have them. Why would the others not, and why would Cadillac Fairview and ClubLink etc make this investment?

Mr Hurst: I think it's just leaders and followers. In every industry there are leaders and there are followers. Cadillac Fairview and ClubLink, to use two examples, are progressive organizations; they're best-practices organizations; they believed it was the right thing to do; and they got their head around the legal issues. They realized that when a person has vital signs absent, no first aid intervention can make that person any sicker than they already are. The only thing you can do with a defibrillator is make a person better or leave them in the condition you found them, which is dead.

So from a legal standpoint, they were comfortable with the fact that they couldn't be sued or there was no liability attached. Perhaps a little bit, some of them maybe saw that there might be a standard-of-care issue

going the other way where they may be mitigating liability by putting the defibrillator on their property and avoiding the situation where a family survivor said, "You should have had a defibrillator at your shopping mall," or on your golf course. But I think the overriding issue is that these are best-practices, forward-thinking organizations. There are many organizations waiting for Bill 51, and they have told us that.

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Mr Colle: I found one of the blockages is this fear of liability. They call up their insurance agency and they look at it for two or three days and say, "I wouldn't do it." Is that what this legislation can basically mitigate, that advice from their insurance company and their lawyer that says you may have liability? In fact, haven't you found that there is growing liability on the other side if you don't have—

Mr Hurst: Absolutely. But to get 100% corporate buy-in—and this also goes back to Mr Beaubien's issue of cost. I think a lot of the cost of putting more defibrillators into our community will be borne by the private sector. I don't think Cadillac Fairview should get a nickel for putting defibrillators on their property. They've got enough money that they can buy their own defibrillators. Asking Club Links and most private golf courses—there are a lot of entities in our communities that can buy their own defibrillators. There are also a lot of community organizations that will pony up money for defibrillators in the community. I guess ultimately in one sense it's a fundraiser that comes from the taxpayer, but it's not direct tax dollars from the government of Ontario.

We can put a lot of defibrillators into Ontario communities just by passing Bill 51. It has the Good Samaritan clauses in it, and that is the reassurance that so many people and organizations are looking for. Companies like ours, or organizations like the group from Windsor, have already spoken to these companies, and many of them are just waiting for Bill 51 and that good Samaritan protection to give them the final level of comfort they need to go forward.

Mr Colle: And the liability protection they need, that the premises aren't liable because they've put the defibrillator onsite.

Mr Hurst: Absolutely.

The Chair: Thank you, gentlemen, for your input.

RICHARD VERBEEK

The Chair: I wish to call forward our next delegation, provincial base hospitals. Good afternoon, sir. Have a seat. I'll ask you to identify yourself for the committee.

Dr Richard Verbeek: My name is Richard Verbeek from the division of prehospital care of Sunnybrook and Women's College Health Sciences Centre. Mr Chair and members of the committee, I certainly appreciate the opportunity to provide my views on Bill 51. Before I proceed, I'd like to review some of my credentials and background which I feel make me an appropriate person to be presenting to you today.

I work as an emergency physician at Sunnybrook and Women's College Health Sciences Centre and, in particular, I'm a representative of the Provincial Base Hospital Advisory Group for Public Access Defibrillation. Many of my comments will be from that perspective today.

Additionally, I act as the medical director for the Toronto Emergency Medical Services and the Toronto fire service automated defibrillation programs. I'm the medical director for the city of Toronto public access defibrillation program and a member of the Heart and Stroke Foundation's advisory committee on automated external defibrillation. Lastly, I'm a contributing author to the Canadian Association of Emergency Physicians' position statement on public access defibrillation, which is currently in press and will be published in the September issue of the Canadian Journal of Emergency Medicine.

The premise of public access defibrillation is that early defibrillation saves lives, ergo earlier defibrillation will save more lives. We know that even in highly functioning EMS systems, there is a limited ability to provide defibrillation early enough to save most victims in cardiac arrest, such that the North American survival rate for most out-of-hospital victims of cardiac arrest is less than 5%. That's certainly the experience in Toronto and the province of Ontario. We also know that lay responders trained in automated external defibrillation could save more lives by responding more quickly to cardiac arrest than can be achieved by many EMS systems.

The epidemiology of community cardiac arrest is such that there really are few community cardiac arrests that occur in a public place that are amenable to public access defibrillation. In Ontario, that's approximately 15%, and that really does mirror the experience that has been published from a North American perspective. We also know that there is a dearth of high-risk public locations for community cardiac arrest outside of a few well-described sites such as casinos, sports complexes, shopping malls, large airports, shelters and community senior centres.

So what's the North American experience with public access defibrillation? We do know that in well-designed programs, mainly in casinos and perhaps using air flight attendants, we can achieve survival rates of cardiac arrest that approach, and in fact in some cases surpass, 50%. There is no other development within the world of medicine in the last 50 years that has achieved such a remarkable improvement in survival rates from cardiac arrest or any other serious, life-threatening illness. However, this experience has only been reported based on 179 cases, so clearly more experience must be reported before we can be comfortable with the 50% level. What we do know, though, is that the success of each and every single program relied on formal program structure, physician direction and training of targeted lay responders.

So what is the current status of public access defibrillation in Ontario today? There is no overseeing authority, there's no structure, there are no formal training requirements, there are no directions, regulations,

guidelines or standards, there is no formal requirement for physician direction, there's no requirement to even notify EMS systems of the existence of a PAD program, and there certainly is no evaluation process.

Compare the state in Ontario today to this soon-to-be-published position statement of the Canadian Association of Emergency Physicians, which is on page 7 of your handout. In particular, I refer to items 3 through 7, which, in an abbreviated format, would say that PAD programs should meet specific guidelines that are created by recognized provincial or national emergency cardiac care organizations, that PAD programs should be coordinated with local, regional or provincial EMS authorities, mainly to ensure compatibility of transfer-of-care protocols and that AEDs are registered with the local EMS authority, and that in fact there is a specific written, on-site emergency response plan for every PAD program.

Secondly, this association recommends that physician direction is required to oversee the development and authorization of PAD program elements. In fact, the provincial base hospital advisory group took the initiative over two years ago, when we did publish a set of guidelines that was alluded to by the previous presenter.

Most important perhaps is item number 7, which in total states that within PAD, the principle of the continuity of EMS patient care must be maintained to ensure that once 911 is called, every patient treated under a public access defibrillation program becomes the responsibility of EMS personnel, the EMS system and the EMS system's medical directives.

Public access defibrillation in Ontario is currently a rudderless ship. It's the antithesis of proven, effective, life-saving public access defibrillation programs. For these programs to make a meaningful contribution to lay responder treatment of out-of-hospital cardiac arrests, appropriate legislation is required to correct all of the deficiencies I've outlined.

How does Bill 51 measure up? I'd like to review Bill 51 in the context of my preceding comments. With respect to section 2, will the installation of portable defibrillators in buildings under the jurisdiction of the province of Ontario saves lives? I would say that would rarely be the case. Government buildings have never been identified as high-risk areas for cardiac arrest. However, this action would certainly serve as a leadership example for the rest of the province and I think would start the ball rolling for widespread development of public access defibrillation in perhaps more important sites. It's not that I don't want to save politicians; it's just that politicians seldom seem to die on the job.

Will the installation of portable defibrillators in municipal and private buildings to which the general public has access save lives? Almost certainly, if they're chosen properly. But clearly it's not feasible, as some of the members of the committee have indicated, to install defibrillators in every building of the province. That's where expert advice is required.

Section 3 indicates the Ministry of Health is required to develop and publish certain guidelines. This is where I have my first key recommendation for the committee to consider. I believe Bill 51 must establish an appropriate authority to oversee the development of these guidelines, training programs and protocols. This authority must provide province-wide medical expertise on the coordination of public access defibrillation programs with emergency medical systems. I also believe that a logical choice for this authority lies within the Ontario base hospital program.

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As an organization, we are recognized as the source of medical expertise for out-of-hospital care, ensuring that the citizens of Ontario receive the best possible patient care. Our task is to work at the provincial and municipal levels to ensure consistent, seamless, accessible, integrated and, perhaps most importantly, accountable out-of-hospital care. Our mission statement is, "We are the centre of excellence ensuring the provision of optimal out-of-hospital care through leadership and medical direction in a collaborative and cost-effective manner."

