Legislative Assembly of Ontario

Assemblée législative de l'Ontario

Official Report of Debates (Hansard)

SP-19

Standing Committee on Social Policy

Defibrillator Registration and Public Access Act, 2020

1st Session
42nd Parliament

Wednesday 29 January 2020

Chair: Natalia Kusendova
Clerk: Eric Rennie

Journal des débats (Hansard)

SP-19

Comité permanent de la politique sociale

Loi de 2020 sur l'accès public aux défibrillateurs et leur enregistrement

1re session
42e législature

Mercredi 29 janvier 2020

Présidente : Natalia Kusendova
Greffier : Eric Rennie

Hansard on the Internet

Hansard and other documents of the Legislative Assembly can be on your personal computer within hours after each sitting. The address is:

Le Journal des débats sur Internet

L'adresse pour faire paraître sur votre ordinateur personnel le Journal et d'autres documents de l'Assemblée législative en quelques heures seulement après la séance est :

https://www.ola.org/

Index inquiries

Reference to a cumulative index of previous issues may be obtained by calling the Hansard Reporting Service indexing staff at 416-325-7400.

Renseignements sur l'index

Adressez vos questions portant sur des numéros précédents du Journal des débats au personnel de l'index, qui vous fourniront des références aux pages dans l'index cumulatif, en composant le 416-325-7400.

Hansard Reporting and Interpretation Services
Room 500, West Wing, Legislative Building
111 Wellesley Street West, Queen's Park
Toronto ON M7A 1A2
Telephone 416-325-7400; fax 416-325-7430
Published by the Legislative Assembly of Ontario

Service du Journal des débats et de l'interprétation
Salle 500, aile ouest, Édifice du Parlement
111, rue Wellesley ouest, Queen's Park
Toronto ON M7A 1A2
Téléphone, 416-325-7400; télécopieur, 416-325-7430
Publié par l'Assemblée législative de l'Ontario

ISSN 1710-9477

CONTENTS

Wednesday 29 January 2020

LEGISLATIVE ASSEMBLY OF ONTARIO

ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

STANDING COMMITTEE ON SOCIAL POLICY

COMITÉ PERMANENT DE LA POLITIQUE SOCIALE

Wednesday 29 January 2020

Mercredi 29 janvier 2020

The committee met at 1305 in the Radisson Hotel Sudbury, Sudbury.

DEFIBRILLATOR REGISTRATION AND PUBLIC ACCESS ACT, 2020

LOI DE 2020 SUR L'ACCÈS PUBLIC AUX DÉFIBRILLATEURS ET LEUR ENREGISTREMENT

Consideration of the following bill:

Bill 141, An Act respecting registration of and access to defibrillators / Projet de loi 141, Loi sur l'accès aux défibrillateurs et leur enregistrement.

The Chair (Ms. Natalia Kusendova): Good afternoon, everyone. I call this meeting of the Standing Committee on Social Policy to order. We are meeting in Sudbury today for public hearings on Bill 141, An Act respecting registration of and access to defibrillators.

Each witness will receive up to 10 minutes for their presentation, followed by 20 minutes of questioning by the committee members. The government will have seven minutes for questions, the official opposition will have seven minutes for questions and the independent Liberal member will have six minutes for questions.

At this time, I would like to ask for agreement from the committee to allow our first presenter to use a prop. Is there agreement? Agreed. Thank you.

Before we begin, are there any questions?

MS. PAULE CORNEIL

The Chair (Ms. Natalia Kusendova): Seeing there are no questions, I would like to invite our first presenter, Paule Corneil, to please come grab her seat.

I would like to invite you to begin your submission by stating your name for the official record.

Ms. Paule Corneil: Paule Corneil.

The Chair (Ms. Natalia Kusendova): Thank you. You may begin.

Ms. Paule Corneil: Bonjour. My name is Paule Corneil and I welcome this opportunity to endorse Bill 141, the Defibrillator Registration and Public Access Act. I want to thank everybody who is responsible for hosting this session, and all of you who have travelled up to Sudbury for this. It's a great opportunity to talk about this topic on which I am very passionate.

Defibrillators became part of our life in 2017, when our daughter Alexa died. She was 19 years old and she was found dead by my brother-in-law while she was visiting their family. She had taken a weekend off from her studies at Brock University to visit and attend her cousin Kim's rock climbing competition that was held on a Sunday. On Saturday night, Alexa announced that she was going to sleep in the guest room in the basement instead of sharing her cousin's bed, so Kim could have a good night's sleep before her big event the next day. That's the night that Alexa suffered her first and only cardiac arrest. It looked to be peaceful, painless and totally unexpected. She had no way to be saved; she was unattended. It was devastating.

An autopsy and genetic testing gave us an explanation: Alexa was diagnosed with two mutations that are associated with ARVC, a disease known to cause deadly arrhythmias leading to cardiac arrest.

Within the week following Alexa's death, we purchased our first defibrillator. In the coming weeks, our other daughter and myself were also diagnosed with the same condition. We now both have an implanted defibrillator. Mine is right here on the side. Our eldest son's investigations continue as he does have a disease-causing mutation but no definite signs of disease yet. Only our youngest son seems to have been completely spared.

This dramatic nightmare significantly touched our rural community of Temiskaming Shores as Alexa was a well-known athlete.

Since Alexa's death, we have purchased two more defibrillators which are shared between our local golf courses and our ski clubs.

A memorial hockey tournament takes place in our community and it's been named after our daughter. This year will be the second edition of our community mass CPR and AED educational event held in conjunction with the hockey tournament. AEDs do save lives and sharing this concept seemed a natural fit for our AC15 hockey tournament.

Audio-visual presentation.

Ms. Paule Corneil: That was a great goal.

For our family, it has become routine to look for and identify AEDs every time we enter a new building. Would you be able to locate the nearest AED in your workplace? In this building? What about in your grocery store or your favourite movie theatre?

That's also a great goal.

For an AED to save a life it must be used. Sadly, in Ontario AEDs aren't always used during emergencies as bystanders don't know where to find them and 911 dispatch operators aren't automatically directing bystanders to AED locations. Bill 141 can address this issue for all Ontarians.

There is no need to reinvent the wheel. AED registries have successfully been implemented in Manitoba, British Columbia, in many states in the US, as well as in Denmark, Sweden and New Zealand, just to name a few. This project is about social responsibility. It's about enabling bystanders to turn a tragedy into a potential survival story.

As I am here to represent family members, I didn't bring a list of statistics with me, as I don't plan to talk numbers. Other fellow presenters can do this expertly a whole lot better than me.

1310

I can tell you, though, that it is incredibly difficult to lose a child as a parent, an athlete as a coach, a classmate if you're a teenager, a student when you're a teacher, a linemate if you're on a hockey team.

We've met so many families whose loved ones died practically right next to a defibrillator while bystanders did everything right—except they weren't told about an AED being accessible nearby. Can you imagine living with that fact for the rest of your life?

AEDs have the potential to be definite game changers, and our government needs to make this happen soon. Cardiac arrests are devastating, but the final outcome doesn't always have to be deadly.

Hopefully, some of you in this room are from northern Ontario. In my district of Timiskaming—I came from New Liskeard this morning. It's a two-and-a-half to three-hour drive. There are five ambulances ready to be dispatched anywhere within the district, from Kirkland Lake, down to Temagami. There are two ambulances available based out of Kirkland Lake, one in Englehart and two in Haileybury. If, however, you happen to suffer a cardiac arrest at 2 a.m. Monday to Thursday, there are two ambulances available, one in Kirkland Lake and one based out of Haileybury—and one is on call in Englehart. The response time is anywhere between 45 seconds and 73 minutes. The area covered by these three crews is 13,000 square kilometres. It might be wise to pick your cardiac arrest time and location accordingly if you want to survive.

Note that presently the dispatch centre in our district will direct bystanders to a nearby AED if that AED has been previously registered with EMS. This is done on a voluntary basis. But imagine the positive impact Bill 141 could have in smaller communities where one's chance of survival is directly proportional to the number of AEDs available. A regulated registry will increase the number of AEDs available, their location will be known, and the survival rates will improve. There are studies that are available to prove this.

The sequence should be as simple as: You witness a cardiac arrest; you call 911; CPR is initiated while dispatch indicates where the nearest defibrillator is located; someone brings the AED; dispatch provides guidance to use the defibrillator, if needed.

For example, in a setting of a witnessed cardiac arrest taking place on the boardwalk on Lake Timiskaming, one might be able to drive to the rink to fetch an AED faster than waiting for the ambulance. In Temagami, a neighbour could run to the school to get the AED way before an ambulance could get there. Chances are that in less dense communities, the AED survival rate applied by bystanders per capita will be much greater than that in larger cities where EMS response time is significantly improved. Increasing the number of AEDs in smaller communities is much more cost-effective than increasing the number of ambulances.

This year, over the holidays, we hosted CPR and AED training sessions for our families, both on my husband's side and my side. Our parents, our siblings, our nephews and nieces, took turns practicing CPR on this mannequin and using the AED. Even our little six-year-old niece was able to correctly and independently apply the defibrillator pads on the dummy.

The Chair (Ms. Natalia Kusendova): You have one minute remaining.

Ms. Paule Corneil: She was only three years old when Alexa died, but after our little training session, she came up to me and asked if a defibrillator had been used on Alexa. Even at her young age, she was able to recognize the power of an AED. Can you?

The Chair (Ms. Natalia Kusendova): Thank you very much. At this time, I would like to invite the official opposition to begin questioning. Madame Gélinas?

M^me^ France Gélinas: Merci beaucoup d'être venue aujourd'hui, et merci d'avoir partagé ton histoire avec nous. C'était très émouvant, et la façon que tu as terminé—c'était encore plus émouvant, donc j'ai eu un petit peu de difficulté à me recomposer. En tout cas, merci beaucoup.

You've talked about the importance of 911 knowing where it is. Right now, in Ontario, we have this voluntary system where people can, out of their own goodness, let 911 know. Why do you figure that this is not enough? Why is it important for us, as legislators, to make it a law that if an AED is available to the public, then it becomes part of a registry, and the registry becomes available to 911?

Ms. Paule Corneil: Thank you for the opportunity to talk on this topic. I will give you a personal example. When we purchased our AED, we were asked to help other clubs that didn't have the funds to do so, and we did; we bought the other two.

I happened to renew my CPR licence for my work. The EMS attendant who was there that day teaching—I told him about having purchased those two AEDs for the two clubs. He said, "Why didn't you tell me?"

I didn't even know that there was a registry. I knew about wanting to have a registry, but I didn't know that voluntary people were able to register.

So I called him last night to verify my data and prepare for this. He told me that just last week, again, there's a church that purchased a brand new AED, and he happened to find that out, because it's not mandated.

That's why the mandated registry is necessary. It's because people don't know what the process is to register

their own AEDs. That's where we're needing to improve that.

M^me^ France Gélinas: Do you think that it will keep people from buying and making an AED available if we say, "You will have to register it"?

Ms. Paule Corneil: That's a very good question as well. I think when people are considering, as an employer, to provide that tool for survival, they really hope to not have to use it, but they know that they will feel terrible if they haven't purchased it.

I think, in general, people are hesitant to even use the AED. When we hosted our first training session last year, we did a quick survey. When people came in, they had to say whether they've used an AED before and whether they would use one. Everybody said no to both questions. On their way out, when they saw how simple it was to use, we had a 100% reversal. It was really neat to see.

So, yes, there's a lot of fear about them. We need to make them public. We need to talk about them. We need to talk about the 30 people a year who are saved by AEDs.

I believe that especially in a small community—when Alexa died, the whole city cried with us. I know that that has been a game-changer in our community. I know that her ex-teammates, parents who were involved with us on various hockey teams—they all are aware of this issue now. I wouldn't be surprised if we probably would be able to do a registry super-quickly in our community, for that purpose.

M^me^ France Gélinas: In the example that you've given us, you said that you went out and purchased—through yourself, your family, or through a club that you belong to? Who made the purchase?

Ms. Paule Corneil: This was for us, because initially, when she died, we didn't know who else was going to be dying, and we felt the need to have that in our house.

In our communities, we quickly looked around. When Alexa died, we never made plans on what to raise money for—not raise money, but what to contribute towards. We were able to secure a fund in our community, and that fund has been used to purchase the other AEDs that were needed.

Some clubs have approached us; they are not necessarily clubs that we've been involved with in the past. We've also gone around and checked, obviously, hockey rinks. All of the schools in our district have an AED. We've also approached various agencies to make sure that they felt covered. It's a well-known fact that if somebody needs an AED, they can approach us. We've also done the same thing in our cottage area where we go, down south. There's now an AED that's available around there as well. As soon as we talk to people—there might have been some hesitancy to cover the cost for a lot of those places, but once you can go through that it's pretty cheap; $1,600 is a very small price to save a life.

1320

M^me^ France Gélinas: Have you actively gone out and asked a club, "Would you do this?" How was it to approach them, and how open—what kind of convincing argument could you give us if you had to go and convince another club or another group to do the same?

Ms. Paule Corneil: I'm not sure if it's biased because of who we are in our community as survivors—well, as impacted by a cardiac arrest—but there has not been any convincing required. We just approach a club—for example, our downhill ski club is located 30 minutes—

The Chair (Ms. Natalia Kusendova): One minute remaining.

Ms. Paule Corneil: As soon as we approached them and told them we could get those funds for them, they were ecstatic about the idea. The ski clubs, actually, are the ones that say, "Well, why don't we join with a golf course because then it's a used tool for the entire year."

M^me^ France Gélinas: Do they raise the money, or do they just come up with the money themselves?

Ms. Paule Corneil: In this case, we were able to provide the money to cover it, because we had the fund from when Alexa passed.

Interruption.

M^me^ France Gélinas: Is this my one minute? Okay. Thank you.

Ms. Paule Corneil: Thank you.

M^me^ France Gélinas: I'm really sorry for your loss.

The Chair (Ms. Natalia Kusendova): Thank you. Now I'd like to turn it over to Mr. Fraser, the independent Liberal member.