The base hospital vision statement is, "To be the source of medical expertise for out-of-hospital care, ensuring every citizen"—of Ontario—"receives the best patient care possible." Our values include those related to quality patient care, partnerships with all our EMS partners at the provincial and municipal levels, continuous quality improvement and continuous program development to ensure that we continue to deliver the best possible out-of-hospital care.

Therefore, my second key recommendation as we proceed is that Bill 51 must establish working rules to guide this designated authority. Although there are no Canadian examples of this of which I am aware, almost all states in the US have enacted PAD legislation that includes such working rules. I've included an example of those working rules in appendix 2, which is page 9. This happens to be an abstract from the Montana House, Bill 126. It was passed in 1999.

I won't go through them in detail, but I hope that as members of the committee you will take time to review them. You will see that they certainly establish an appropriate framework for the development of integrated, compatible public access defibrillation across Ontario. Certainly, and independently, the Canadian Association of Emergency Physicians has come up with its own position statement, which mirrors these guidelines very closely. I would add that these guidelines were developed independently and there was certainly no knowledge of this bill when these guidelines were initially worked on three or four years ago.

Regarding section 4 of Bill 51, perhaps some specifics regarding liability. This bill is fairly weak in that aspect. I agree that liability issues must be addressed; however, liability should include the agency that provides training, the involved medical director and the agency that purchases the defibrillator.

Lastly, from a physician's perspective—I'm surprised that Mike Colle didn't ask my opinion on this when he was developing this bill—the definition of a perceived

medical emergency is inappropriate. This definition really should be limited to the belief that a person in need of assistance is experiencing a cardiac arrest rather than a life-threatening medical condition. There are many life-threatening medical conditions for which it would be completely inappropriate to apply a defibrillator in any sense of the word. I wouldn't want to see legislation proceed where there is, within a bill, legislated permission to be attaching these defibrillators to a number of patients, which would be inappropriate.

I'd like to conclude my comments with compliments to MPP Mike Colle for all the work he has done in developing this bill. I think it's the right thing for Ontario. Public access defibrillation is going to occur in Ontario whether you like it or not. As you've heard today, it is in many places in Ontario. At the current time there is no way these programs can be controlled or evaluated, and I think this is a wonderful opportunity for the government of Ontario to take leadership in this area.

The Chair: Thank you. Comments? Mr Beaubien—about one minute.

Mr Beaubien: I want to make it very quick. Dr Verbeek, thank you very much for your presentation. I think it's very enlightening. First of all, I think we all realize this is a motherhood issue. As I pointed out before, it's pretty difficult to speak against it. However, I think you pointed out what I was trying to question some of the previous presenters about. There has been no costing. There has been no authority looking at where we're going to put this, how we're going to train people, where this should be. One of the presenters alluded to fire departments, that we do have hoses in public buildings. I agree, but there was a gradual process through the building code that we've implemented certain fire prevention issues over the years.

I don't really have a question. The other comment I would like to make is that maybe there are a few too many regulations you wish to see in this bill, but I think your presentation was very well thought out.

Mr Colle: Thank you, Doctor. Just remember, when I talk about provincial government buildings, I'm talking about places like courthouses and the Ministry of Transportation. We're not only talking about politicians, who are few in number; we're talking about the workers and the visitors in those buildings, as Justice Harris said.

I would just like to ask, in terms of your last comment that it's going to happen anyway, if this government and the members of the Legislature—because this is a private member's bill—decide not to do anything and let this rudderless ship, as you say, continue, what is the downside of that?

Dr Verbeek: I guess the downside is some of the comments I alluded to earlier, in the sense that we would really have no way of monitoring the progress of public access defibrillation.

One of the things I've learned in my capacity as medical director for many defibrillation programs is that the transfer of care of the patient from the time they have a cardiac arrest to the time they arrive in an emergency department has to be reasonably well organized, reasonably well orchestrated and to some extent seamless. The situation we often face right now in public access defibrillation is that there are a lot of providers out there who are not sure what their roles and responsibilities are. We have had instances where there have been, shall I say, difficulties with firefighters and paramedics actually being able to assume care from providers who feel some ownership of the patient, to the point where perhaps there has been detriment to the outcome of the resuscitation.

We are facing a situation where there are a lot of tails out there that to some extent are in a position to wag the dog. That's why the comment about the integrity of the transfer of care of a patient from a lay responder to an EMS system, and that patient becoming the responsibility of the EMS system, is so important. We have no ability to accomplish that within the current framework of public access defibrillation in Ontario right now.

The Chair: Mr Kormos, one minute.

Mr Kormos: There was a good example this morning. Maybe it got itself on a bit of a wrong track because it was the profile of a healthy 33-year-old woman with no previous disease. In other words, she wasn't old and didn't fit any clear profile, and she had fibrillation. You are suggesting that you can create profiles in the course of analyzing where you prioritize putting defibrillation equipment. If you had to prioritize, are you suggesting that my seniors' clubs in Thorold or Welland, for instance, are more appropriate places to put these? Because you're dealing with mature people or seniors, is that a more appropriate place than, let's say, some other place, or are you talking about the size of the venue or the number of people who travel through it?

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Dr Verbeek: There is an epidemiology behind all this. Cardiac arrests occur at a fairly predictable rate within a community. I can tell you that in Toronto we see approximately 1,800 cardiac arrests per year. It seldom, over the course of a year, varies by more than 100, in a population of 2.6 million.

So we can reasonably define for a site, based on the profile of the public that either lives there or attends there, what the expected rate of cardiac arrest is. There are formulas that exist. From that, the recommendation of the American Heart Association is that a defibrillator be placed in an area where you might expect a cardiac arrest at least once every five years. That's the importance of having medical expertise and medical input into the development of public access defibrillation, because we understand the nature of the beast and we're in a position of being able to provide leadership on that issue.

The Chair: Thank you, Dr Verbeek.

ST JOHN AMBULANCE COUNCIL FOR ONTARIO

The Chair: Our next delegation scheduled is St John Ambulance, Ontario Council. I'd ask the delegation to come forward. Good afternoon, sir. If you could identify

yourself for the committee and then proceed with your deputation.

Mr Philip Griffiths: My name is Philip Griffiths, and I am the director of sales, marketing and training for St John Ambulance, Ontario Council. So we're responsible under the Priory of Canada for the province of Ontario.

I'm here today just to say a couple of words. I believe that some of my peers most likely have been here this morning, and most likely you'll see them again tomorrow, so I thought I would keep my comments to you quite brief and perhaps come from a little bit of a different angle.

My job at St John Ambulance is actually on the business side. I have people who work for me who I would consider to be my content managers in the area of AED. But primarily my responsibility in the organization is to drive the revenue on the business side of St John Ambulance, which is indeed a not-for-profit organization. If you're not aware, it's our business side that generates the revenue that allows us to perform our community service events.

St John Ambulance has approximately 2,000 first aid instructors in Ontario. Our market share is approximately 65% of first aid training in Ontario.

I thought what I would do today is just overview some specific points in regard to the bill that I had met with some of my peers and discussed, without going into great detail, understanding that some of our other partner organizations like the Heart and Stroke Foundation would be presenting to you and perhaps be going into greater detail on the medical side.

First and foremost, we'd like to say that St John Ambulance fully supports the objective of the bill and also that St John Ambulance recognizes the use of an AED is currently considered a controlled medical act under the Regulated Health Professions Act, 1991, sections 27 and 29.

St John Ambulance recommends use of an AED be amended to a form of a first aid act. That has been done, for example, in Alberta and Nova Scotia.

We feel that this deregulation, much like CPR a number of years ago, will promote the widespread availability and use of AEDs in Ontario. We have some further basic recommendations:

Section 2 of the bill states, "Defibrillators shall be installed in a readily accessible and highly visible place in the following locations." St John Ambulance recommends the inclusion of specific workplaces, such as large office towers or industrial sites.

Subsection 3(3) states, "The ministry shall develop a training program and protocol in the appropriate use of ... defibrillators in conjunction with stakeholders that provide emergency services." St John Ambulance recommends that the ministry take into account the existing cooperative work between the Heart and Stroke Foundation, St John Ambulance and other providers. St John Ambulance already has in place an extensive AED training protocol. The ministry should look to adopt this training curriculum to avoid repetition and cost duplication.

I just wanted to point out that in regard to the delivery of the training for AEDs somewhere in the future, I think the committee should feel very confident in the fact that St John Ambulance, with 65% of the training market share, has 59 training centres located throughout Ontario.

We are indeed covered by a medical director. We are under the supervision of a medical director. The liability for all AED training is not covered by the St John Ambulance liability but indeed is covered by our medical director, Dr Edward Wasser.

In closing, those are about all the comments that we had today.

The Acting Chair (Mr John Hastings): Thank you, Mr Griffiths. We have some questions, probably. We'll start this time with the Grits.

Mr Colle: Thank you, Mr Griffiths, for being here on behalf of St John Ambulance, certainly a well-respected provider of first aid in this province, and for your work over the years in providing support at community events. It goes without saying that's much appreciated and not recognized enough, I'm sure.

In terms of some of your recommendations, I do appreciate those recommendations and I think the committee will look at those, because the committee, certainly speaking for myself, is very interested in getting these kinds of suggestions. This bill is open to input and interpretation, based on the input we get from professionals like yourself. So I think those are two very good recommendations that I've seen right off the bat.

In terms of your reliability, you talk about St John Ambulance and the trainers. What about the equipment providers? Is that covered through the medical providers' liability?

Mr Griffiths: That is a very good question, and I do not have the answer to that. However, I can get the answer for that to you by tomorrow. I did come in here today thinking that part of my responses would be the ability to answer on another day, as I don't have one of my content experts.

Mr Colle: I was just thinking of that.

Mr Griffiths: It's a very good question.

Mr Colle: It's one way for organizations like yours to get that kind of liability protection, and as was raised here today, the provider of the training equipment, how do they get protected? And the facility that perhaps employs that trained individual, what is their liability protection? I was just wondering.

My colleague would like to continue for a second.

Mrs McLeod: You mentioned the reference to the controlled act and the need to have an amendment that would make it a first aid act. I gather there is some controversy or uncertainty in Ontario as to whether in fact defibrillation is a controlled act. I understand St John Ambulance has determined that from your perspective it's a controlled act, so that you would not have your volunteers doing defibrillation now. Is that correct?

Mr Griffiths: From talking with the medical people in our business, anecdotally what I'm being told—and again, I've only been in this industry a couple of months; my background is in business—is that this kind of approach to a delivery of public first aid training is not new. Apparently the same kinds of things happened years ago with CPR, almost under the exact same conditions, where it was felt that it needed a lot of medical supervision and things like that. I've been told by my experts that you see the results today, that CPR is widely available and taught to the average person in public. We feel that the exact same situation could occur with AED.

Our current situation is that we have two kinds of certifications under which we train. We have what is called a non-certification class. What happens there is it's the same amount of hours and it's actually the same training course, but at the end of it the individual is not actually allowed to use an AED machine. They're not certified to use it and therefore not covered under the liability of our medical director. The other course is a certified course whereby they are allowed to use the AED. As I understand, to be able to take that course they have to be supported by their workplace. They have to be nominated to be that person who would be responsible for using that particular AED unit. We see in the future—perhaps to a certain extent it's simply a question of demographics—that as the age cohort between 50 and 75 increases in numbers, common sense dictates we are going to have more cardiac events, and what we're recommending therefore is this kind of training should be made available to the public in general.

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Mr Kormos: Further on that whole business of who is going to use these machines to administer defibrillation—I've got to check with these folks later because maybe I'm wrong—I'm hearing some people say it should be trained people, however modestly trained, who are permanently in that place, to wit, people who are on staff in the mall or what have you. And I hear from other people that, again, in a worst-case scenario, they don't care who it is as long as it's somebody who can read the instructions or follow the diagram and listen to the messages on the machine telling you how to do it. I guess, what the heck, you've got little alternative. What are you saying? Are you suggesting that only people who have at least a modest level of training should enjoy the liability immunity?

Mr Griffiths: No, I think what we're saying is that in the end, the more AEDs you have out in the public and the more individuals who are trained on the unit, the more chance that, if you or I have a heart attack somewhere, somebody will actually see the unit, recognize the unit and be able to use it.

One of the things we face in regular first aid training—and perhaps some of you have experienced this in the past, but we're seeing it evident. A standard first aid course or an emergency first aid course that's common, regulated by WSIB, is either eight hours or 16 hours in length. That doesn't necessarily mean that the person who has taken that training is actually going to have the confidence to be able to use it, quite frankly. It's one thing to have received AED training; it's another thing to actually have the gumption to run to the machine, pick it up and use it. What we're saying, Peter, is that there is more of a likelihood of a person having the gumption to pick up that unit and use it, even if it runs by itself, if they've actually had exposure and training on the unit and a basic background in CPR.

Mr Kormos: I appreciate that and I agree with that, but if I'm with Mrs McLeod and nobody else is around, I hope she throws caution to the wind and puts the things on me. Are you suggesting that only people with training, whatever that level of training is required to be—I want to know—are the ones who should be covered by the act in terms of the liability exemption?

Mr Griffiths: No, we are not.

Mr Kormos: Or should any person? The bill now says any person.

Mr Griffiths: Yes, that's right. In our consultation with the manufacturers of the unit and with our testing and our recommendations from our medical director, it can indeed by used by anyone. They are quite simple to use. Again, what comes into question is a person's confidence in their ability to use it. For example, you do have to take the white pads and put them on somebody's chest, and if you're doing one of these, you might not be able to do it. You might not even be able to place it correctly or you might drop the unit and break it, for all I know. So it really becomes a question of confidence. We are saying that the more people who are trained the better but that we fully support the AED proliferation.

As I heard mentioned before, there is the question really of, where is the funding going to come from? I was curious when that question was answered by the two gentlemen before. I think that's actually pretty key in this whole thing, especially in the private sector. It's one thing to have public access to defibrillation, it's good we're in the malls, but certainly if I'm an investment adviser down at TD or one of the numerous bank towers down there and I'm a 53-year-old middle manager in the right age group for a possible cardiac event, I'd like to know that my employer has actually purchased an AED and it's on the floor that I'm on. Who is actually going to pay for that? That's a very good question.

To a certain extent I think that regulation would obviously push companies to do that. That's why first aid training became so prevalent in Ontario in the 1990s, because it was provincially mandated through regulation 1101. To a certain extent you'll have preferred employer status. I believe, at least in the managerial group in that age group, if they have an advanced health and safety program that includes AEDs as an employee benefit, I'm going to feel a little bit better about that as well. The companies have to truly believe within their own health and safety program that there is a return of some sort in the inclusion of an AED unit in their workplace.

Mr Beaubien: Having spent a good part of my life in the general insurance business, the liability exposure

certainly is a concern to me. I think you're quite right. I think Dr Verbeek in a previous presentation hit the nail right on the head, that in order to have a carrier underwrite the risk, you're going to have to have a thought of a business plan as to who's going to do the training, what type of training, how long it's going to take and that type of thing. I stand to be corrected, but I don't think you'll find an insurance writer that will underwrite the liability of risk by just saying anybody can operate these machines, because I don't think anybody wants to leave themselves that wide open. I'd like to get your response on that.

Mr Griffiths: That's a good point. When I first came into this particular market, I had spent some time dealing with group carriers in the disability management field, and one of my first thoughts—without giving away some of my sales strategy; after all, I am on the business side—is that indeed I think you've hit the nail on the head. The carriers, when they underwrite risk, are very cautious.

I truly believe that part of the strategy to promote AED usage in Ontario would be, on the carrier side, that for them to underwrite policies there would have to be something in the policy, through the private sector at least, through the companies themselves, that they would either get a reduction in premium if their staff were trained in AED or indeed would not be eligible for that liability insurance unless they were trained in AED.