Mr. John Fraser: Bon après-midi. Merci d'être ici. Thanks for being here and for sharing Alexa's story. It's not always easy to tell the stories again, but it's important that you share that with us, because the bill is important.

I've got a couple of quick questions for you; nothing too onerous. In terms of the clubs that took the AEDs, what did they do in terms of training? Did they have a protocol, or did they—I kind of get the sense that maybe you took that over?

Ms. Paule Corneil: Well, I'll talk about the downhill ski club, to start with. They have their own first aid crew. It has not been fully completed, but on their suggestion—they thought that we should have a little thing underneath it stating where the funds came from and what is the purpose of the AED. But yes, they did train their people around them, and their first aid crew. We have a poster in the works that will say, "This is an AED. If you're not sure how to use it, please use this bar code to bring you to the nearest CPR course that you could take."

The training has been done in between, but we also have lots of courses that are available. I personally have not trained anybody except for in our little mass training sessions, but training is available in our community quite easily if required.

Mr. John Fraser: My second question is about when you purchased your AEDs. I don't need to know what company they're from. In terms of the process, when they sold you the AEDs, what did they tell you?

Ms. Paule Corneil: That's part of the issue that could be improved a little bit. If we wanted to register all the AEDs, we could make it so that when an AED is sold, that could be reported automatically so that we could have an

easy way to know where the AEDs are and their locations and things like that, if somebody wished to make it public. In our case, there was nothing. We just ordered it online and it showed up at our doorstep 48 hours later.

Mr. John Fraser: They're easily available.

Ms. Paule Corneil: Very much so.

Mr. John Fraser: So obviously you ordered online. Did the company have any connection with, "Here's what you need to do every year"?

Ms. Paule Corneil: No.

Mr. John Fraser: Did you get any instructions that said, "Here's what you need to do"?

Ms. Paule Corneil: Yes, we do have instructions about changing the pads and the battery. Ours actually comes with a training kit which has been used over and over again, and that's been very useful. But, remember, the AEDs themselves do not need training to be used. An AED talks to you and tells you how to use it, so the training part of it is not a mandatory thing.

Mr. John Fraser: No, it's not mandatory, but one of the things is you've got a hesitancy. You've got that thing inside a zippered bag, and it delivers an electric shock. It's like when people look at a computer for the first time. It's like, "I don't want to do anything bad." So it's the hands-on piece. You think, "Well, maybe you don't need to be trained. It can be used." But should we actually take it apart and show people what it does? You know when you do that it's not so scary. From that training perspective, even videos are not the real thing, which is what you want to see.

Ms. Paule Corneil: It's true. That's what we found out at our AED sessions. It was amazing to see how nobody would have used it. Then, afterwards, just by opening it up, seeing and hearing it talk to you and teaching you through it, that made a huge difference.

I had friends who know my story. I told them, "If we're playing golf and I collapse, you're the ones who are witnessing. You should know how to use this. I now have one." They all said, "Oh, I wouldn't want to do that." So I did a registered CPR course. We did it all together. Afterwards, they were amazed by how easy it is to use.

Mr. John Fraser: It's one of those things that with repetition and having done it, you can go into a mode where—it's just like life-saving in swimming. You just know what it is you have to do, through some repetition.

Ms. Paule Corneil: Much simpler because it tells you, if you forget.

Mr. John Fraser: This is not part of this bill; it's something that interests me, though. Somebody brought it up last week. For instance, you have a school and there's an AED in that school. But that school is locked up.

Ms. Paule Corneil: Exactly.

Mr. John Fraser: Or that business is locked up. What do you think about getting around that, in terms of it might be an awful thing to be three blocks away from the school?

Ms. Paule Corneil: Exactly. It's like having a fire extinguisher, really, in a school that's locked up and you need it outside. It's the exact same principle.

I think we'll have to probably think about some regulations and see how we can make those AEDs available. But AEDs are sensitive to—you couldn't leave it on the outside of a ski club, for example, because of cold, or even extreme heat. They have to be protected a little bit. We have to be careful about that.

But definitely, some regulations helping people to best place them and realize that they don't need to be locked up necessarily in the principal's office drawer on the left side. Or, if it is, then it should be part of the registry so that you know exactly how to locate it if you're in the school.

The Chair (Ms. Natalia Kusendova): One minute remaining.

Mr. John Fraser: Thank you very much. Thanks for being here.

Ms. Paule Corneil: Thank you.

The Chair (Ms. Natalia Kusendova): Ms. Corneil, I just wanted to ask you, is it your AED that's beeping?

Ms. Paule Corneil: Yes. I'm sorry about that.

The Chair (Ms. Natalia Kusendova): Okay. No problem.

Ms. Paule Corneil: I don't know why it is happening either.

The Chair (Ms. Natalia Kusendova): Maybe it needs maintenance.

Ms. Paule Corneil: I think it wants me to remove the training pads from there. Sorry about that.

The Chair (Ms. Natalia Kusendova): No problem.

Now I'll turn it over to the government side, beginning with Mrs. Martin.

Mrs. Robin Martin: Merci beaucoup d'être venue ici.

Before I start with the questions, I want to acknowledge that both of the other parties have brought forward similar bills. Madame Gélinas brought forward Bill 140, and Mr. Fraser brought forward Bill 158, I believe, all with the same objective to make this happen. It's kind of nice and rare when we all agree on something. I think some of the questions you're getting are really just us trying to make sure that we get this right and make it work.

Interestingly, on the last point that Mr. Fraser mentioned: I was talking with a company in Peel that sells defibrillators. In their registry that they're keeping for the ones that they know about, they actually have the times when the places are open. You can have the registry complete with the address: "It's by the elevator, on the right-hand side; and the building is open these hours," so that the dispatcher will know not to send people to a closed building. So there are ways around some of these things.

I wanted to thank you very much for letting us know about Alexa's story. I imagine it is hard to revisit. You've certainly become, I would say, almost an ambassador for defibrillator use in your community and surrounding area. It would be nice if somehow we could legislate that every community had an ambassador like you, because you're doing a lot of work to educate people and make it a reality in that community. I think that is really an important part of this, so I thank you for all that you have done.

I wanted to ask you, because it was a unique situation in your family, with Alexa having an arrhythmia that I

guess you didn't know about, or a disease which caused the arrhythmia—I didn't catch the name of what that was.

Ms. Paule Corneil: It's ARVC, arrhythmogenic right ventricular cardiomyopathy. I think in the books it shows up in 1995 as a diagnosis, so it's pretty recent.

1330

Mrs. Robin Martin: I was born with an arrhythmia, and no one has ever said anything about it ever since then. But I think they're more common than people realize, so it's just another thing to think about.

In your family, obviously, Alexa, tragically, was lost, but the rest of your family is now aware that you have this genetic issue and are able to take precautions, which is good.

The people who were selling them suggested that they actually take defibrillators with them—because you can get them in little backpacks—when they go hiking or cross-country skiing. That's how intense they are about, where are the defibrillators? Do you do things like that?

Ms. Paule Corneil: My defibrillator was put in quite shortly after Alexa passed, because I did have some heart damage that necessitated having it placed. Our daughter Heidi had hers placed this summer, because they started to find some damage in her, as well.

Until then, when we travelled as a family, we would take it, because nobody can get in our house to retrieve it when we're gone.

My husband is also a family physician, so if we are somewhere and somebody is not feeling well—we've had people knock on our door when we're on holidays and things like that. So yes, we take it with us when we travel.

As far as hiking and things like that, we've really changed our activity levels. We now have restrictions on our heart rates. We still do some fun stuff, but it's not to the same extent as before. If we're travelling as a family, typically, we take it with us and have it available.

Mrs. Robin Martin: That's a good idea.

Ms. Paule Corneil: Yes. I'm hoping to never use it.

I would like to mention that I'm here representing my family, but it's not just me who's working on this. When I talked about our whole community crying with us, it truly was; everybody is on board with CPR. When I'm trying to organize an AED session, I make one phone call and 10 people show up. It has been quite wonderful.

Mrs. Robin Martin: That's great. Thank you.

The Chair (Ms. Natalia Kusendova): Mr. Harris, with two and a half minutes remaining.

Mr. Mike Harris: Thank you very much for being here today and telling us your story. It's a really heartbreaking story. You never want to have to go through that. I have five kids, and I could not imagine what it would be like to be in your shoes.

I want to go back to something you touched on, talking about rural areas. I'm originally from North Bay. I have friends who live in New Liskeard, and I have spent many a day in the Tri-Towns, so I know what it's like. I'm now representing a largely rural area in southwestern Ontario, around Kitchener, and some extended territory. Obviously, arenas and schools are great places to have AEDs. But when you look at the expanse of rural areas, what are some other good locations where you think we could look at potentially having these installed?

Ms. Paule Corneil: Any area where you have a gathering of people should be a place where you would consider using an AED.

For example, in Elk Lake, which is a 40- or 50-minute drive from New Liskeard, they do have a centre there. The response time for an ambulance to get there is way, way longer than New Liskeard, unless by chance the ambulance tends to be there. Over there, where the firemen are located, they do have an AED placed there, so that's a good start. They have some kind of a coalition of citizens—

The Chair (Ms. Natalia Kusendova): One minute.

Ms. Paule Corneil: —who are trained in first aid. They have an AED there, as well.

I would say, libraries, churches, golf courses—any sports facilities, for sure—and large employers. If your employer can afford to purchase an AED—again, if you're thinking that $1,600 is a lot, it's not that much when you can save a life. Those would all be great places. Walmarts should have it. McDonald's would make sense.

The Chair (Ms. Natalia Kusendova): Thank you very much for your testimony today.

Just a reminder: The deadline to send a written submission to the Clerk of the Committee is Thursday, February 20, 2020, at 6 p.m.

HEART AND STROKE FOUNDATION, SUDBURY AREA

The Chair (Ms. Natalia Kusendova): Now I would like to call upon Cori-Lynn Lemaitre from the Heart and Stroke Foundation to come on up. Welcome. Thank you for being here. You may begin by stating your name for the record.

Ms. Cori-Lynn Lemaitre: Good afternoon. My name is Cori-Lynn Lemaitre. I'm with the Heart and Stroke Foundation. I am the community fundraiser for the Greater Sudbury as well as Manitoulin districts, and most recently, North Bay, Timmins and Sault Ste. Marie.

In Canada, 35,000 to 45,000 people die of cardiac arrest each year. For every minute that passes without help, the chance of surviving a cardiac arrest drops by 10%. My family and circle of friends have been blessed to date; we are not part of the noted statistic. Having suffered great loss, it hasn't been to cardiac arrest.

However, over the course of my four years with the Heart and Stroke Foundation, I have had the pleasure of meeting so many local survivors and their families, many who have shared their stories. With great sadness, I have met many families who have lost loved ones, friends and colleagues to cardiac arrest, and it's for them that I stand before you today.

I believe in our Heart and Stroke mission: Promote health, save lives and enhance recovery. Our vision is life uninterrupted by heart disease and stroke.

Bill 141, the Defibrillator Registration and Public Access Act, 2019, will provide an essential life-saving tool and resource to our communities. Together, we can change the life loss from cardiac arrest in our neighbourhoods and workplaces.

For families who have lost their loved one to cardiac arrest, for the grandmother who buried her grandchild, the sister who can no longer pick up the phone to talk to her best friend, the husband who lost his soulmate, these loved ones who didn't have the opportunity to say goodbye or "I love you" one last time—I am here today for the families who fell victim to a cardiac arrest statistic.

The vast majority of Canada's approximately 35,000 cardiac arrests each year happen outside of a hospital. Devastatingly for families and loved ones, almost nine out of 10 of these cardiac arrests are fatal; however, when an automated external defibrillator and CPR are used within the first few minutes, research shows the chance of survival doubles.

The Heart and Stroke Foundation strongly supports legislation that would mandate the creation of a registry of every AED in Ontario, integrated with 911 to ensure that 911 communications officers can seamlessly provide callers with the location of the nearest AED in case of emergency.

Specifically, we are supporting the passing of Bill 141, the Defibrillator Registration and Public Access Act, 2019. Heart and Stroke is encouraged to see that Bill 141 mandates the maintenance and upkeep of the AED by the venue owner, as per the manufacturer's instructions. Many businesses will likely be very surprised at the low maintenance cost of these machines: anywhere from $115 to $150 in an average year, with a battery life of four years and the pads about three. It's a nominal cost to potentially save the lives of their employees.

Heart and Stroke is encouraged to see that Bill 141:

—allows for the inspection of AEDs to ensure they are meeting the requirements of the legislation, particularly with regard to maintenance and accessibility; and

—provides for the creation of designated spaces which will be required to have AEDs accessible on-site.

Beyond what is currently outlined in the legislation, Heart and Stroke would encourage the government to consider specific recommendations in the development of regulations. Heart and Stroke is asking the Standing Committee on Social Policy to ensure the broadest possible definition of "designated spaces" to ensure AED accessibility to the greatest number of Ontarians, with particular attention to both high-traffic and remote locations. An example even here in Sudbury: walking along Bell Park. We could be anywhere along that line and come across someone who is unresponsive and has collapsed. We call 911. Do they have the access and do they have the knowledge of the closest AED to our location? Is it the amphitheatre, or could it be Science North? Are they accessible?

A recent Canadian study suggested placement in coffee shops, ATM lobbies and 24-hour restaurants—venues that aren't high-traffic enough to themselves warrant placement, but that are usually located in dense, urban areas where their AEDs could protect thousands of homes and businesses.

An example would be my little town of Copper Cliff. We have four of these popular buildings. We have a public library, an arena, a curling club and an indoor swimming pool, all on the same corner, but all with very specific hours of operation. If there is an emergency on our ball field, which is only 500 metres away, could the 911 operator instruct the passerby to the right facility to access the AED machine in enough time to save the life of that person on the ball field? Is it located in the right building for quick, easy access?

1340

The right answer: The AED should be strategically placed in the local restaurant, which is on the same corner, which has longer business hours and easy public access.

Another study suggested placement on certain floors of high-rise buildings, as cardiac arrest survival declines on the upper floors due to emergency response challenges.

Mandate that AEDs are prominently displayed, with uniform signage, to ensure they are recognizable.

I know for a fact that the AED access and publicity has had a positive impact on our youth. I have done more than 200 presentations in the past four years at our local elementary schools, which have AEDs present. As part of my presentation, I review what an AED is and what it does. Year over year, more students raise their hands and are ready to answer, and more often, they have the right answer. It is very impressive. So now that the community is aware, we need to support the community with the proper access.

Ensure that the registry is not only seamlessly available to 911 dispatchers, but that it is also publicly available in a digital format, such as an app, designed for smart phones. My children are now 17 and 20, and keeping up with them and technology is a challenge in itself. The app needs to be free, accessible and user-friendly. The general community will be armed with another tool to help save a life, possibly their own, or their loved one's.

Require the inclusion of specific information regarding locations—including text descriptions, maps and photos of the AED in its location—and availability, as well as the business hours.

I strongly believe in Bill 141, the Defibrillator Registration and Public Access Act, given the fact that every five minutes a Canadian family will lose a loved one to heart disease, stroke and related illness. With proper AED placement management, we could change that statistic one life at a time. It could very well be one of my loved ones or dear friends.

Thank you very much for the opportunity to speak on behalf of the Heart and Stroke Foundation as a community fundraiser, parent and wife.

The Chair (Ms. Natalia Kusendova): Thank you very much for your presentation. We will now begin the questioning with Mr. Fraser—six minutes.

Mr. John Fraser: Thank you very much for your presentation and for being here today and for all your work to raise money and awareness for Heart and Stroke.

With regard to public access and where they should be, have you any defined criteria? When you make a regulation, you're going to have to define criteria as to schools, the type of building. Has Heart and Stroke done any of that work, or do you have any recommendations in that regard?

Ms. Cori-Lynn Lemaitre: I know they will have those recommendations. I'm here representing as the community fundraiser, so I'm not as involved as our team down in the head office.

Mr. John Fraser: Maybe it's a bit of an unfair question, yes.

You have to define those criteria, but you have to define those criteria in a way that will make sure that they're available as well as practical. That's the challenge inside regulations. I agree that the more available they are, the better for all of us.

My next question is with relation to education. We've heard, just with the last presentation, that there's a hesitancy with defibrillators. You can put it on the wall or you can put it in the building, but what do we do to make sure that people are aware and are comfortable using it? That's one of the challenges we have. I know Heart and Stroke can play a big role in that, and you may have some thoughts around that as well.

Ms. Cori-Lynn Lemaitre: We have been part of the blitzes that we've been fortunate to have in Sudbury with our local paramedics, out in the community, offering free hands-only CPR, which also included showing how to use an AED—the process and how simple it is. I think that had a huge impact in Sudbury. I believe we're doing them again.

Like you said earlier, it's just repetitiveness. It's making it more common but not being so scary—because once you do open it up, it does talk to you, it walks you through that. But, like you said, if someone is just walking by it on the wall, they don't know that. They don't know to rip that thing off and get it in front of that person. It's no different than a fire extinguisher—if you have never used one.

Again, I think having them more in the workplace, so being part of health and safety—now these are my own words—that type of thing, and in the schools, whether it's part of our education system or presentations, like ourselves going into the schools and showing the simplicity and how easy it is to help someone.

Mr. John Fraser: In Sudbury, do you train in high schools? Are you part of that curriculum? Do you go into high schools, into classrooms—

Ms. Cori-Lynn Lemaitre: No, I'm more on the presentation side of it. We don't do any training. It's talking about the access to the AED, what it does and how it can help someone.

Mr. John Fraser: Inside the schools in Sudbury, do they provide training for CPR—you may not know—and defibrillators? Do you know if they do that? I think it's the grade 9 or grade 10 curriculum for—

Ms. Cori-Lynn Lemaitre: No, I'm not 100% sure. I do not have an answer for that.

The Chair (Ms. Natalia Kusendova): Thank you. We will now turn it over to the government side, beginning with Ms. Hogarth.

Ms. Christine Hogarth: Thank you very much for being here. I appreciate your messages that you shared.

One thing when we talk about training in schools is that you have a targeted audience. It's easy to do it. When a small community gathers, especially over a tragedy—small communities are different than large urban centres. You have that feeling of loss in a community, so there's that extra bit of push to make sure that everybody is aware of how to save a life, really.

Do you have any advice for us on people who are not in school—how to train them or get them to feel comfortable? It's not only the training piece; it's, "Okay. There's this machine on the wall. What do I do? Can I do it?" There's that fear factor. Do you have any advice for us on how to get that message out to a different generation who are not in school?

Ms. Cori-Lynn Lemaitre: Once they're in more accessible areas where people are congregating—even if it's at our local Legions, for that generation, or they talked about churches, or where they are. Then it's taking that opportunity, as those clubs or those groups, to take it upon themselves to initiate a training day—or just to be able to identify that, "Yes, the machine is there, and let's talk about it." I think we're in the right generation now where we talk about a lot. It's more open. There are not a lot of closed doors anymore. So let's talk about how we can use these machines.

If we're putting them out into—like, the local swimming pool. It has been there for years. Before I was with Heart and Stroke, I saw it. I haven't been impacted by it, but after working with Heart and Stroke—you don't know what you don't know. So I think it's getting the message out there, whether it's through our social media or through other mediums, and just letting people know that they're there and they can walk you through it and not to be scared of it. We have sprinkler systems. We have fire extinguishers. We have all kinds of different things that we use to help others. This is just another thing. We have to make it as common as a fire extinguisher.

Ms. Christine Hogarth: Thank you. That's all I had.

The Chair (Ms. Natalia Kusendova): Mrs. Martin.

Mrs. Robin Martin: Thank you, again, for your presentation. That was really interesting.

By the way, I started canvassing for Heart and Stroke on my street as well. I've certainly been raising money for them historically. It's a very good organization.

I know that Heart and Stroke runs the registry that they set up in Manitoba. That's an interesting thing.

In my legislation, what we conceived at least was that a person who comes across someone who has had sudden cardiac arrest on the street would phone 911; the 911 operator, with a proper registry, would be able to direct somebody else, who is there with the person while they're administering CPR, to send somebody to the building across the street, which is open, where there is an AED that you can use and to bring that back as quickly as possible. That's what we've conceived.

But you mentioned in your presentation a publicly available app, in digital format, which I think they have in Quebec, as I understand it. Somebody told me, in talking to people about this, that the problem with that is that sometimes you get people coming not necessarily to help the person, but to be there—media or whatever—to watch the event unfold.

1350

Do you think it would add anything to the rescue of the person, that having the 911 operator send someone to get the AED does not add, if we had an app? That's kind of a complicated way of asking the question. Having an app adds broad public availability. Do you think that would actually improve the survival of people having sudden cardiac arrest, when we already are anticipating having a system where the 911 operator will be able to direct them to the defibrillator? I'm asking if you think it adds anything to that.

Ms. Cori-Lynn Lemaitre: If the app will add value?

Mrs. Robin Martin: In that circumstance, if we have already the 911 operator sending people. You don't have to answer.

Ms. Cori-Lynn Lemaitre: I'm just thinking.

Mrs. Robin Martin: It's just I'm asking if you think there's something I'm missing that it does add.

Ms. Cori-Lynn Lemaitre: What if the person that called doesn't know CPR? They could be there, and maybe they don't know CPR. I think you don't want to draw maybe too many people, obviously, to the scene to just cause a media frenzy.

We're in the age now where it is all about apps. It's all about knowledge. It's at your fingertips. I think we'd be almost behind the times if we didn't proceed in some way to have an app as access, but also to use it as maybe the social medium to be able to allow people to understand what an AED does. Now they've downloaded this app. What more could we offer with this app?

It's not only letting them know. Again, with this generation, that's what we use. We use our phones; we use our apps. That's what I'm thinking.

Mrs. Robin Martin: That's a good point. It does add something. I just wanted to get that.

One of the reasons people may be hesitant to use them is they're concerned about personal liability if they do something wrong. As you point out, the AED itself, the defibrillator, will walk you through the process. But nowhere on it, as far as I know, does it say, "You will not be held liable; it's the law in Ontario," or something like that. Do you think if we had a sticker like that on the box, or as you're approaching it, that that would help remove some of the concerns that people might have?

The Chair (Ms. Natalia Kusendova): One minute remaining.

Ms. Cori-Lynn Lemaitre: There's probably a stigma. We do have the Good Samaritan Act. I think that should be part of our social media. That should be part of how we market it, advertise it—just the fact that it is safe.

Mrs. Robin Martin: You're not going to get in trouble.

Ms. Cori-Lynn Lemaitre: You're not liable, yes. Unfortunately, they're dead.

Mrs. Robin Martin: Yes, the person is dead if you don't help them.

Ms. Cori-Lynn Lemaitre: Yes, they are already. You can't do anything more to someone who has already passed on.

Mrs. Robin Martin: Right.

Ms. Cori-Lynn Lemaitre: So anything you can do is going to help.

Mrs. Robin Martin: Right; important message.

Ms. Cori-Lynn Lemaitre: Yes, exactly. So it's not a heart attack—because people get confused. This is an unresponsive. This person is gone, so anything that you can do is going to help them.

The Chair (Ms. Natalia Kusendova): We now turn it over to the official opposition, with Mr. Kernaghan.

Mr. Terence Kernaghan: Cori-Lynn, I'd like to thank you for your presentation, and thank you for your work you do with the Heart and Stroke Foundation. What you've put together is quite thoughtful and very well rounded, and you've approached it from a number of different angles, especially when you consider that this registry should include such items as maps and pictures, geotags, coordinates and locations, in providing ground-level access. I think those are really important pieces to consider.

I'd just like to ask the question: What do you suspect would happen if there was indeed an AED registry, and EMS was not specifically given access to this knowledge?

Ms. Cori-Lynn Lemaitre: It wouldn't be very successful, I guess, to be fair. I think they need to have access to that in order for the bill to be successful and for a better survival rate. They're the ones out there in the community, answering these calls—thousands and thousands of calls. I think it's an important part of the whole process.

The Chair (Ms. Natalia Kusendova): Madame Gélinas.

M^me^ France Gélinas: I will start with a confession to make. The reason I brought forward the bill was because of conversations that I have had with Heart and Stroke. They are the ones who convinced me that it was time for Ontario to do this registry and time for Ontario to take the next step to make this registry available to 911. Heart and Stroke has a body of evidence that supports all of the ideas that have been presented by Cori-Lynn today as to how it would help with the 35,000 people a year who have a cardiac arrest in our country and the nine out of 10 who will die from it.

A little parenthesis about some of the questions that were asked: You will know that you're in northern Ontario. When you landed at the Sudbury airport, you were actually in my riding, in Nickel Belt, and then we are now in Sudbury. I can tell you that for the vast majority of the territory of Nickel Belt, 911 does not work, as in, if you dial 911, you will get, "I'm sorry. This number is not in service." Then you call 0, and after everybody panics and everything else, they will redirect you to a 1-800 number.

All of that being said, the registry needs to be made available in many different formats. Once we go through

the little bit of work that it will take to make that registry available, then we have everything to win and nothing to lose to make that registry available.

Cori-Lynn went through some of the information. When you register, you are proud of what you've done as an employer, as a not-for-profit group, and you purchase an AED. You hope nobody never ever needs it, but if they do, it will be there, because everybody feels the same way. You put it onto the registry. It would be wise of us—I didn't put it in the bill, and I don't think any of us put it in the bill—to put it in regulations that we ask for GPS coordinates, that we ask for a picture, that we ask for all of those details that Cori-Lynn had shared with us. I don't think that we need to put those in the bill, but certainly keep them in mind when the regulations come out for this bill. I'm already seeing third reading and royal assent, as you can see. If you're going to dream, dream big. I think that's what we all hope for. Those are all good.

I'm assuming that the information that was shared with me will be shared with the committee to show some of the best practices in other provinces, as well as other countries, as to making this registry available. The more you know where it is, the more the stigma of fear goes away, the more people feel comfortable in using it and the more lives are saved.

Cori-Lynn, if you feel comfortable sharing a bit with us: When you go into schools, the age of the kids—and how are you received? How do you go into the schools to make that information available, just so that everybody knows?

Ms. Cori-Lynn Lemaitre: I'm the Jump Rope for Heart coordinator, so when I go to the schools, we're talking about health and wellness and all of that, so it's wrapped up in that. Because of our work with our local paramedics and doing the blitzes, I just felt it had to be part of my presentation—and being in northern Ontario. I have two children of my own. I just felt it was very important.

The more I talked about it year over year, I couldn't believe how the students really understood and they knew what an AED—to even know the term "AED." They didn't always know what it stood for, but they knew that they had to know what that was and the importance of it, and they could do a quick little brief description of what does it do.

The Chair (Ms. Natalia Kusendova): One minute remaining.

Ms. Cori-Lynn Lemaitre: I'm really proud of what has been happening in our community, with the marketing and people doing the blitzes with the paramedics. It's having an impact.

M^me^ France Gélinas: Could you share with us the age group in the classes that participate in the events that you run?

Ms. Cori-Lynn Lemaitre: Usually it's right from JK to grade 8, depending on the school.

More often than not, it was the athletic students who put their hands up, because they're the hockey players and the basketball players, so they're made aware that these machines are in the gyms or at the arenas.

M^me^ France Gélinas: Do you think that what we have developed here in Sudbury and what you have been running is a program that would add value elsewhere?

Ms. Cori-Lynn Lemaitre: For sure. The more you talk about anything the better. Again, familiarity—get people more comfortable with it and help them understand the importance and that it could save a life.

The Chair (Ms. Natalia Kusendova): As a reminder, the deadline to send a written submission to the Clerk of the Committee is Thursday, February 20, 2020, at 6 p.m.

Thank you very much for your testimony today.