That goes back to the question another gentleman had raised: trained to what standard? That goes back to our conversation with the Heart and Stroke Foundation, Red Cross and ourselves. There is a history of these organizations setting the standard for delivery of first aid training in Ontario, and I would recommend that we be part of that setting of that particular standard.

But yes, I would think that for the carriers to be able to underwrite that, they would feel much more comfortable if they were actually able to put it into the policy itself. In other words, if you don't have the appropriate training, we will not be covering you.

The Acting Chair: Thank you, Mr Griffiths, for coming in and presenting your views today.

HEART AND STROKE FOUNDATION OF ONTARIO

The Acting Chair: Our next presenter is from the Heart and Stroke Foundation, Mr Anthony Graham. You have 20 minutes, Mr Graham, which you may utilize for your whole presentation, or you may leave some time for questions.

Dr Anthony Graham: Good afternoon. The Heart and Stroke Foundation of Ontario welcomes this proposed legislation as an important step forward in responding to cardiac emergencies and appreciates the opportunity to provide comments to this committee.

My name is Anthony Graham. I am chair of external relations for the Heart and Stroke Foundation of Ontario and have been a volunteer with the foundation for over 20 years. During this period of time I have been president of both the Heart and Stroke Foundation of Ontario and of the national federation. I am also a professor of medicine at the University of Toronto and a clinical cardiologist at St Michael's Hospital.

The Heart and Stroke Foundation has had a long history of concern and action on cardiac emergencies. For the past 25 years, the foundation has actively promoted cardiopulmonary resuscitation training and the concept of integrated emergency cardiac care across Canada. Recognizing the importance of automated external defibrillators—AEDs—the foundation established an advisory committee earlier this year to make recommendations to our board. The work of that expert committee informs this submission.

The foundation believes it is important for Ontario to have in place the best possible legislative and policy framework for the efficient and effective use of AEDs. This brief will outline why cardiac arrest is such a significant issue, the role of AEDs within the chain of survival, the foundation's perspective on the guidelines and standards required for the safe use of AEDs, the role of the emergency medical services system, and some recommendations with respect to the protection from liability proposed by the bill.

Cardiac arrest is a significant issue. As the committee members will know, heart disease is the number one killer in Canada. Every year in Ontario, approximately 6,500 people will suffer cardiac arrest, and this includes 1,000 people in the community of Toronto each year.

Very few will experience cardiac arrest outside of hospital and survive. The proportion of people who survive in fact is less than 5%. Most cardiac arrests are caused by what's called ventricular fibrillation, which can only be terminated by defibrillation. With each passing minute from the time of cardiac arrest, the likelihood of survival declines by 10%. If defibrillation does not occur within 10 minutes of the cardiac arrest, the possibility of survival is very limited.

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Cardiac arrest cannot be reliably predicted. In fact, cardiac arrest can be the initial presentation of clinical heart disease. Consequently, immediate access to the chain of survival is essential. AEDs are an important part of the chain of survival. Automated external defibrillation is an efficient and effective means of achieving rapid defibrillation. I presume this committee has already had an explanation and a demonstration of how AEDs work, so I will not take the time to elaborate. In short, AEDs are safe and easy-to-use devices and may, with the proper training, be effectively used by both medical and non-medical personnel.

US studies show that with the increased use of AEDs within the emergency system chain of survival, survival from cardiac arrest can be as high as 40% to 53%. The AED program in place at Casino Windsor suggests a similar pattern in terms of improved survival. While there is still limited research on the effective use of AEDs, there is strong support for the argument that they repre-

sent a significant addition to the response to a cardiac arrest.

It is important to put AEDs in the context of the chain of survival. This term is used to describe the steps required in the process to save lives of people who have had cardiac arrest. The ultimate goal of the chain is to minimize the time involved from the onset of cardiac arrest to treatment. The four most important components are:

(1) Early bystander recognition: once bystanders recognize the emergency, the emergency medical services system must be activated by calling 911 or the local emergency number. Delays are usually caused by a lack of recognition of the signs of a cardiac problem, either by the individual or the witness, and the lack of a 911 number or an emergency tiered-response system. It is crucial that the public have access to information regarding the signals of a heart attack and cardiac arrest and the appropriate use of the EMS system.

(2) Early cardiopulmonary resuscitation, or CPR: to increase survival, basic CPR must be started immediately after a cardiac arrest is recognized. CPR keeps oxygenated blood going to the brain. Delays are encountered when bystanders are not trained in CPR. Widespread citizen training in CPR continues to be critical, even in the days of AEDs.

(3) Early defibrillation: defibrillation will re-establish the normal spontaneous rhythm of the heart and is the link most likely to improve survival rates in people experiencing ventricular fibrillation. The speed with which defibrillation is applied is the major determinant in the success of resuscitation. Restoration of a normal rhythm and long-term survival generally requires defibrillation be administered, at the outside, within 10 minutes of the cardiac arrest, and optimally within five minutes of the cardiac arrest.

(4) Early advanced life support: advanced life support measures are those implemented by trained health care professionals, including the administration of drugs with associated equipment. Advanced care may be provided either at the scene of the incident or in hospital.

This chain of survival is only as strong as its individual links. While we recognize that this bill is focused on AEDs, it is important for public policy to address all elements of the chain. In this regard, universal access to the 911 system and citizen CPR training should be in place throughout any given jurisdiction. Ambulance response times should also be optimized. The Heart and Stroke Foundation would be pleased to work with the Ministry of Health and Long-Term Care and other key stakeholders to promote public awareness of the chain of survival and the importance of bystander CPR and CPR training, as well as the use of AEDs.

Support for access to AEDs: as I indicated above, there is still limited data on the use of AEDs. Nevertheless, the experience in Windsor suggests that more widespread access to AEDs saves lives. In the Heart and Stroke Health Show we were able to show the use of an AED in that casino and then interview the survivor. These examples speak volumes, and the survivors and their families make a strong argument for widespread access to this life-saving technique.

Consequently, the foundation supports the bill's intention of providing for AEDs in public buildings. The foundation also strongly supports the development of guidelines for the use of AEDs. In addition, the foundation believes the emergency medical services system has an important role to play in the development and ongoing monitoring of public access defibrillation programs.

The need for guidelines on the use of AEDs: as with any piece of life-saving equipment or any community-based health program, good quality control measures and protocols need to be applied with respect to AEDs and public access defibrillation programs. Issues of funding, coordination, equipment selection and maintenance, the intelligent and effective deployment of AEDs in public places and, in particular, the establishment of appropriate training programs must be addressed. There should be standards and protocols developed of a high quality, and the movement and transition of patients among levels of EMS care should be properly managed. It is important that AED initiatives be part of the chain of survival and that necessary data involving cardiac arrests and the use of AEDs be collected, stored and published so as to facilitate the development of AEDs as an important link in the chain of survival.

In each community establishing a public access defibrillation program, a committee needs to be developed that should have medical oversight and an identified local coordinating authority established with the following responsibilities: (1) promoting the effective use of AEDs and helping to establish a local public access defibrillation program within the context of an integrated EMS system; (2) advising on training requirements and providing access to the needed CPR training, and training as a support for PAD programs; (3) serving as an information and advisory clearinghouse for groups and organizations interested in establishing public access defibrillation programs in other communities; (4) maintaining good relations with equipment and training providers; (5) facilitating the relationship between public access defibrillation sites and provider organizations and the local emergency medical systems; and (6) ensuring the collection of appropriate data on cardiac arrests and use of AEDs. The authority assuming these responsibilities needs to have expertise in cardiac care, as well as prehospital emergency care systems. Further, it needs to be a body that will be held publicly accountable for its role.

The foundation feels so strongly that these guidelines need to be in place that it is bringing together an expert panel to develop such guidelines. Hopefully these guidelines would be followed on a voluntary basis, which would of course be preferable, but it would be preferable to have these guidelines developed and endorsed by the Ministry of Health and Long-Term Care. The foundation is certainly eager to contribute to the development of guidelines for the use of AEDs.

The government should consider its role in supporting the EMS system to become fully equipped with AEDs. As stated, the foundation believes the emergency medical services system has an important role to play in ensuring safe access to AEDs. This is not referenced in the proposed legislation; however, it deserves attention.