MR. DEREK McKINNON
MS. CELINA McKINNON

The Chair (Ms. Natalia Kusendova): At this time, I'd like to call upon Mr. Derek McKinnon to come forward.

Committee, since we're having some technical difficulties, I propose a five-minute recess.

The committee recessed from 1404 to 1410.

The Chair (Ms. Natalia Kusendova): Welcome back. We are resuming public hearings in Sudbury for Bill 141, An Act respecting registration of and access to defibrillators.

I would like to invite Mr. Derek McKinnon to begin his presentation by stating his name officially for the record.

Mr. Derek McKinnon: Derek McKinnon.

The Chair (Ms. Natalia Kusendova): You may begin.

Mr. Derek McKinnon: Thank you very much, first of all, for having us here today. My name is Derek McKinnon, and I have a prop with me today. She's my 20-year-old daughter. This is Celina McKinnon.

Ms. Celina McKinnon: Hi.

Mr. Derek McKinnon: My background is as a professor. I teach pre-hospital medicine. One of the major curriculum components that I teach is electrophysiology, on how those funny looking beats all work in the physiology of heart function. Before that, my background was critical care flight medicine; I worked on Bandage 2, 7798, here out of Sudbury. I have been teaching for the last 19-and-a-half to 20 years as a professor. I'm normally used to standing to give my lectures in my lecture hall, but I'm very comfortable in speaking with each of you sitting here today.

I'd like to introduce Celina McKinnon. Celina is my daughter. She's 20 years of age. We've been advocates for the Heart and Stroke Foundation for 20 years, starting when Celina was about four or four-and-a-half months of age.

Discussion topics I want to bring to you today:

—a little bit on Celina's story;

—a little bit on the community out-of-hospital cardiac arrest stats that I have for the city of Sudbury;

—advocating with the Heart and Stroke Foundation, Cori-Lynn, and to the general public of the city that we are living in;

—a little bit on Bill 141; and

—then a little bit of a conclusion.

Celina's story is interesting. This is her at four-and-a-half months of age. Celina, luckily for our family, turned 20 years of age six days ago. We're very proud of her progression from what you see here. This young lady was found to be a little bit short of breath, a little bit wheezy. Our family physician thought maybe she had infant asthma at the time. They did some chest films that came back that Celina's heart was about two-thirds enlarged inside of her chest, leaving her with a condition called ALCAPA. That's anomalous left coronary artery from the pulmonary artery. Celina suffered a myocardial infarction—she had a heart attack—at that age. Most of these kids are found in post-mortems. Some of them are defined as SIDS babies. Once they do the post-mortems, this anomaly is located, sadly, after death has occurred.

For us, we found Celina with this condition prior to that conclusion. We were able to get to Toronto on my helicopter, on my night shift, with my partner. I didn't fly. I drove down to the city. My wife went with Celina on the helicopter, where the team at SickKids hospital was able to do their incredible work. We were met by a pediatric cardiothoracic surgeon. He makes a little bit more money than a professor in Ontario. And that gentleman did some magical work. Post-surgery, this is Celina.

Celina was then brought back to my wife and I, post the surgery where they repaired this anomaly, and we started the progression. We knew we wanted to meet with somebody. The Heart and Stroke Foundation was who we jumped with right away in regard to beginning the Mother Daughter Walk for heart disease in our city. We started canvassing. Celina has done national commercials, some local commercials, and has been an advocate for the Heart and Stroke Foundation since the beginning of her time and for the last 20 years for our family.

Every time the Heart and Stroke Foundation asks me, as a professional in EMS—for my background as a critical care medic—and then as a professor—and one of the big pieces that I teach, which is heart disease and electrophysiology—I cannot take a no to any of those questions. I love coming out to talk about the importance, specifically, of Bill 141, which is the AED registry.

This is Celina today, obviously at Christmastime. We've gone from this progression of catastrophic events potentially to a young lady who is in your community, with other kids that have conditions, not just adults. I think one of the important pieces that we're trying to get across with these AEDs and with trying to get the health care units out there is that this is not just for seniors. Cardiac arrest does not just happen to seniors or other populations; it can be kids. That's one of the bigger parts, when I'm teaching, that we try to get across.

With the AED registry, through the 911 system, we believe that if we can have those private institutions that have these AEDs and we can register them—I know what that communication officer sees on their board. I'll give an example of a Honda place here, Palladino Honda. If they have one in there and if it's registered, the 911 operator can see that and send somebody who is a layperson on the street with their cellphone, who doesn't maybe want to get involved, they can run across to that place of business and take that AED. It's going to give them that two- or three-minute opportunity to save myocardial time versus EMS getting there. I am a huge proponent of EMS. I know what it does in the community. I've been teaching it for almost 20 years. I know the value of what it is, and I have somebody in my home—I really know the value of having those AEDs available.

A little bit on the stats and where we'd like to be, and some of the more important information I wanted to share with you guys: Currently, we have 65 in our community of Sudbury that are now city-owned. That is between pools and arenas, we have 65. We have a population of about 162,000. That means about 2%. If we look in this room right now, that means some of you in here would die from cardiac disease if your heart stopped and we didn't have these AEDs close.

We have a number of private AEDs that are out there. Right now, they're an unknown number. We have an unknown number out there, but we know that there are private institutions that have them. If we can even increase that 65 to 100, we are going to show a statistical difference in out-of-hospital cardiac arrests.

The number of cardiac arrests responded to by EMS—these are the latest data from 2019. We have 145 out-of-hospital cardiac arrests—that is, non-traumatic cardiac arrests, so 145 within our community in 2019. Out of those cardiac arrests, 28 are in the public setting, so we do have people out there who are not in a private setting. The private setting rings in at about 117, so that's at home, a residence or somewhere else other than a public setting, bringing us to that number of about 145.

The number of cases of CPR, again, prior to paramedic arrival: in the public setting, 24; private setting, 67. Again, if I look at those stats, that means maybe we're not doing as much in our own private settings as we are in public, where people are actually beginning to access people with CPR of some kind. It's so critical, when I teach my own students, that we've got to get the word out about the public setting. Can we get people to get their hands on someone? I understand what this looks like. I understand the questions, I believe, some people had today about not feeling good about grabbing that machine and putting it on. I understand what people look like when they're in cardiac arrest; I've seen it, and I've worked on these patients.

I've also had the opportunity in my professional life to push that button and watch somebody come back to what we call a return of spontaneous circulation. That's an incredible feeling for us in the EMS world and also as public citizens out there. That's a great feeling. When I think about my own daughter, the more we can have in this city, as she grows to maybe become a professional in this city and live here—that we can have more of these public access defibrillators, giving these people the opportunity to save myocardial time. They may have a little bit of myocardial damage, but maybe myocardial time in their life, and their brain, specifically—that we can perfuse their brain, keep them functioning, is critical.

Right now, we have five reported cases of public access or AEDs being applied to patients in 2019. That is prior to EMS arrival. If that was one, I would be happy. If it's five, I'm pretty excited. If that's 50, I'm getting more excited. If that's 100, we get more excited, because we're giving these people an opportunity.

Again, going back to what we're trying to do right now with cardiac arrest is identified here in italics. It's about capturing, electronically, on the ACR forms for paramedics what they're seeing when they get activated to 911. This Bill 141—

The Chair (Ms. Natalia Kusendova): One minute remaining.

Mr. Derek McKinnon: Oh, one minute remaining? I'm so used to a two-hour lecture.

Laughter.

1420

Mr. Derek McKinnon: I'm certainly not going to read through this. Cori-Lynn was excellent in trying to get across all the information that the Heart and Stroke Foundation wants to encourage and is working towards: registering through our 911 system, making sure that these public access defibrillators all look the same and that they're accessible.

Great questions came up today about what happens if a school is closed. We have to find the next location; that's all. There are answers to this. Get as many people certified, first of all, in CPR—AEDs, especially these public access defibrillators, are simple to use. They do speak to you; they tell you how to do it.

One question came up about how we make people comfortable. I don't want anybody to ever be comfortable doing this. I'm not comfortable. It's still exciting for me as a medic to do this stuff. It's exciting for me to teach it. It's exciting for me to get it across to the public. It doesn't mean you have to be comfortable. It just means you have to try it. By training people, by making them accessible to the public, we can certainly expand everybody's ability to work with AEDs and CPR.

Thank you for your important time on this important topic to me.

The Chair (Ms. Natalia Kusendova): Thank you. We now begin seven minutes of questioning by the government. Mrs. Martin.

Mrs. Robin Martin: Thank you for your presentation, and thank you for bringing Celina. She's a lovely prop. You must be very proud of her. She turned out pretty good.

Laughter.

Mrs. Robin Martin: We're delighted to have you here.

Given your expertise, I was wondering if you could just tell us a little bit about how important the time is in getting defibrillators to people. We heard from earlier presentations that in some rural areas it can take quite a long time for the EMS to arrive, just because there aren't that many ambulances available and the distances are large. If someone gets there with a defibrillator or administers CPR in that time frame—can you talk about the difference it can make for patients if they get there within a shorter period of time, a few minutes as opposed to—

Mr. Derek McKinnon: If we're talking statistics, 45 seconds to four minutes: If we're getting some kind of compressions and we're perfusing the brain and the myocardium, we can get those machines, whether they're public access or EMS—we can get the machine on that patient and find them in this rhythm that that machine can recognize. That's the important piece of this, specifically with CPR.

I have statistics from Seattle from 1996-97. Seattle had 50% of their population certified in some form of CPR, and their survival rate for out-of-hospital cardiac arrest was 47%. That's unbelievable.

It's getting our hands on people so that we can get these AEDs—that AED doesn't work if that myocardium is not moving. If it's fibrillating or if it's in a ventricular response that it can be activated, it will work.

The time is critical. Rural centres need these AEDs, for sure. It takes between eight to 12 minutes for us to get our helicopter ready to fly to these other rural centres. That takes time. If we have somebody doing something and we have these AEDs, I think that we can save a lot of these young lives that are out there, or senior lives out there, and save myocardial time.

Mrs. Robin Martin: Just because we don't have the medical expertise: When you say "perfuse the brain," you mean get the blood circulating to the brain and to keep it alive and—

Mr. Derek McKinnon: Yes, it's critical. We need to get oxygen to them and keep that myocardium fibrillating so the machine can pick that up. Once that heart stops moving, that machine will not be able to respond to it. So we need to perfuse it.

Mrs. Robin Martin: You need it to happen quickly.

Mr. Derek McKinnon: Yes.

The Chair (Ms. Natalia Kusendova): Mr. Babikian.

Mr. Aris Babikian: Thank you very much for coming and giving us an update with your thoughts. from your personal experience.

It looks like, from what I have heard today, the biggest problem that we're facing is the fear of using the AED. It is natural that the fear of the unknown is something that hinders the use of this machine.

Do you think that Heart and Stroke and other private sector organizations and NGOs can launch a public education campaign, for example, in movie theatres, where it will be freely distributed like other commercials to educate the public on this important issue?

I understand some police stations have already the AED, but not all of them. Do you think mandating police stations to have them will help provide more locations for accessing these machines?

Thirdly, other than 911, do you think, as a B plan, because we know that most of the 911 work perfectly—but in case there is a breakdown, as a B plan, is there any other place or source you think they can have access to that registry?

Mr. Derek McKinnon: Thank you for your questions. To go to the first question, I believe you asked about—remind me?

Mr. Aris Babikian: Public education campaigns.

Mr. Derek McKinnon: Yes, public education campaigns. I've been with the Heart and Stroke Foundation for, like I stated, almost 20 years. They do a terrific job in getting the education out there. If we can find more ways of doing that, if we can get the commercials out there—I loved your idea of in a theatre where they show you how an AED works and operates and place it on a mannequin or a sim mannequin or on a human being—who is, obviously, alive—so that you can actually see how those pads are placed, and listen to the prompts. If each of you has not had the opportunity to listen to the prompts, that might aid you in understanding how rudimentary it really is: "Press the green button. Place pad on right side of chest." It's awesome. It is simplistic in its origin but does a great job for that myocardium. So I think public campaigns can continue to do that at very little cost.

The second question was in regard to—

Mr. Aris Babikian: The second question, about the police stations.

Mr. Derek McKinnon: I won't be able to speak to all the police stations within the province, but I will tell you that if we can increase any locations, that is going to help with any of these public access defibrillators for AED access. Police stations are located geographically. I think that, like EMS stations, they're put into spots that are great for locale and getting out police, fire or EMS. So if we can continue to place AEDs in these locations, it's certainly going to increase the likelihood that we can get an AED on a heart that requires it.

The third question was on plan B: I love the idea. The Heart and Stroke Foundation is working at ideas such as apps. Today, that just seems to be these words, but it really does work. If you can have something on your phone that, if you've made a 911 call, an app shows up and shows you that you are 30 metres from an AED—that person could say to someone else, "Could you please get to this location to grab it?" You can hear that the sirens are coming, but that siren—I understand the EMS system intimately. It could be more than eight minutes; it would be more than 12 minutes, because in this city, we are busy. EMS is a busy service. Our emergency department is very busy. So it's a possibility that we could save myocardial time by having them located throughout a city. Increasing putting them out there, I think, is excellent.

The Chair (Ms. Natalia Kusendova): Thank you. That concludes the time allotted to the government. We now move on to questioning by the official opposition, beginning with Mr. Kernaghan.

Mr. Terence Kernaghan: Thank you, Derek and Celina, for your presentation, and also thank you for the work that you do on the front lines.

You quite rightly say that there is a fear of AED and there's a fear of the device. I think back to my background in education, where health and safety training was done in a hands-on way, whereas in other locations it might take place in more of a video way. I think, for instance, of the EpiPen, "Orange to the thigh, blue to the sky," and we actually took a fake EpiPen and did that.

What recommendations can you make to the government in terms of a training program?