The Heart and Stroke Foundation has considerable interest in training. Section 3(3) of Bill 51 provides for a training program. The committee may find it useful to understand what the Heart and Stroke Foundation's role is in training. The Heart and Stroke Foundation of Canada has established national guidelines for training in all aspects of emergency cardiac care, and these guidelines are followed by many training organizations in this field. This includes training standards for the use of AEDs. The Heart and Stroke Foundation of Ontario has resources for AED instructors and delivers approximately three instructor training courses each year. The foundation also has information for the general public and is currently developing two toolkits which will be available in 2002, one for the community and one for the workplace.

The foundation agrees with importance of explicit protection for rescuers. Legislation that increases rescuer involvement in cardiac emergencies is very welcome. Consequently, the foundation supports the proposals in section 4 of the bill. It may be helpful if the terms "gross negligence" and "reckless misconduct" were defined to provide further protection.

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The foundation would also request that there be provision for exception from liability for the promotion of broad public access to AEDs, as well as the supply of AEDs by the foundation or other organizations. "Supply" should rather refer either to acquiring or supplying AEDs for use by the public or, alternatively, funding the acquisition of AEDs by third parties for the ultimate use of the public. While it is not the foundation's intention at present to fund the acquisition of AEDs, this has been an activity of the British Heart Foundation. Such claims may be remote; nevertheless it would be helpful to minimize any potential barriers to promoting AEDs.

Finally, the bill does not provide for the creation of any regulations. Would creating references to both the existence of regulations and the power to regulate concerning various issues provide for more effective implementation?

This bill is an important step. The foundation welcomes it and hopes that with the changes made it will proceed to be approved by the Legislature and proclaimed as law. Continuing our long history of activity in emergency cardiac care, the foundation will continue to play its part and would be pleased to work with government in promoting access to early and effective intervention for the cardiac arrest victim.

The Acting Chair: Thank you very much, Dr Graham. We have about two minutes for each caucus, and we'll start with Mr Kormos.

Mr Kormos: Are you arguing that "gross negligence" and "reckless misconduct" are not a sufficiently high threshold in terms of liability?

Dr Graham: Our feeling is that these pieces of equipment are safe. They will not harm people. There is no evidence they will harm people. Their widespread availability will indeed save people's lives. We think they should be used by people who have basic first aid. But even in a situation where people do not have first aid training, this equipment will not hurt somebody. We feel this should be included under Good Samaritan legislation, as it has been in the United States, and this would take away the liability issue in significant part.

Mr Kormos: I know there's going to be a discussion when the bill goes through clause-by-clause, but are you endorsing the gross negligence standard in the bill?

Interjection: The advice we had from our lawyer was that it would be useful if it was even further defined.

Mr Kormos: OK. Do you have any proposals in that regard?

Dr Graham: No.

Mr Kormos: Fair enough. Thank you kindly.

Dr Graham: It's important to understand that this equipment will not harm somebody. There is no way it can harm somebody. The issue is that if somebody has had a stroke or an epileptic fit, it will not fire.

Mr Kormos: One of us asked that question of the Ministry of Health people this morning, because we were interested in the downside, and they said the worst-case scenario is that it could kill you. Now, they suggested that would be very rare. I don't mind getting zapped.

Dr Graham: It won't do that. It's not capable of doing that. The only concern is for the person who feels this machine is all you need to do to somebody who has had a cardiac arrest, that all you need to do is run and get the defibrillator and not do CPR while you're waiting. That is wrong.

Mr Kormos: But you'll understand there's already some conflict today about the role of CPR. You're a strong pro-CPR person.

Dr Graham: Yes.

Mr Kormos: Others have not been opposed to it but have said it plays a minimal role in the whole process. Am I correct?

Mr Colle: In cardiac arrest.

Dr Graham: The availability of rapid defibrillation is the most important issue. That does not preclude the fact that the initial ABCs of resuscitation should be carried out prior to the availability of—

Mr Kormos: While you're waiting for the—

Dr Graham: That's exactly the point. If this happened right now and there was a defibrillator, I would shock you right now without doing CPR, because I could do it. If it would take a minute and a half to get it from upstairs, CPR should be done for a minute and a half and then shock.

Mr Kormos: Under the best of circumstances.

Dr Graham: That's correct.

The Chair: We'll go to Mrs Molinari.

Mrs Molinari: Thank you very much for your presentation. I hope you can help me understand the difference between a situation where CPR would definitely be necessary with the defibrillator versus situations where you

would not need CPR and would just use the defibrillator. Some of the presentations we're hearing today—as Mr Kormos indicated—are saying you need both in order for the victim to be resuscitated, and others are saying, "No, the defibrillator would do it. You don't need CPR." If I understand correctly, there are various levels. If it's cardiac arrest or if it's something else, in some cases you do need both and in some cases you don't. I hope you can help clarify that for me.

Dr Graham: Let me try. It's a very important question. We've talked about the concept of the chain of survival as being required to allow the optimal chance for the best functional recovery. When the heart stops, blood flow and oxygen flow to the brain stop. The brain starts dying within three to four minutes. Optimally, if you can restore the effective heartbeat within that time period, you don't have any brain damage. CPR, in effect, is an artificial way to provide oxygen to the brain, plain and simple, until one can restart the heart.

If the defibrillator is available instantaneously, that's what you would use as the preferred option. The reality is that even with these programs the defibrillator will not be available instantaneously, because it won't be where the victim is. So the idea of the chain of survival, the calling for help, activating the system, wherever it is, to get the defibrillator—there is still a period of time in most instances, while you are with the patient, where CPR should be initiated until the defibrillator is brought. Hopefully that will come quickly when these are widely available in public places. So CPR is always necessary unless the defibrillator is available instantly, which it never is. Even in a hospital, where a defibrillator is down the hall, 10 yards away, if you're with somebody and they've had a cardiac arrest, you will start CPR for whatever period of time to allow oxygen to go to the brain. They are not mutually exclusive.

What early access to defibrillation does is reduce the likelihood that the patient will have brain death dramatically. This 10%-per-minute figure is absolutely crucial if you think about the length of time to effective defibrillation. If you can reduce to five minutes the time from the cardiac arrest to restarting the heart, you can have survival rates of 50% to 70%. If it's after 10 minutes, it's less than 10%. That's what we're dealing with here. We're really trying to get definitive care to the person who needs it in the community, plain and simple.

The Chair: Comments from the Liberals?

Mr Colle: Thank you, Doctor, for being so direct. You remind me of one of your colleagues, Dr Luigi Casella, my parents' former family doctor and a great cardiologist and heart doctor at St Michael's, a fine institution. Thanks so much for being so informative.

The first thing I'd like to suggest is, I don't think it was the intention of the Ministry of Health earlier to emphasize the dangers of defibrillators. I think they were saying there is a possibility that certain things could go wrong. I think that's been blown a bit out of proportion.

I wonder if at one point, if you get time in your very busy schedule, you could perhaps sit down or communicate with a couple of the presenters earlier today just to straighten this whole thing out, because you're quite emphatic. You're saying this equipment is safe and will not hurt people. I think it would be most beneficial for the committee, just to sit down and get that straightened out, because there's a bit of concern on our part about some of the testimony we heard earlier today.

You're a cardiologist. You deal with the health system, you deal with real life health situations and people's lives and the cost and everything. Are these investments in AEDs cost-effective in terms of saving lives? Is this just motherhood or a cost-effective way of saving people's lives?

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Dr Graham: I think that's a very prudent and timely question. Whenever we think about new and improved systems of health care, I think you have to compare what are the costs we currently spend that we accept, whether it be bypass surgery or kidney transplantation or dialysis or cholesterol-lowering, any of those therapies. We do have costs associated.

As you have heard, the cost of this piece of equipment is the price of a PC now, between $3,000 and $4,000. The benefits of having somebody resuscitated promptly in terms of the health care system are staggering. I had a patient in just last week who collapsed at home. His wife went into the washroom to find her husband and called her son to have the EMS there. EMS was there with a defibrillator within three and a half minutes. He was successfully resuscitated with no brain damage and arrived at the hospital I work at to have a defibrillator inserted, which is an expensive piece of equipment—that's about $22,000. But the point is that this is an individual who is mentally competent and back home living with his family, and was out of hospital within three or four days, as opposed to living in a chronic care institution or receiving all sorts of support for a neurological impairment. That's assuming he had survived.