Mr. Derek McKinnon: I think the recommendation I would want to start with is—we started grassroots—start in schools. Why not as part of everybody's phys-ed class? Put them in their health classes. My wife is a teacher. I'm a teacher. I've watched our daughters grow up in this city in their schools. Why not start it at the grassroots, and every year—you do not have to be certified in AED. We can go buy one of these AEDs, as we heard earlier. You can go buy one. The Good Samaritan law allows us to utilize that and put it on. We do not have to get certificates from the government. Everything is at cost. If you're in schools, start with the grassroots. These kids—by the time they're in grade 8 or 9 and in high school, it becomes part of what they're doing, and those become the future for what we're going to do.

1430

Workplaces: We're seeing them more and more. I'm busy in the rinks with my other daughter; I see them on the wall. I know where they're located. I make that cognitive effort to understand where they're located. I think grassroots is the best route for us for the future. It's making sure that the young people get an idea of how they operate, what they sound like, and how they work. I hope that answers your question a little bit.

Mr. Terence Kernaghan: Then you would suggest that alterations would be made to the health and phys-ed curriculum, for instance, in order to include that as a specific expectation.

Mr. Derek McKinnon: That sounds like a fantastic idea.

Ms. Celina McKinnon: I would like to add something. I would like to add that perhaps the training should be done more often in public places where the AEDs are registered. For example, I was at my local gym at Laurentian University a few weeks ago and I asked an employee if they knew where their AED was, and the employee didn't even know if they had an AED. For myself, being in the gym every day and doing physical activity with my friends and whatnot, it's really important for me to know if there is one accessible and where it is.

I think that increasing the amount of times that we do this training is really important also.

The Chair (Ms. Natalia Kusendova): Madame Gélinas?

M^me^ France Gélinas: Thank you. I would like to also start by thanking you, Derek and Celina, for coming here today.

Our community is very fortunate that the city of greater Sudbury has purchased 65 city-owned AEDs. They've made them available there on the outside of the buildings, so they're available not only when you're using the facility but to anybody, and they have shared their locations with our central ambulance communications centre, which knows where they are.

I don't know if I am accurate, so I will ask you and you can correct me. We've had in the last year five times when one of those city-owned AEDs was used. I was told that they were used because 911 knew where they were and

they directed people to use the AED. But I heard that through the grapevine. Would you know if that's accurate?

Mr. Derek McKinnon: That is accurate. I believe it's on my second slide or third slide. We know five AEDs were utilized in 2019. Because the registry doesn't have the privates, we wouldn't have that data to say if a private one was utilized. We could increase that; it helps in research. But that sounds correct.

M^me^ France Gélinas: It was really to give an idea—as it works, once the call takers know where those things are, they use them. They direct people to them. Sudburians are no different than anybody else; they're as fearful. But if you see somebody, you know you have to ask—you have 911 on the phone, who guides you, who reassures you, and they get it done. They use the AED and those people are with us today.

Just to make the appeal for how important that is—and also, we have many, many businesses. You mentioned Palladino motors, but we have a large number of businesses in Sudbury that have purchased an AED, that are making them available, often on the outside of their building. It's connected to their electrical system. They have a box on the outside so that it keeps at a certain temperature, because it cannot go below so much or above so much and whatever. I don't know the technicalities, but the little box does that.

It's easy to find, it's easy to see, and it is being used, but none of those are on the registry. The 911 call takers don't know where those are. It would really be left to people seeing them and remembering where they are. And in the moments of panic, when you find a person who is unconscious—

The Chair (Ms. Natalia Kusendova): One minute remaining.

M^me^ France Gélinas: —the moment of panic sometimes takes away all of this. The 911 would be there to help.

I also want to thank both of you for all of the work that you have done with the Heart and Stroke here in Sudbury. It has made a huge difference. Many, many people know about CPR, know about the AEDs, know about heart health because of the work that volunteers like you have done, and I wanted to thank you.

Mr. Derek McKinnon: It has been our pleasure. Thank you very much.

The Chair (Ms. Natalia Kusendova): Now I turn it over to Mr. Fraser for six minutes.

Mr. John Fraser: Thank you very much for being here today, Derek and Celina.

Mr. Derek McKinnon: Our pleasure.

Ms. Celina McKinnon: Thank you.

Mr. John Fraser: One technical question: So you have a registry. Is it integrated into DPCI, or is it separate from the dispatch system that exists? Is it actually integrated right into that?

Mr. Derek McKinnon: That's correct.

Mr. John Fraser: It is? And does AMPDS—do you know the other system as well?

Mr. Derek McKinnon: I'm not familiar with it.

Mr. John Fraser: It's another one they're looking at, for the integration in the system. Okay, it's good. I'm just trying to figure out whether things were compatible, because that's important, right?

Mr. Derek McKinnon: Of course it is.

Mr. John Fraser: If you're going to set up a registry, if you've got two things going on at the same time—

Mr. Derek McKinnon: It shows up right on the same screen.

Mr. John Fraser: The same screen? Okay. That's great. With technology—and we're talking about getting an app—you can put an RFID into something, or another chip that sends a message as to where something is, so that it's recognizable. We were talking earlier about people finding out that there's an arrest going on over here, but you wouldn't necessarily have to have an app to have that. You could just turn on your phone, and you'll pick up an RFID 300 metres away that would give you an identifier as to what was there.

I want to talk a little bit about schools and training, because there are two components. There is training for the general public, and their comfort, and there's the opportunity to do generational change in schools.

Talk about schools first. It's actually part of the curriculum in schools. It's just that it's not very specific as to how we teach that, which is different from how we do other things. It's part of the health and physical education, but there's no consistency. Sometimes it doesn't get taught. Sometimes it's a viewing; it's a video. It's not the worst thing in the world, but it's not the best thing.

Hands-on training seems to be the best thing, to have more prospective people being comfortable with it, the AED and the CPR, but also, from the perspective of, at the age of 14, 15 or 16, actually having an impact on people understanding that they can have a career like yours. I don't know if you have any thoughts about training in schools.

Mr. Derek McKinnon: I can't disagree with the hands-on; I think that the hands-on approach is always going to be a piece of that. We have the didactic component, that you can just teach it or put a video up. Kids like the online ability to get information.

I'll give you an example. When I'm teaching intravenous initiation, I can do that and show them a simulation, but until they're actually starting that intravenous line, and they have the shakes and they really want to be able to get into that vein and do it and get that flashback—that takes the dexterity of working with your hands. I cannot put that away.

Working with an AED, the monitors that we work with are much different. I can cardiovert a heart; I can defibrillate a heart; I can pace a heart. We do different things. That has to be a hands-on approach.

I think we have to integrate, because of the cultural changes in some of our students, that they want to have the piece that's quickly online. But to also make sure we're getting the hands-on approach is critical to a learning component. It's a pedagogical learning component. You must have the hands-on.

Mr. John Fraser: That's good. Thank you very much. From a public perspective, it's a bit different. It's a bit harder. We're going to have to identify places where they should be, and prescribe some regulations around the responsibilities.

What would you think would be a good way to ensure that a defibrillator would be used in a public place—or a place of employment, would be a better way to put it, that people were in. What kind of plan would you put in place, or what would you prescribe to have as a plan?

Ms. Celina McKinnon: I think if the AED is in a public place, then the people who work in that establishment should definitely know and be aware of where it is and how to use it. Like my dad said, the AED itself gives you instructions on what to do, but it's really important that people who work in an establishment know that they have one and where to find it.

Like you mentioned, consistency in training is also really important, because we know that the turnover in part-time employment is really high for people who are changing jobs and whatnot, so I think that improving the consistency of the training on AEDs in public places, so that people know where it is, is very important.

Mr. John Fraser: One of the things we'll have to tackle is, if we're going to prescribe it in some way, how you put a bit of meat around the bone so that you've got some consistency that we're looking for in the school system.

1440

Mr. Derek McKinnon: I think that it is difficult to make an employee accountable and say, "You have to be trained in CPR; you have to know the AED," for everybody that's there. I don't think that's always a possibility. I think that making sure that you're consistent in a certain percentage of your employees, that if you owned a business you had a few people who were interested in doing that, or you strike up a committee and say, "You are part of our CPR/AED initiative," or those who want to volunteer—

The Chair (Ms. Natalia Kusendova): One minute remaining.

Mr. Derek McKinnon: Thank you—or if you have a small percentage of people who become part of that committee, then your establishment, where you have the registered AED, can become important.

Mr. John Fraser: In other words, a plan—

Mr. Derek McKinnon: Correct.

Mr. John Fraser: Just a plan.

The last thing I wanted to ask you: Is there any information that's out there that would talk about the prevalence of cardiac arrest that would help regulations be formed as to where they should be and where the best benefit is? If I had five places to put them—what are the first five places?

Mr. Derek McKinnon: That's a great question. That's a good question. I don't have the absolute answer, but I would tell you that, geographically, we have to put EMS stations in cities that are hot zones, that happen to be where we get the highest volume of calls. We put stations, hopefully, in those areas so that we can respond. What we would have to do as a community is find out: Where are these cardiac arrests occurring? Are they on the fourth floor of buildings? Are they rural? Are they centralized more in the core? Can we get more establishments to put these AEDs in stores downtown instead of maybe just in these malls or somewhere else?

It's a great question. I would like to be involved in finding out that research.

Mr. John Fraser: That's a bit of a ways off, but it's a really important question.

The Chair (Ms. Natalia Kusendova): Thank you very much. This concludes the time we have allotted.

As a reminder, the deadline to send a written submission to the Clerk of the Committee is Thursday, February 20, 2020, at 6 p.m. Thank you so much for your presentation.

Mr. Derek McKinnon: Thank you, everybody.

Ms. Celina McKinnon: Thank you.

NORTHERN CITY OF HEROES

The Chair (Ms. Natalia Kusendova): At this time, I would like to call upon Mr. Robert Ohle, director of Northern City of Heroes. Good afternoon, and welcome. You have 10 minutes for your presentation. You may begin by stating your name for the record.

Dr. Robert Ohle: My name is Robert Ohle. Thank you very much for having me here. I'm an emergency medicine physician at Health Sciences North and I am a clinical epidemiologist. I'm delighted to speak to you today on behalf of a community initiative here in the greater Sudbury area and, indeed, northern Ontario, called Northern City of Heroes.

Through my work, sometimes I'm called upon—and all front-line staff—to resuscitate or to care for somebody who is critically ill. There is nobody more critically ill than someone who's suffering a cardiac arrest.

It blows my mind, almost on a daily basis, that the most important thing which is going to lead to a successful outcome for that person happens before I see them. It happens before the paramedics get there. That's bystander CPR, and that's early access to automated external defibrillators.

Let me ask you this: In Sudbury here today, do you know what the survival rate is from out-of-hospital cardiac arrest—any guesses?

Interjection.

Dr. Robert Ohle: One out of 10? Okay. What about yourself?

Mr. John Fraser: It's probably about 4%.

Dr. Robert Ohle: Yes. The survival rate here in Sudbury is 5%. That is shocking. Our national average in Canada is closer to 10%. There are municipalities around Canada that have a higher survival rate than we have here, and there are countries and cities around the world that have four, five and 10 times the survival rate that we have in the greater Sudbury area.

Cardiac arrest kills. It's affecting between 35,000 to 50,000 Canadians per year. To put that in context, cardiac

arrest kills about five times more people than die in road traffic accidents, or five times more people than die of a stroke. It's a devastating, devastating illness.

One of the other most important things to know about cardiac arrest is, the vast majority of them occur at home, so the people who are in the best position to help your mother, your father, your brother or sister—well, it's you. But the truth in Sudbury today is that less than one in two people actually perform bystander CPR in a cardiac arrest. It's low.

People are worried. They're worried that they're going to hurt somebody. They're worried that, "I haven't been trained," or, "My certificate is not up to date." But any CPR is better than no CPR. You can't hurt them. The person is already dead. All you can do is help.

They say, "Well, we have fantastic paramedics. If I call them, if I stay by their side, then they will be able to save them." The paramedics in the greater Sudbury area—there are none better in the world. The average time within the greater Sudbury area is about four minutes, and 90% of them get there within eight minutes, which is unbelievable. We've got a wide distribution of our population, we've got massive potholes on our roads, but they get there.

With cardiac arrest, it's time-sensitive. As we heard before, with each passing minute, the chances of being able to restart that heart decrease by about 10%. So by that eight minutes, by that nine minutes, the chances of survival of your loved one is close to zero.

So you've got to ask yourself: Would you know what to do? To be honest with you, at the start of the Northern City of Heroes, we turned around to our friends and our families, and the answer was that they didn't know what to do. And that's fine; that's okay. That's part of what these community initiatives and what Heart and Stroke are doing. The community paramedicine program, they're out there; they're educating. They're doing it in lots of different ways, trying to address the barriers to performing hands-only CPR and the barriers to using an AED.

There have been lots of conversations about what it looks like to educate, to break down these barriers. The simple fact is that it looks like a lot of different things in a lot of different places. I don't think there will be a one-size-fits-all. What we're trying here in Sudbury is, we've incorporated 20 high school students. We've come together to create a one-hour didactic and hands-on session, delivered by the high school students, by their peers, in the schools. We have over 3,500 students who are signed up to get trained in March and April. The WHO says that every kid over the age of 12 should have at least one hour of CPR training every year until they leave school. Repetition: It's changing culture.

It's about the community coming together. We've partnered with Health Sciences North, with Science North, with the community paramedicine. It's not about any one person going alone. It's about coming together to bridging that gap.

We've developed the first, anywhere in the world, interactive exhibit which is going to be opening at Science North. This addresses some of the barriers to getting trained in CPR: time, child care, money. This is an exhibit which is open to all, that you interact with on your own time, where you get educated. Then you actually get to test how effective you are on simulation trainers that health care professionals use every day. This is how we get trained. The public will have access to that.

Imagine if we could downsize that and make it economically viable to have in different locations around the country. The American Heart Association has a stand-alone kiosk. It costs 10 grand, so it's not really viable to disseminate across, but there's no reason why we can't do that cheaper.

Helping someone when they're suffering from a cardiac arrest—it's easy. It's calling 911; it's calling for an AED. It's pushing hard; it's pushing fast. If you have an AED, it's using an AED.

But why we're here today is—there's the rub: if you have an AED. We don't know whether we have AEDs. The dispatch, if they know someone's there, they'll direct to use.

You could have a cardiac arrest here. Where is the nearest one? A dispatcher won't know. We're in a private environment. This is a time-sensitive condition.

Where should we place the AEDs? There have been studies about how you optimize AED location. If we know where the AEDs are, we can map in the city of Sudbury where our cardiac arrests are, and we can see where the gaps are and where we should place more. They've done this in Toronto. They increased their use of AEDs—I was looking it up while we were chatting here—from 14% to 22% by optimizing the placement of AEDs.

We talked about apps and potentially crowdsourcing. There is great success in the States. It has been piloted in Kingston here. They haven't shown a massive increase, and they're working on the reasons why. But in the States, in the locations where PulsePoint, the third-party app, was developed, it has increased the bystander CPR from 48% to 62%.

1450

There are issues in regard to the vast majority of cardiac arrests occurring at home, and then how do you get public access to the home. There are different models to address that. But all the research in regard to improving survival for cardiac arrests points to one thing: You come together as a community, you try to change the culture and you innovate. You bring people together, and you work together to improve it. It's not one person going alone.

But the reason why we're here is that we can't do this without the support of the government, without the support of people bringing in private members' bills to mandate for these things, so we can get some sort of cohesion across the entire country. The AED registry is a fantastic first step to getting people access to AEDs. It's not the last step, but it's the first one. It would allow us to do things like optimizing the location of the AEDs. It would allow us to get access for the dispatchers to direct people. It's going to improve defibrillation in cardiac arrests, and it's going to save lives.

Within our community, across our country, these are our friends and these are our families. Here in greater Sudbury, across northeastern Ontario, this is our north. If we come together here today, if we come together in everything that we're doing going forward, we can make this the genesis, the starting point, and we can make this the Northern City of Heroes, which we can disseminate across the country and show that Canada is the world leader in this. But it starts with everybody coming together.

I'm going to finish by thanking everybody for being here. What you're doing is important. What you're doing matters. What you're doing is going to save lives. Thank you.

The Chair (Ms. Natalia Kusendova): Thank you, Dr. Ohle. We will begin questioning with the official opposition. Madame Gélinas.

M^me^ France Gélinas: Thank you, Dr. Ohle—a very powerful presentation. Would you care to share a little bit more—because there are people on their first visit to Sudbury who don't know the Northern City of Heroes. Talk a little bit about what you have done and what the group has done.

Dr. Robert Ohle: Yes, it is myself and my wife—she's a critical care physician and an anesthesiologist. Sometimes we get to work together, and it's usually in the setting of somebody who is critically ill, like a cardiac arrest. We noticed that the big thing is the bystander CPR and the early AED use. It changes the conversation that we get to have with families. We get to go in and say, "You know what, you're a hero. You did the most amazing thing. You pushed hard; you pushed fast. You saved your loved one's life. You gave us the opportunity to care for them and to bring them back to health."

So how can we increase the frequency of those conversations? How can we really change those incredibly traumatic experiences for people into that your loved one is going to get the opportunity to go home? How do we do that? Do you know what it was? It was talking with people. Everybody is interested in helping; everybody is interested in engaging.

This would have stayed this small without engaged people across our community, without support from Science North driving things forward, from the community paramedicine, from Heart and Stroke. It's like-minded people coming together and saying, "Why don't we get the students to teach?" I said, "Okay. Would the students feel comfortable with that?" So what we ended up having is a presentation which was informed by what the students want to hear: How do we engage them? This is a very different presentation than I've ever been involved in for teaching bystander CPR and AED use. It's incredible.

The exhibit at Science North, it's crazy. This is something which Sudbury—you know, people say, "Sudbury? Why are you going to Sudbury?" Why do we live in Sudbury? Why do we visit Sudbury? Because it's amazing, and because it's filled full of amazing, innovative individuals. This exhibit is just one example of that, something that we can disseminate across the country and across the world to improve survival.

M^me^ France Gélinas: Just so people know, the exhibit at Science North is not quite open; otherwise, I would have brought you to it.

Dr. Robert Ohle: March 12 will be our official opening.

Mrs. Robin Martin: Share photos.

Dr. Robert Ohle: Yes, exactly.

M^me^ France Gélinas: We will share photos, for sure. But one thing that Science North does is that they travel their exhibits. We will have it first, because it was developed by Science North, but eventually, I am hoping, it will be one of those exhibits that will travel around, and other people will get to see it, learn from it and benefit from it.

My other question has to do with this: Northern City of Heroes have donated an AED. Do you want to talk a little bit about how this is done?

Dr. Robert Ohle: Yes. It's the Chase McEachern foundation. Again, talking about like-minded people, and by being a voice out there, people see that you're doing something and they plug into it. So, we connected across social media. They donated an AED to our daycare. We have a two-and-a-half-year-old and a four-and-a-half-year-old. We actually went in and did CPR training, and we saved a lot of teddies that day.

People were talking about, "Why do you need an AED at a daycare?" The first thing is that people don't know, but cardiac arrest happens at all ages. It is far more common in the elderly, but it happens at all ages.

The other thing is talking about changing culture. These kids and their families—this AED is right in front of you when you walk in. Every day, people are walking by this; they're seeing the AED. Underneath the AED, there is the six easy steps, starting with the only one you really need to know, which is pushing the start button and listening. They walk by this every day; it normalizes it. "This is an AED." "Yes, I walked by this for five years when I was at the daycare." "I see this every day." This is not a scary piece of kit. This has got an idiot-proof guide on the bottom for how to use it.

So it's about changing culture. It's about being in the schools and implementing the WHO recommendations. It's about having the AED registry, and it's about making AEDs visible. It's about changing the thought process.

People probably remember when there was no 911. If you tell people there was a time before there was 911, they look at you like you're crazy. "We've always had 911. What are you talking about?" But we didn't. And I want people to look around in five or 10 years' time and say, "Remember a time when most people didn't actually know how to do CPR? Remember a time when AEDs were as rare as hen's teeth? Remember a time when AEDs were really scary and we didn't know how to use them?" It's like, "What are you talking about, Dad? They've always been a thing. You're crazy." That's what we're working towards.

M^me^ France Gélinas: Thank you very much.

The Chair (Ms. Natalia Kusendova): Any further questions? All right. Now I'd like to turn it over to Mr. Fraser for six minutes.

Mr. John Fraser: Thank you very much, Dr. Ohle. Thank you for your passion. We all just learned a bit more, and not just about your passion, but about your city.

You're right: These are all community-based solutions. And what this bill is—and actually, the bill from my colleague and the bill that I put forward, they're all very similar—is a structure to enable communities to do things like mapping and to do things like education.

We're trying to do the best bill possible, without overprescribing, which is to create a framework. But I really like the way that you framed it, and that you brought forward that WHO recommendation, which I was totally unaware of.

I will tell you that I remember when there were no paramedics. I remember in the 1990s, there were no paramedics in the city of Ottawa or Hamilton or here, but they were in Toronto. The government of the day—we won't mention who—said, "No, you can't have them." We eventually got them, so things do progress.

It's critical that we give communities the tools to be able to build and to work on their own capacities. I think you may have said it's not going to be the same everywhere, because you have different capacities, different people and different leaders.

I don't know if you have any other advice for us. I'm still absorbing what you told me, and your passion for this. But if there is anything else that you want to add right now—I just really appreciate you taking the time and coming here today. It's obvious that you, like all of our other presenters, care very deeply about this.

Dr. Robert Ohle: There are people far smarter than me around the country who are doing amazing work. And so, linking in and getting them to inform what you're doing is probably the best thing that you'll ever do. Having people who are on the ground, like the incredibly inspiring people sitting behind me here talking to you, you're going about it the right way.

1500

Mr. John Fraser: Thank you very much.

The Chair (Ms. Natalia Kusendova): Thank you. Now I will turn it over to the government. We will begin with Mr. Harris.

Mr. Mike Harris: Thank you, Doctor, for being here today. Obviously, you're a very passionate guy, and I love to hear what you have to say.

This is a question I was actually hoping to ask the McKinnons, but I think you may be better suited to answer this, especially with your experience. When we talk about early intervention when someone's having a heart attack or a cardiac event, what does it mean as far as somebody with a condition like Celina's, when you're talking about the time frame that that gets seen, that an AED can be deployed and used? By the time they get to the hospital, what does that look like? Is it so much more beneficial to somebody with her type of condition to be able to have that early intervention, and what does it look like once they get to you?

Dr. Robert Ohle: That's a great question. If you don't do bystander CPR, usually you don't get to hospital. If you don't use an AED soon enough, then your heart doesn't restart.

What does it look like? It either looks like a very short stay in the emergency department, where there is nothing that we can do, or people aren't even transported to the hospital. It looks like the worst day that I could possibly imagine for their family and friends, and it looks like grief. It looks like the darkest of days. This is what it means to do these things early.

Mr. Mike Harris: Would you say, from your experience and what you've seen, that the majority of people that are coming into your ER have some type of condition that they've had previously, or is it mostly people that have never had an inkling of any heart condition? I know that's a tough question to answer.

Dr. Robert Ohle: Yes, it's a tough question. Certainly the vast majority of people who suffer a cardiac arrest have some risk factors for narrowing of the blood vessel to the heart, which may predispose to a massive heart attack, which may affect the passage of electrical activity through the heart, which leads it to stop. They themselves are probably not aware of the risk. They may be aware of the individual risk factors for which they are seeing their family physician or a physician about, such as high blood pressure, smoking or high cholesterol. I don't know whether you're getting at whether there are people who have congenital heart disease or valvular problems. There are a lot of things which people wouldn't necessarily be aware of. But there are definitely massive things which can be modified, which Heart and Stroke has done unbelievable work in, trying to create a healthier population to reduce the number of people who actually have cardiac arrests and to make this problem less.

Mr. Mike Harris: Thank you.

The Chair (Ms. Natalia Kusendova): Ms. Hogarth.

Ms. Christine Hogarth: I just have more of a comment about things that you do and you do very well. I actually learned my CPR right at Health Sciences North to the tune of Stayin' Alive. I remember that training. It took the fear out of it because it's a song and it goes in your ear and it keeps things—well, everybody knows the song.

Dr. Robert Ohle: We use Baby Shark with our kids.

Ms. Christine Hogarth: Baby Shark? Oh, well, there you go. As I said, it took the fear out of it—

Mr. Mike Harris: Now it's going to be in my head all day.

Ms. Christine Hogarth: And those are the kinds of things we need to take the fear out—that it is okay to do this. There's something about it. At the same time, they showed us the defibrillator training. It was so simple. We just watched it happen and it was—

Dr. Robert Ohle: I know.

Ms. Christine Hogarth: Press a button, and here you go.

So more of that sharing and what Health Sciences North did well—I think it was your paramedics department that put it on for us, and we came down. If we can share that with other hospitals and other venues, community centres

or something, to take that fear out of it—I think if we could share those programs, it would be great.

I just want to thank you for your passion and all the work you did on this because these are things I'll certainly bring back to my riding and my area.

Dr. Robert Ohle: Thanks for being here.

Ms. Christine Hogarth: We've certainly learned a lot today.

The Chair (Ms. Natalia Kusendova): Mrs. Martin.

Mrs. Robin Martin: Thank you again very much for your presentation. You had a lot of important information to add. One of the things I was struck by, and I think it was also mentioned by the McKinnons, is how many people are impacted at home and how, in some ways, this bill may not necessarily address some of those things—it could, potentially.

I was just thinking about it: best practices from the EMS or dispatch point of view, when someone calls in and they're panicked because someone has had a sudden cardiac arrest, even at home, if dispatch sends the ambulance but then also walks the person through CPR—I don't know if they do that now, but if they say to them, "Okay, now this is what you have to do"—because you need someone to tell you right then that you can't hurt the person.

Dr. Robert Ohle: Yes.

Mrs. Robin Martin: This is the time when you have to actually help. I think that once they know that, then it takes away the fear a bit if someone's walking them through. I don't know if that actually happens—

Dr. Robert Ohle: Yes, it does. Dispatch-assisted CPR is one of the really huge changes in how things have been done, which has increased the proportion of cardiac arrest sufferers who have received CPR. Melissa Rooney was the one who brought it into the Greater Sudbury area, and it has had a big impact on the number of people who have received CPR.

Speaking to your point about the fear, I think we've got to think about long-term and short-term. Long-term, we're looking at changing culture, and the way you change culture is each retirement or funeral at a time. As kids grow up and become adults and become community leaders, putting that mandatory, supported CPR and AED training in schools every year from the age of 12 decreases that fear.

Then, for the short term, it's with community engagement, having access to the education pieces—

The Chair (Ms. Natalia Kusendova): Thirty seconds.

Dr. Robert Ohle: —whether that's through things like exhibits, community programs, advertisements on television or, in the future, stand-alone kiosks that people can interact with on their own time for free.

Mrs. Robin Martin: Thank you very much.

Dr. Robert Ohle: You're welcome.

The Chair (Ms. Natalia Kusendova): Thank you very much, Dr. Ohle. As an emergency room nurse myself, I have thoroughly enjoyed your presentation. Thank you for all the wonderful work you do for all of our patients.

As a reminder, the deadline to send a written submission to the Clerk of the Committee is Thursday, February 20, 2020, at 6 p.m.

DR. CALUM REDPATH

The Chair (Ms. Natalia Kusendova): Members of the committee, our next two presenters will be via teleconference.

Right now we have Mr. Calum Redpath on the line with us. This is Chair Natalia Kusendova speaking. I ask that members introduce themselves every time they are speaking so that Mr. Redpath can identify who is asking him the question.

Calum, can you hear us?

Dr. Calum Redpath: Yes, I can.

The Chair (Ms. Natalia Kusendova): Wonderful. I invite you to begin your submission. You have 10 minutes, and you may begin by stating your name for the record.