That's a very good news story. The reality is that if you can defibrillate people early, their chance of functional survival and returning to being useful citizens in our society, taxpayers and all that, is infinitely improved. A lot of what we do at the end of people's lives is very expensive for very little incremental benefit. This, I think, has a tremendous benefit. This particular patient had a cardiac arrest and hadn't even had a heart attack and yet he's home today.

The Chair: On behalf of the committee, thank you Dr Graham. We appreciate your input.

MICHAEL WHITEHEAD

The Chair: I wish to call forward the next delegation, Michael Whitehead.

Mrs Molinari: Are we running late?

The Chair: Yes. Mr Whitehead, have a chair, and if you wish to identify yourself for Hansard, we have 10 minutes.

Mr Michael Whitehead: My name is Michael Whitehead. I am here to support Bill 51. I live in Toronto and for the last 16 years, I've been teaching first aid, CPR and, more recently, automated external defibrillation and advanced first aid. I teach for three national training agencies: St. John Ambulance—I'm an instructor-trainer in automated external defibrillation for them—the Canadian Red Cross and the Heart and Stroke Foundation of Ontario.

I'm the guy who trains people to save lives. Most people take this training because they have an obligation to do so for a job or for their education. If I was the king of Ontario, then everybody who had a driver's licence would be made to take first aid training every three years. But I'm not, so you can take that up at a later time. What I can say is the most gratifying part of my job is listening to students talk about opportunities they've had to save someone's life. It's a life-changing experience and it makes them value everything they do on this planet much more after it has happened.

Sudden cardiac arrest is a major financial health problem, as you've probably already heard today. The Heart and Stroke Foundation's Web site pegs the cost at about $19 billion a year. Mr Beaubien was asking what the cost is. Well, $19 billion dollars a year is more money than I could spend in a lifetime. It's $2 million per hour. In the time I'm speaking to you, if I speak for 10 minutes, Canadians will spend $330,000, and Ontarians $70,000 of that, as a result of heart disease and stroke, in lost productivity, life insurance payouts, health care costs and all of that.

A person who survives a heart attack or stroke, as Dr Graham was just explaining, with a significant disability such as congestive heart failure, where they can't walk up a flight of stairs without stopping after three steps to take several minutes of deep breaths or with a stroke and has permanent paralysis, (1) can't work and (2) usually needs home support and long-term medical care. Such a person can easily require millions; $3 million is what a neurologically impaired person who lives 20 years costs us over their lifetime. Every day in car crashes four people end up with a brain injury and cost us that much money.

That's the financial impact, but that's not the only impact. Their condition means major life changes and suffering for the victim and their family. Parents have to go to work part-time and spend time at home taking care of people; there may not be money for university education. There is a major impact on not just the casualty but the people they live with, their immediate family.

The critical factor, as you've probably heard several times today, is time. Save rates drop by 7% to 10% for every minute that a person doesn't get shocked if they have no pulse. A first-rate EMS system in North America achieves a six- to eight-minute fire and ambulance response from the time the person calls 911 until the ambulance arrives at the door of the building where the patient is located. But getting to the patient and setting up the gear, however expert the people are, takes an additional two to five minutes if they're not in someone's residence and right in the front lobby. That can add another two to five minutes, and that's why save rates are so low, at about 3% to 5% across North America for EMS systems. Save rates of better than 50% are possible if AEDs are readily available in public places.

Both the American Heart Association and the Heart and Stroke Foundation of Canada recommend that public locations where they estimate people are more likely to have cardiac arrests, such as airports, casinos, shopping malls, golf courses and large office buildings, be equipped with AEDs to achieve a drop-to-shock time of about five to seven minutes. For example, in Toronto, the Woodbine Racetrack has had two cardiac arrests in the last 12 months, both of whom were successfully resuscitated. Their drop-to-shock time is between two and three minutes. On the other hand—and I must apologize because the Eaton Centre now has defibrillators, but three months ago when I asked a security guard, they didn't; and I don't know when I asked someone about this building, but if someone dropped in here today and someone didn't have a defibrillator over there, we'd probably face a 12-minute drop-to-shock time and wouldn't survive.

So AED certainly saves lives, and the cost of saving lives, which Mr Beaubien asked about earlier, is certainly very reasonable. Machines cost $5000 to $6000 by the time you add the case and batteries and stuff, and are virtually maintenance-free. The cost is likely to drop significantly with mass marketing over the next few years. Training costs average about $100 to $150 per year per person trained and that includes medical direction. Training is readily available about the province.

In terms of the cost spread over a number of people, it's truly reasonable. I live in a building with 265 units and 400 residents, many of whom are elderly. I've seen ambulances called three or four times for various kinds of medical emergencies in the past three or four years. The cost of an AED for my building would be $12 to $15 per resident. In large buildings with public access and traffic of more than 1,000 people per day, the cost drops to $5 to $6 per person. Is there anyone in the room who wouldn't spend that small sum, the cost of one lunch, to ensure the best chance of survival for victims of sudden cardiac arrest? I don't think so.

Heart attacks and strokes affect many people. I'd be surprised if anyone in this room didn't know someone who had suffered a heart attack or a stroke. In my own case, the first time was when my Aunt Jennifer called me after midnight one winter evening to say, "Your uncle has just died." My Uncle Edward was 48 years old and had gone into cardiac arrest at his cottage in Ste Adèle, Quebec, which is in the Laurentians about 45 minutes north of Montreal. A neighbour initiated CPR within a few minutes and he briefly regained consciousness, but went back into cardiac arrest and stayed dead. At the time, neither Montreal nor Ste Adèle had 911 phone service, and ambulance response time was 45 minutes. Cleary, under those circumstances, my uncle had no chance of survival. This summer I spent a weekend with

my cousins and reflected that under different circumstances, if an AED had been available, he might well have been spoiling his nine grandchildren on the beach with us that day.

By contrast, earlier this year a cardiac arrest happened at Woodbine Racetrack and a defibrillator was immediately available and they didn't have to do CPR. On the third shock, the person regained consciousness, and apparently his first words were, "Did I win?"

Mr Colle: He sure did.

Mr Whitehead: I think we all do in a situation like that.

Early defibrillation saves lives. It's affordable, it will save us all social services and health care dollars, and it will improve recovery and reduce human suffering. No one who is lucky enough to collapse in a public place in Ontario should have to wait more than five minutes for this life-saving therapy. As Dr Safar, the person who promoted artificial respiration in 1958, said, "Theirs are hearts and brains too good to die." I urge you to enact this bill as soon as possible. The life you save may well be your own or someone you love.

The Chair: Thank you, sir. I know 10 minutes goes very quickly. There's maybe a minute of PC rotation, if there is any very brief comment.

Mr Hastings: You bring a very interesting viewpoint involving the national dimension of the program. While this is a provincial bill and the province pays most of the health care, what's your thinking as to federal engagement in this kind of an enterprise? Do you think they should be helping to pay for starting a national program, and Ontario would be part of that national program?

Mr Whitehead: If it was up to me, I wouldn't wait for the federal government to be involved, but I would certainly say there's a leadership—

Mr Hastings: That's a very good point.

Mr Whitehead: I sent an e-mail to Jean Chrétien about six months ago when Bill Clinton enacted enabling legislation in the United States for airports and promotion of AEDs in federal buildings and I've gotten about six e-mails from different departments saying, "These are wonderful things that private sector corporations are doing. I hope you're interested, and thank you for your interest."

Mr Hastings: This was the federal response?

Mr Whitehead: The federal response was to tell us what was going on, but they didn't say they had any plans to put defibrillators in public buildings.

Mr Colle: Unlike my colleague from Etobicoke North, I'm not going to wait for the feds. I think we can do something here and lead the way right across the country.

The Chair: Thank you again, Mr Whitehead.