Dr. Calum Redpath: Hi. My name is Dr. Redpath. I'm a staff cardiologist at the University of Ottawa Heart Institute and an associate professor in medicine at the University of Ottawa. I am involved in a research capacity with my colleagues in Ottawa EMS, and also the cardiac care research and education advocacy group, which is based in Ontario.

We are very keen to promote the legislation that would encourage, or rather mandate, registration of AEDs in Ontario because a very similar program performed in Denmark resulted in a tripling of survival in Denmark. What that program involved was, first of all, providing high-tech post-resuscitation care, which we already have in our major urban centres in Ontario, particularly in Ottawa. Then, in order to complete the chain of survival, we would need to have bystander CPR and availability of AEDs.

I'm sure you've heard earlier that there is a window of opportunity to successfully resuscitate and then be able to rehabilitate patients to live completely normal lives if defibrillation and CPR are performed promptly. We believe that, rather than the tripling of survival that happened in Denmark, if we were able to double survival in Ontario, it would be between 700 and 1,000 lives per year.

1510

AED registration is an extremely important part of this chain of survival, because, first of all, clearly, any public health program to improve bystander CPR is going to fail if the resuscitation with a defibrillator is not available.

The data both in Denmark and from the work that we've done in Ottawa and in the GTA, by my colleagues in Toronto, is that approximately only 10% to 15% of all privately owned defibrillators are on a registry so that people can actually use them in an emergency.

The literature and, indeed, our colleagues in care in the paramedic service will tell us repeatedly that they were aware that there were AEDs within 200 metres of a patient who required the AED, but from ignorance of knowing that the defibrillator was there, no one used it.

To give you an idea of just how important this is, the first trial that really started this off was putting defibrillators in casinos. When the cardiac arrest was witnessed by security staff—as you know, security cameras in casinos are fairly widespread—with prompt CPR and defibrillation, 100% of all of the patients who had a cardiac arrest had a shockable rhythm.

When we see shockable rhythms deteriorate is in the two to five minutes, and then the five to 10 minutes and beyond. For example, in Ottawa, we can get our EMS services to patients within four and five minutes only in the city centre. Then it extends out to the seven- and 10-minute marks, and then we see the drop-off in shockable rhythm.

So if we can move the needle with public bystander CPR, and use the registry to create, virtually at no cost, a registry that is usable by the emergency services and/or the public, if you wish to democratize the information—and you may not wish to do that; I understand that. But if the EMS could harness the availability of what we believe is anywhere between 15,000 and 20,000 defibrillators that are not registered across Ontario, then we would be able to save at least 700 and, if we can replicate the Denmark experience, anything up to 1,500 lives per year.

For those of you who attend football games, it wouldn't take very long—perhaps the term of your office of five years—to fill a stadium with the survivors of cardiac arrest, and their families, based on legislation that you, as our representatives, could enact. I think that's a pretty powerful way to think about this.

You are aware, of course, that our fire service does a phenomenal job—but 90 citizens of Ontario died. Yet we have thousands of people dying from witnessed, never mind un-witnessed, cardiac arrest.

So there is a big gap between what we're currently doing and what we could easily do, based on the experience in Denmark. I think that the first step is to have a viable, usable AED registry. There's technology available, both commercially and here, adapting fire service software that's already in use by the fire service here in Ottawa and elsewhere in Ontario, to be able to provide that information in an emergency. We believe it would take perhaps four to six seconds to automate this—as part of Ottawa EMS, and I imagine it would be the same across the various EMS services in Ontario—to the call. Therefore, we would immediately be able to identify if there was an AED in the proximity of the patient, and whether or not it would be more likely that the AED would arrive before the EMS service, which is already en route.

I would be happy to answer any questions at all on the matter. I hope that this has been useful to the members of the committee.

The Chair (Ms. Natalia Kusendova): Thank you, Dr. Redpath, for your presentation. We will begin with Mr. Fraser, for six minutes of questioning.

Mr. John Fraser: Thank you very much, Dr. Redpath, for taking the time today to talk to us about the importance of the registry, and for your advocacy. I know we had a chance to meet a few months ago.

I want to go a bit beyond the registry, because it's clear that the registry will help to provide tools and a framework, as I said earlier, for communities to build their solutions. Do you know of any information or any criteria that you think we should use? Because part of the bill is to take a look at where these are. I think I said, when we looked with one of the last deputants, that if there were five places we need to put these—where are the top places that we need to put these things?

Dr. Calum Redpath: There are a number of scientifically ratified programs and protocols to determine where those would be. They're fiendishly difficult to explain. Of course, they use a formula based on meeting places and whatever. Essentially, those are scientific ways of identifying either groups at risk or places where large numbers of people congregate. So you'll understand why schools, hockey rinks, sporting stadia, airports—those have already been identified.

What I would hope this registry would be able to do would be allow our city planners and the EMS services to use these—they're often referred to as "in silico." What we do is they take the 911 calls that were confirmed as cardiac arrests and the location, and they work backwards retrospectively to identify where those were, and then they program it in. They build, essentially, an ideal geographic distribution of these devices, and they essentially merge the two, one on top of the other. Those areas that are above the threshold for placing an AED, if there's not an AED there, then that allows the city to place an AED where it's most likely for the marginal benefit.

We believe that there are thousands and thousands of these defibrillators out there, but only 10% or 15% are likely to be registered in this Excel file that previous legislation has mandated our EMS services keep. But that is completely useless in an emergency situation. Indeed, the paramedics that I have spoken to extensively are very concerned that this old school pen-and-paper approach really takes resources away from helping citizens and actually isn't fit for purpose. We have an opportunity for the registration to look at the prior five years or a predetermined period of time and then to determine where the gaps are. The registry will allow us to have an accurate geographic—essentially a geolocation for the AEDs that are currently out there.

The Danes did this. They had a 500% increase in the number of AEDs that they were able to geolocate at a cost of zero dollars, because those defibrillators had already been purchased by members of the Danish public. What was interesting is, you may well think that sales of defibs went down, but actually sales of defibrillators went up once this actually started going, and there was a small percentage of withdrawal from the registry. So it seems to be a massive win at very little cost because the money has already been spent.

Mr. John Fraser: Yes, I can see where it can lead to, but when I look at—the registry is critical. There's no question about that. I guess the next step, and you've explained it in a way, of how we decide where it is—but one of the things we have to look at is, it's easy to say in a

public place, at a rink or a community centre. Then we have to somehow draw a line at, is it employers who have more than 100 employees? Or 50 employees? Or do we want to do that? So it's just trying to get our heads around what's the best way to build a skeleton that we can add to, not by prescribing as much as doing it in a community-based way. So that's kind of what I was getting at.

The Chair (Ms. Natalia Kusendova): One minute remaining.

1520

Dr. Calum Redpath: Sure. I didn't quite understand, but now I see. If you were looking to set a threshold for how many people will be likely to be in a place at a particular time, and whether or not there should be a defibrillator there—yes. Those scientific studies are there, and it really depends if it's a 24-hour facility, if it's something that—again, it's a combination of things: the population at risk, the duration of risk and the number of people who are likely to be there at any one time. Those formulas are available, and I'm sure any number of us would be happy to work with you to drill down into exactly what that should be.

Mr. John Fraser: Thank you very much, Dr. Redpath.

The Chair (Ms. Natalia Kusendova): Thank you. We now move on to questioning by the government, for seven minutes, beginning with Mrs. Martin.

Mrs. Robin Martin: Thank you very much, Chair, and thank you, Dr. Redpath, for your very interesting submission. I haven't heard about the Denmark program, but it sounds very interesting. I have a particular bias for Denmark because that's where my mother's family came from. I'm wondering if there is information about it that you can share with us—maybe a study that is hopefully not too medically complicated for us to understand, but that outlines some of what they did or what their legislation was like.

Dr. Calum Redpath: Yes. Would you like me to describe the study in more detail? Or I'd be happy to send one of the most recent ones to you directly in the mail. What would be most useful for the committee?

Mrs. Robin Martin: Probably send it to us, and if there's anything else specifically you wanted to elaborate on now, you could do that.

Dr. Calum Redpath: Sure. In simple terms, the Danish study is really very useful. It explains what they did in the most detail. It was published in JAMA Cardiology early in 2019.

Basically, what they did was a combination of stakeholders from the government—local, regional and national—as well as public health, and a cardiology and resuscitation scientist. They looked at the chain of survival: bystander CPR, availability of AEDs, and then hospital care for resuscitation. What they did was they took a public health and a legal approach to this to say: How do we make a sustainable change in this? Because we know, from the casino studies I was referring to, which are now 15 to 20 years old, as well as from some places in the US, that if you can literally only get from 4% to 5% of the bystander population trained in CPR to about 9% or 10%, you between double and triple the likelihood of receiving bystander CPR.

Then, of course, once they got that going, they recognized that the defibrillator was the key part and that they did not wish to spend tens of millions of dollars to litter Denmark with defibrillators. So they established, initially a voluntary and then a mandatory registry. Initially, when this started in 2006, for the population of Denmark, which is not dissimilar to Ontario, they had 3,000 defibrillators. At the end of the decade, when mandatory registration of defibrillators and public education on CPR was performed, there were almost 20,000 defibrillators registered in Denmark. Then they saw initially a doubling and then a tripling of survival of patients with cardiac arrest to discharge from hospital healthy and well.

In Canada, work that we did here in Ottawa, but others have also replicated—we have demonstrated that if there is hospital and post-hospital care in the large cities, we can get to about 10% or 11% survival. If you are one of the lucky patients who has a witness to cardiac arrest, has CPR, and an AED applied and used within five minutes—which I'm telling you is essentially right at the limit of what, currently, our EMS can deliver in the best circumstances—you are 50% to 60% or five- to six-fold more likely to leave hospital, and to leave hospital well, economically active, a taxpayer, a voter. There is this huge change. They were able to demonstrate that even in residential situations, even though that is a much smaller number of human beings, the proportional increase was similar. You get this tripling of the overall survival rate, which currently, we believe, in Canada is about 11%; in Denmark it is 25%. If we could get this doubling or tripling of survival—as I said, it's about 700 to 1,500, depending on the numbers, lives per annum—that's a huge change.

The Danes did not spend a lot of money in doing this. They essentially were just redirecting funds. Instead of buying or purchasing defibrillators, they were able to harness the community through CPR training in schools. It doesn't take long to have a cadre of young people who are comfortable providing CPR.

That social change is also relevant. I'm sure there are members of the committee who remember that perhaps a generation or two ago it was acceptable to drink and drive, but now it is unacceptable, socially as well as legally, to drink and drive, in the same way that maybe three generations ago not wearing a seatbelt was common. By changing the needle—it's not that we need 100% of Ontarians to practice CPR; we only need to go from 3% or 4% to 8% or 9% of our citizens, and that will give us 700 to 1,500 lives per year saved.

The Chair (Ms. Natalia Kusendova): One minute remaining.

Mrs. Robin Martin: Thank you. It's MPP Martin again.

You said that the rate of AEDs in the community actually increased after this mandatory approach came in, which is something we were somewhat concerned about. We also have in our legislation penalties for people who don't maintain etc. Do you have any comments about

whether you think that is the right way to go, or what the penalties should be or if we're going to lose people helping because of that?

Dr. Calum Redpath: I can't tell you exactly what happened in Denmark down to the nitty-gritty as regards fines. There was a stick as well as a carrot in the legislation that was passed in Denmark. I don't know how many groups or organizations suffered or were penalized for failure to comply.

But as I said, there was a 500% increase in defibrillators being registered over the decade, with only 10% fallout. My interpretation of that is that the 10% withdrawal rate for organizations who did not wish to risk being penalized—

The Chair (Ms. Natalia Kusendova): Thank you.

Dr. Calum Redpath: So a 500% increase and a 10% decrease.

The Chair (Ms. Natalia Kusendova): Thank you, Dr. Redpath. Now I will turn it over to the official opposition, beginning with MPP Kernaghan.

Mr. Terence Kernaghan: Hello, Dr. Redpath. Thank you very much for sharing the comprehensive and multi-pronged approach that Denmark has taken. In it, you spoke about bystander CPR. Earlier, we learned about the World Health Organization's recommendation that from the ages of 12 years old and onward, individuals receive one hour of CPR education per year.

You also spoke about how Denmark redirected funds in order to prioritize this program. We know that within Ontario we have the EQAO test, a non-standardized test which is really quite costly, and the EQAO is also a mandated part of the education system. What do you think is a more effective use of public money? Would it be to have CPR every year or a non-standardized test known as EQAO?

Dr. Calum Redpath: I'm very sorry; I don't know what the test is that you refer to. I can certainly tell you that once you recruit a cadre of students in high school—we obviously have a strong history of community service and volunteer work as part of high school graduation, and so once you get enough CPR going into schools, then essentially students can often self-teach, and there's a huge number of voluntary organizations that are prepared to teach CPR in schools.

1530

There are data from various places in the US and in Europe—and again, obviously, Denmark has done this extensively—to say that hands-on training for CPR and AEDs, in 40 minutes to an hour, can be effective as young as age eight—that's grades 3 or 4—right through to the World Health Organization, which, as you've said, recommends that children of approximately age 12 do this.

We recommended in Ontario that school CPR and AED training, which has to be hands-on—because we know that their attention in merely watching a video or being lectured on this really doesn't work. But if you do the hands-on training, we think, from the best resuscitation science that's published in the literature, that perhaps two or three episodes of training, from middle-school age, sort of nine or 10 years old, through to graduation—and you can have, as I said, the cadre of the older students teaching the younger students. It would not require, we believe, the purchasing of new equipment, because this equipment has already been purchased in large numbers. It would be a case of getting that equipment into schools and then teaching there.

I'm sorry. I don't know the EQAO test that you referred to, so I can't comment on that.

The Vice-Chair (Mr. Aris Babikian): Madame Gélinas.

M^me^ France Gélinas: Thank you for presenting, Dr. Redpath. It's much appreciated.

I just want to make sure that I understood a part of your presentation. There have been many questions about where we place the AEDs. Your answer so far has been the one that has given me the clearer path. I think what you said is that you look at the 911 calls for cardiac arrest in a specific geographical area, and you make a map of that. Then you put a map of where the AEDs should be on top of this. Is this what you said?