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ONTARIO MEDICAL ASSOCIATION

The Chair: I would ask the next delegation, the Ontario Medical Association, to come forward. Good afternoon, gentlemen. We have you available for 10 minutes; I know there were some last-minute arrangements. I'd ask you to identify yourselves for Hansard.

Dr Ted Boadway: I'm Dr Ted Boadway, executive director of health policy of the Ontario Medical Association. With me today is Dr Dreyer, professor of emergency medicine at the University of Western Ontario. He's also chair of the emergency medicine section of the Ontario Medical Association, and medical director of the base program for London and Middlesex, Perth, Oxford and Elgin counties, which means he oversees the paramedics there. He will make our presentation.

Dr John Dreyer: Mr Chair and members of the committee, it's a pleasure to be here today. Thank you for this opportunity.

Death from sudden cardiac arrest is certainly a significant health care issue in Ontario. Efforts to improve survival from these catastrophic events should be encouraged. Improved rates of citizen CPR and rapid access to defibrillation are the two most likely to lead to improved survival.

A review of the evidence from the medical literature describing the potential benefits of these manoeuvres might be instructive to the committee as you deliberate on this important decision. It's not sufficient to review only the number of cardiac arrests that occur each year, but one must analyze the factors that will make those cardiac arrests available to intervention and therefore potentially save lives. There's a study currently underway in the United States, which, when completed, will help elucidate these issues. But we are fortunate in Ontario to have available to us data which may help us in this regard.

You're probably familiar by now with the Ontario Prehospital Advanced Life Support Study, or the OPALS project. This study is the largest ever study of out-of-hospital cardiac arrest, and is currently ongoing in 21 urban, small urban and rural communities in Ontario. A subset of the OPALS data taken from three medium-sized cities for the period 1995 to 2000 reviewed the locations of cardiac arrest in almost 1,400 cases. This data is shown on page 2 of your handout; there's a chart there. Looking at that, you can see that the percentage of cardiac arrests that actually occurred in large public buildings was quite small. Similarly, the percentage in small public buildings was also small. Using statistical analysis, it's been calculated that if survival rates were to have doubled as a result of using public access defibrillation in large public buildings, one additional patient would have survived during this five-year period in these three cities in Ontario.

According to OPALS data, it can be estimated that of the estimated 6,500 cardiac arrests occurring annually in Ontario, only about 90% are cardiac arrests occurring as a result of a cardiac cause. That leaves just a little under 6,000 cases, of which only about 50% are witnessed arrests. Clearly, in order to use a defibrillator you have to witness the event in order to apply the technology and potentially save a life. This brings us down to approx-

imately 3,000 cardiac arrests occurring in the province which are witnessed and are therefore potentially responsive to early defibrillation. Of these, a further 20% are actually going to occur in view of the paramedic. That brings us down to 2,400 cases. Further recognizing from the chart I've just referred to, approximately 80% of these cardiac arrests are actually going to occur in private residences or nursing homes—those are the small and large residences. This means that of the 6,500 cases occurring in the province each year, only about 500 could potentially benefit from the widespread introduction of public access defibrillation programs.

We now face the daunting challenge of time and location. In the absence of adequate CPR, defibrillation must be accomplished within four minutes before brain damage begins to occur. In a large office building or indeed in this building, it's most likely the defibrillator would be kept near the front entrance. During that four minutes, someone must first of all correctly identify the potential for a cardiac arrest, run to get the machine, wherever it is, take it out of its container, run back to the unconscious person, bare their chest, apply the pads and actually turn the machine on and deliver the shock. Perhaps to some this sounds easy, but I think it's a daunting challenge in the face of people who have not taken charge of this type of critical situation before. And it may be even much more difficult in a high-rise office building.

There's research which speaks to this matter, and that research shows that where the location of cardiac arrest has been studied, there is no pattern to the public places in which those arrests occur. They occur anywhere and everywhere. Therefore, even with a potential caseload of 500, the number of instances where access would be timely must surely be minimal. Furthermore, a continuing process of updating the knowledge of the whereabouts and usefulness of the modality must be carried on in the workplace, in the office building where these are kept, and new staff must be made aware of the equipment.

At the same time that introduction of public access defibrillation is likely to have a small impact, statistical analysis suggests that improving rates of citizen CPR would have a much greater impact. Present rates in Ontario are approximately 15%. Looking at OPALS data again for the period 1991-97, there were 9,200 cardiac arrests in that period. If citizen CPR rates could have been improved to 30%, we would have saved an additional 107 lives during that period of time. If we could have increased them to 40%, we would have saved over 350 lives.

Liability is another issue I want to briefly address. Section 4 of the proposed act deals appropriately with protection from liability for individuals operating a defibrillator and for owners and operators of sites where defibrillators have been installed. It should be noted, however, that the purchase of a defibrillator carries with it a responsibility to ensure that at all times it is available for use and in good working order. There must be continuous updates to existing staff and training of new staff, not just in the use of the defibrillator but in recognizing cardiac arrest. We do not know the standard to which the owners of these public places will be held in a court of law. But in the environment in which I operate, failure to maintain equipment and train staff has been found to be gross negligence or reckless conduct. Our question is, could this lead these owners into the same situation?

The Ontario Medical Association would like to commend this initiative, since it focuses on the subject of prehospital care of cardiac arrest. As policy-makers, when you make these decisions you will be committing the public purse and private businesses to significant cost and logistics expenditures. We have tried to present data that will help you in this analysis. Before this policy decision is made, we believe it would be valuable to compare the costs and benefits of increasing the use of a simple skill such as CPR to those of introducing public access defibrillation. It may be that you will wish to await the data that will soon be available from the ongoing American study. However, that is your decision. We would certainly like to encourage ongoing analysis of cardiac arrest data that could lead to the appropriate installation of AEDs in locations where cardiac arrests are more likely to occur.

The Chair: Thank you, Doctor. We have a minute or so for comments or questions. We'll begin with the Liberal Party.

Mr Colle: Thank you very much for the presentation. I guess you've looked just at the OPALS Study. Have you looked at the New England Journal of Medicine study of casinos in the United States?

Dr Dreyer: Yes. No question, it has been shown that putting defibrillators in casinos has been effective. We have experience in Ontario in that regard. In Windsor we have defibrillators in the casinos. They're extremely efficient and save a lot of lives. But that doesn't mean there are thousands of other locations in the province where the same sort of thing occurs. Indeed, looking at the London experience, we have analyzed our data over several years and found there is absolutely no pattern to where these arrests occur, in terms of shopping malls, large office buildings and so on.

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Mr Kormos: Along that same vein, your final sentence, locations more likely to occur, Dr Verbeek made some comment on it. He said you can identify. What is it about casinos versus, let's say, the Seaway Mall in Welland, which has a lot of, I don't know, the same kind of people, at least as much as I—I've been in the Seaway Mall a lot more than I've been in casinos.

Dr Dreyer: I think you have to look, certainly, and at the end of my comments I urged that we do continue to look and see if there are any patterns. At the present time, apart from casinos—in the OPALS Study at least, and that's 10,000 cardiac arrests, or close to it—we've not been able to establish such a pattern.

Mr Kormos: So you say how many cardiac arrests have occurred there. That's probably the most simple, basic way of doing it. OK, fair enough. It's too obvious.

Mr Hastings: Dr Dreyer, I take it that the OMA's position, or at least your position, is that we should proceed with some caution in terms of the strategic location of these particular devices on a widespread basis, even where you are after you've completed community policing, the ambulance service, the fire departments, where I've had some involvement through our Rotary Club. We've managed to place three in fire trucks over the last number of years. I would like to know, should we proceed not only with caution but, in that caution, proceed with a prioritizing of the places that have the mostly likely possibility for these cardiac arrests because of anxiety, like in the casinos, or, when you come to a place like this, a Legislature, the excitement of the place?

Dr Dreyer: I'd be very interested to know, sir, if there have been a number of cardiac arrests in the Legislature building. Certainly if there have been, it would be reasonable to have a defibrillator in this location. I think the concern I'm trying to express is with regard to the wording in the bill which suggests that these be placed in buildings with general public access. That hasn't been defined, but it could certainly refer to every 7-Eleven and Blockbuster store in the province.

Simply saying there are 10,000 people who work in this building doesn't cut it. If you put a defibrillator in the Toronto-Dominion tower, in the foyer, and the arrest occurs on the 60th floor in a corner officer, the chances that somebody is going to recognize it, witness it, get downstairs or call somebody downstairs and get them up there so they know where they're going and get them into that office within four, five, six, seven minutes is not very good. You've got to look and see. If you had 10 arrests in that building, it may be worth a try putting one in there, but if you haven't had any arrests in that building in the last 10 years, it's probably not worth it.

Mr Hastings: Prioritization based on statistical incidence, on data.

Dr Dreyer: Absolutely.

Mr Colle: So $5,000 isn't worth it?

Dr Boadway: Actually, the whole question of cost benefit is a very difficult one, and unfortunately these questions get answered a little quickly. I don't know of a formal cost-benefit analysis that's been done on this issue. We couldn't find one. There may be something that would convince us on this matter. We're not convinced one way or the other, actually.

Mr Colle: You wouldn't spend the $5,000 if you were in that Toronto-Dominion tower?

Dr Boadway: No, I don't know whether I'd spend it or not.

Mr Colle: You wouldn't spend $10,000 and put two in?

Dr Boadway: I don't know.

Mr Colle: You'd just leave it as is?

Dr Boadway: No, what I would like to do is know what the studies show that would help me make that decision. If the studies are there, just as the science has been analyzed, I think that's what we want to see.

Mr Colle: Why would the federal government in the United States pass legislation to put them in all federal buildings and in rural communities, then?

Dr Boadway: I don't know.

Mr Colle: Why would the FAA put them in all their airplanes? They think it's worth the $5,000; you don't.

Dr Boadway: No, we didn't say it wasn't worth $5,000.

Mr Colle: You basically have said that today.

Dr Dreyer: I think the cynical eye would look at the timing of the introduction of that legislation in the United States, with a President about to leave office.

Mr Colle: It wasn't a political issue at all.

The Chair: On behalf of the committee, I do wish to thank you, Dr Dreyer and Dr Boadway. Thank you for your time and flexibility.

RESCUE 7 EMERGENCY TRAINING SERVICES INC

The Chair: For our next and final delegation today, I wish to call forward Rescue 7 Emergency Training Services Inc. Have a seat, sir. We'll ask you to give us your name for Hansard, and we'll proceed with your deputation.

Mr John Collie: Thank you. My name is John Collie and I'm director of Rescue 7 Emergency Training Services Inc. I'd like to thank the Chair, committee members and the clerk for inviting me here today to allow me to speak on behalf of Bill 51.

Our agency has been in existence for approximately four years, and our head office is located in Markham, Ontario. We provide health and safety training and supplies to companies, organizations, educational institutions, daycare facilities and governments on all levels. All of our instructors and sales personnel are or have been in the emergency services field in some capacity, whether it be paramedicine, firefighting and/or nursing. Our agency trains and provides supplies in this field to clients right across Canada.

Rescue 7 Inc is fully approved federally in CPR/first aid training by Health Canada and Human Resources Development Canada. We are approved provincially by the Workplace Safety and Insurance Board (WSIB) of Ontario. We are also approved by Health Canada, Human Resources Development Canada, and Sunnybrook and Women's College hospital in Toronto in automated external defibrillation training. All of our instructors are individually accredited to teach CPR/AEDs through the Heart and Stroke Foundation of Canada and/or the Heart and Stroke Foundation of Ontario.

I have been an employee for the past 14 years with the Toronto Fire Services, east division. In my capacity with the fire services, I have had the opportunity to become a shift training instructor in first aid and defibrillation. This opportunity has allowed me to experience the pace of the technological growth of defibrillators.

As director of Rescue 7 Inc, I have been a part of the educational process of defibrillators since their infancy in

the public access defibrillation program. I am currently an AED instructor trainer for the Ontario Heart and Stroke Foundation, the Canadian Heart and Stroke Foundation and the American Heart Association. I am also an emergency patient care/first responder instructor with the Ontario fire marshal's office.

Rescue 7 Inc provides PAD—public access defibrillation—training to a number of companies and organizations in Ontario and across Canada. Just to mention a few of our companies, Ontario Power Generation is one. I had the pleasure just a couple of weeks ago of visiting the riding of the honourable member of the Legislature Lyn McLeod, and visited Atikokan to train the Ontario Power Generation employees in that area. Some of our other companies are Johnson Controls, Husky Injection Moulding and CIBC.

We go across Canada, and we follow the guidelines set forth by the various provincial heart and stroke foundations, the Canadian Heart and Stroke Foundation, Health Canada, Human Resources Development Canada, and of course Sunnybrook and Women's College hospital. And we provide a training manual, which is Health Canada-approved, to every participant in our program.

Our program is continually monitored and directed by our physician. Our daily tracking system via our Web site allows us to keep a database on each AED provider that we train.

Rescue 7 Inc supports Bill 51. The statistics that have been presented before you today show that clearly there is a need for defibrillators. The greater the access to these machines, the more lives we save.

Some companies and organizations have taken upon themselves to go ahead and implement a PAD program for their buildings, offices, plants and/or sites. Cities, towns and communities throughout Ontario have emergency medical services in their areas or close by, but ambulances and fire trucks are not always able to respond in time to prevent a death from a heart attack. Promoting defibrillators and placing them strategically in urban and remote areas of our province is a positive move.

The concern Rescue 7 Inc has is with the training of the participants using these machines. We feel there must be a set of guidelines to follow and there should be some type of governing body that oversees protocol and ensures that these guidelines are similar to approvals met by agencies governed by the WSIB for first aid.

Rescue 7 Inc recommends that training agencies be approved by a governing body before they can provide AED training to various companies, organizations and individuals. Federally, Health Canada, under the guidance of Dr Harwood and his staff, has implemented AED standards that training agencies must meet to become recognized and be able to provide training to companies and organizations that are under federal jurisdiction. Sunnybrook and Women's College hospital has taken the same approach under the guidance of Dr Verbeek for city of Toronto employees. These approvals are important to maintain competency and standards in the field. It is important for training agencies to meet and maintain certain criteria in order for PAD programs to continue in their standard of excellence.

In order to be consistent, we must nominate one governing body to oversee a province-wide or nationwide program. Since individual industries do business right across our country, it would be prudent to try to work with all other provincial bodies and come up with one master training plan or at least provincial plans that are on the same level, not only in the training of defibrillators but also with the liability factors related to the machines. Bill 51 will effectively reduce any fears associated with purchasing a defibrillator and the liability issues involved therein.

The Heart and Stroke Foundation of Ontario sets guidelines for cardiopulmonary resuscitation and AED training. This organization does research and recommends certain levels of training for the public and private sectors. Rescue 7 Inc believes there must be some level of control and competency with anyone training participants to the AED provider level, and the only way to achieve this is to have a governing body approving these agencies.

Bill 51 will help to ensure that defibrillators are purchased. Our concern is that before a defibrillator is purchased, a training program with medical oversight should be in place or the manufacturer or manufacturers should direct the purchaser to approved training agencies and have an agreement in place before the manufacturer releases the AED to the purchaser.

The Chair: Thank you very much, sir. We have about three minutes for comments or questions, beginning with the Liberals.

Mr Colle: I guess the main thing is that you support standardized training guidelines, right?

Mr Collie: Correct.

Mr Colle: That any recognized training body would have to meet certain criteria?

Mr Collie: Correct.

Mr Colle: You know those criteria are already in place from the feds, so it's there already?

Mr Collie: Pretty well, yes, it is. We're just making sure that before we go ahead with this, the training agency should seek those approvals before they go out and do training with individual corporations etc.

Mr Colle: Thank you for your presentation.

The Chair: Mr Kormos, any comments?

Mr Kormos: No, thank you, sir.

The Chair: Any comments from the PC Party? Seeing none, we are under some time pressure; we have our Ottawa meeting tomorrow. So I wish to thank you, Mr Collie, for coming before the committee.

I have a brief important announcement for committee members that we can discuss once I adjourn. I declare the committee adjourned.

The committee adjourned at 1611.

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