Dr. Calum Redpath: Where the currently available AEDs are in the registry, yes.

M^me^ France Gélinas: It seemed quite simple. When you started, you said that it was a complicated formula based on meeting places and groups at risk and airports and stadiums and schools. But then you went on with this map, and it seemed quite simple.

Dr. Calum Redpath: Yes. The registry will provide the geolocation, if it's done in the way that either my colleagues in Toronto or we here in Ottawa are suggesting. That provides a geolocation in three dimensions of the AED position. Then, on the map, you would overlay the places that either have had previous 911 cardiac arrest calls, or would be predicted to have them, using these formulae, which are publicly available and free to use.

Not only that, but these designs or the formulas I'm referring to have been proven to be of use, because they did the retrospective and then they used the formula for a forward prospective five years.

What the registry does is tell you where your resources already are, and then you just fill the gaps, based on the threshold that the formula gives you.

Obviously, we don't have the right to tell Loblaws, for example, to give us their AED and move it five blocks down. What we see from the map is that there is an AED in position A, and we predict that the best place for the next AED should be position B, based on the formula, knowing that there is already a defibrillator at position A.

It's a way to actually make best use of any resources, or even to determine whether any additional defibrillators are necessary. Because with only 10% or 15% of defibrillators being registered, if we were able to use the registry to direct bystanders to nearby AEDs, it may be that there's already sufficient defibrillators in the community. We just have no way of knowing.

M^me^ France Gélinas: And would you know if this method of checking if they are at the right place—has it

been tested in more rural areas, or only high-density, urban areas?

Dr. Calum Redpath: This is what I meant by the thresholds. It's been tested across large geographic areas, but of course, as I said, in order to predict the frequency of events, it's whether or not the individuals who are in a particular location are high-risk individuals, how long they're staying there, how many individuals are likely to be there, and then the duration of their stay. This design process is where you can get the best marginal improvements with the addition of one defibrillator at a time, and of course—

The Chair (Ms. Natalia Kusendova): Thank you, Dr. Redpath. My apologies, but the time is up. Thank you so much for your presentation. As a reminder, the deadline to send a written submission to the Clerk of the Committee is Thursday, February 20, 2020, at 6 p.m.

Madame Gélinas?

M^me^ France Gélinas: I would like to request of the researcher to get us a copy—in English, if possible—of the Denmark legislation, because he referred to it quite a few times and it seems in line with what we're trying to do. I would be curious to read their legislation.

The Chair (Ms. Natalia Kusendova): Does the committee agree? Agreed.

Thank you so much, Dr. Redpath. We will now take a five-minute recess to get the next caller on the line. Thank you.

The committee recessed from 1537 to 1542.

The Chair (Ms. Natalia Kusendova): Welcome back, everyone. We are resuming our public hearings on Bill 141, An Act respecting registration of and access to defibrillators.

ONTARIO PARAMEDIC ASSOCIATION
PROFESSIONAL PARAMEDIC ASSOCIATION OF OTTAWA

The Chair (Ms. Natalia Kusendova): We have our final presenter on the line. As far as I understand we have Mr. Darryl Wilton, who is also being joined by Damien Martin. I ask that when you speak, if you could please identify who is speaking each time. Because we can't see you, we need to know for the record who is speaking. Welcome. Can you hear me?

Interjection: Yes, I can hear you fine.

The Chair (Ms. Natalia Kusendova): I would also like to let you know that the Clerk is ready to play your video, so just let us know whenever you would like us to play that video.

You have 10 minutes. I now invite you to begin your submission by stating both of your names for the record.

Mr. Darryl Wilton: Great. My name is Darryl Wilton. I am president of the Ontario Paramedic Association. I'll have Damien Martin introduce himself when it's his turn to speak. Are you ready?

The Chair (Ms. Natalia Kusendova): Yes, we are ready.

Mr. Darryl Wilton: I'm talking to you today about Bill 141, the defib registration and public access legislation that's pending.

Paramedics have all sorts of wonderful medications and invasive procedures that are actually useless without immediate bystander intervention. Bystanders are essential to the first three steps in the chain of survival. The following steps are the chain: First is 911; next is CPR; third are defibs; fourth, paramedics; and five, coronary care units with emergency departments.

The only step that's absent or missing in most communities is defib. This is when chances of survival begin to diminish. If there is no CPR or shock from a defib to restore a pulse, chances of survival drop by 10% per minute. There's not an emergency service in any rural or urban area that can consistently get to a patient's side in less than five minutes. That's when survival becomes 50-50. This is where public access defibs make a huge difference.

The ask is simple. I will cover what it is, and I will cover what it is not. This does not involve more funding for paramedic services. This does not involve more funding for fire or police services. This does not involve more funding from the Ontario Ministry of Health. We can save lives by enabling Ontarians with a simple piece of equipment: a defibrillator.

Defibs need to be legislated and regulated in public spaces where large groups of people congregate. These units are rescue-ready, and a defib program is incredibly simple to implement. It just involves training, registration and the actual defib units.

I've been a paramedic for 23 years, and I operate at the advanced care level. The biggest impacts paramedics have ever had with regard to sudden cardiac arrest did not involve fancy medical procedures; it involved bystanders starting CPR and applying defibs. Save rates can dramatically increase from 3.9% to at least 30% and in some areas as high as 50%. What's important to understand is that, in the medical world, a benefit of 5% is a big number. We're talking about a minimum 26% improvement in outcomes. This is a vision that already exists and already works. The lens should be non-partisan.

The reason why you're being asked to support Bill 141 today is not because this technology is new. It is because there are already thousands of defibs in the community, and we already know they save people in sudden cardiac arrest. The problem is this: There are places holding out who need to be legislated and regulated to do what is right.

I now turn this over to our video. Following the video, Damien Martin will speak. His young son, Griffin Martin, was at a school that was holding out. Sadly, Griffin is no longer with us. Would you please play the video?

Video presentation.

1550

The Chair (Ms. Natalia Kusendova): Mr. Martin, would you like to continue the presentation? You have two minutes remaining. Hello?

Mr. Damien Martin: Hello. Yes?

The Chair (Ms. Natalia Kusendova): Can you hear us?

Mr. Darryl Wilton: Damien, are you there?

Mr. Damien Martin: Yes.

The Chair (Ms. Natalia Kusendova): You have two—

Mr. Damien Martin: I'm Damien Martin. I'm Griffin's father. Thanks, everyone, for giving me some of your time.

As you can probably tell, Griffin was a kid who wrung the most out of life, and he deserved a full life. His death was devastating to our family. I don't want to dwell too long on what it was and is like for a family to go through this, because I can't really adequately explain that to people who haven't gone through that. What I do want to say though is I don't consider myself to be a shrill parent of a dead child trying to find peace by asking for something that's unrealistic.

For decades now, people have recognized that there's a bit of a gap in public safety. There have been at least three attempts in the past to pass Ontario legislation to mandate AEDs in public places, the first in 2001 and then again in 2005 and 2010. Now, had any of those attempts resulted in a law, Griffin might be with us today. I'll admit that in the beginning, when I got involved in the push for more public access defibrillators, it was an emotional reaction. But the more I learned, the more pragmatic my views of it have become.

If AEDs were to cost $100,000 or even $20,000 each, I'm not sure I could authentically keep being involved in this campaign. But they don't. They cost anywhere from $1,200 to $2,000. I remember when I looked at the Ottawa school board's budget, I found that they could replace all of their AEDs every year for three one-hundredths of 1% of their annual budget. So cost isn't really an obstacle.

The administrative burden is minimal, I've found out. It takes less than 60 seconds a month to inspect an AED. Sure, in schools, the various unions will likely quibble over whose job that 60 seconds a month is, but they'll figure it out.

Training is not really a burden either. I recently updated my own first aid and CPR training and discovered that there are places that have a 25-minute CPR- and AED-only course. So something like that could easily fit into the agenda of a staff meeting or a PA day. But even without training, though, from what I've learned, an average 10-year-old can successfully operate an AED and save a life.

I'm involved in this because I hope that letting people see the human side of it will help push this over the finish line. I'm also involved because it makes sense. It's doable, and it is at least as logical as fire extinguishers.

I also know that there are other laws named after kids. If you wanted to name this one after someone, there are at least two children in Ontario who have died from lack of an AED who could lend their name. Seeing that there's actually a choice about who to name that after, it's really an indication that it's high time to do that. That's where I'm coming from.

The Chair (Ms. Natalia Kusendova): Mr. Martin, thank you so much for your testimony. I'm afraid the time for your presentation is up. I just wanted to offer my condolences and all of our condolences for the loss of your son. Your story has certainly touched us all today.

Now I'd like to pass it onto the government side for seven minutes of questioning, beginning with Ms. Hogarth.

Ms. Christine Hogarth: I just wondered if you wanted to finish off your story.

Mr. Damien Martin: I think that's it.

The Chair (Ms. Natalia Kusendova): Mrs. Martin.

Mrs. Robin Martin: Thank you very much, both of you, Mr. Wilton and Mr. Martin, for your presentations. It was very moving to hear about Griffin's story, and that's why we're here. Hopefully this will be the fourth-time-lucky law that will get passed and help us get this registry set up, which will go some way to addressing some of the concerns in having at least a knowledge of where AEDs currently are and designating some public places like schools where AEDs should be. That's what we're here for, and we really appreciate your taking the time to speak to us.

I was interested—and I hadn't heard it expressed this way—in what you described as the chain of survival, and how a missing link in the chain can really make all the difference. I wondered if you could elaborate a bit on where that concept came from. It's the first time someone has used that concept, I think, in the presentations. It's certainly the first time I've heard it.

Mr. Darryl Wilton: Yes, certainly. The chain of survival is recognized worldwide from the Heart and Stroke Foundation. What it's based on is five simple steps that must be in place in order to improve or enhance or ensure that people have the best possible access to care and survival.

Those five steps start with the 911 call, and we're set up well for that in most areas of Ontario. Number 2 is CPR, where that's provided by the public. The quicker somebody can get on a chest and start doing CPR, the better the outcomes. Number 3 is the defibrillator, and I'm going to stop at step three, because before we get to step 4, which is paramedics—if we don't have those first three steps in place, then the patient's chance of survival is severely diminished, and it diminishes by 10% per minute.

Now, the good news is that with our paramedic communications officers in Ontario, they're excellent and they can now diagnose some things by phone, they can provide medications by phone, and they can provide medical procedures. CPR and defibrillation are two of those medical procedures that they will coach somebody through during a call so that they can have the best outcome.

Myself being in the position that I am in, as a paramedic, I have had the opportunity to listen to these 911 calls, because they're all recorded—1.75 million 911 calls per year in Ontario to paramedics, and they're all recorded. I've listened to them as they unfold, and it's amazing. You can hear people starting CPR, you can hear the cover coming off the defibrillator, you can hear the pads going on and getting attached and the machine powering up, and then the machine talking the provider through the next steps to do.

If people don't do those first three steps, by the time we show up on the scene as paramedics, we don't have anything to work with. If the first intervention occurs after five minutes, the patient's chance of survival is already less than 50%.

Mrs. Robin Martin: It sounds very much like it is critical. We were discussing at one of the earlier presentations how the paramedics can walk people through CPR—because I understand that a number of the second cardiac arrests that don't occur in hospitals also occur in people's private homes, and it is unlikely to be a defibrillator in everyone's private home anyway. Maybe there will be one nearby, but maybe not. But the paramedics are successful in getting people who would otherwise be reticent to provide CPR, and maybe they don't know how to provide CPR but can be coached through it? That's working out?

Mr. Darryl Wilton: Absolutely. That's working out, and that's referred to as Heart Safe Cities. You can google "Heart Safe Cities" and you'll see that pop up, where municipalities have taken on the responsibility of training people in CPR and AEDs, where they are in public places.

1600

It's like I was saying earlier: The big problems that we have are those last places in Ontario that are holding out. There are already many AEDs in the communities. There are places that will not put them in place until they're actually regulated or legislated to do that.

On top of that, look at an area like the city of Toronto, as an example. They've sold over 20,000 AEDs in the last 20 years, and fewer than 2,000 of those are actually registered. That's the other part of it, with registration: How do you know where they all are?

Mr. Damien Martin's presentation—with his case, what ended up happening was, when his child suffered a sudden cardiac arrest in school, there was actually an AED at a neighbouring school less than a kilometre away, and nobody was notified. That's where registration becomes really, really important.

Mrs. Robin Martin: It's a terrible tragedy that they weren't notified. I agree that it's important to have the registry.

I'm just wondering if you have any other suggestions. You said schools, so we've got that point: They should be in schools. You said people are holding out. Are there any other places where you feel it would need to be legislated for people to have them?

Mr. Damien Martin: I would think playing fields, as well. Especially in places where you have a bunch of soccer fields in one place, that would be a good spot for one.

That relates to somebody like the other person I hinted at in the end of my talk: Andrew Stoddart. He died on a soccer field in 2015. That would have been a good place for that as well. His family has been quite active in putting them in parks and things.

There are free-standing kiosks you can put AEDs in as well, that are heated in the winter, and those sorts of things.

Mrs. Robin Martin: Thank you.

Mr. Damien Martin: There are arenas *[inaudible]*.

The Chair (Ms. Natalia Kusendova): We will now turn it over to the official opposition for seven minutes of questioning, beginning with Mr. Kernaghan.

Mr. Terence Kernaghan: Darryl, thank you very much for your presentation and your very moving video with Damien.

You talked about the gap in public safety. I would like to know your opinion: Would you like it to be reflected in Bill 141, making schools—public, private and separate—that it's mandatory to have an AED device?

Mr. Damien Martin: Yes.

Mr. Darryl Wilton: Actually, that was Damien who gave the yes, and I would agree. But I also don't see a reason to separate that out and get granular. Places of congregation, public places where people come together, whether it be schools, shopping malls, sports facilities, rec centres—if you look at it, you have hundreds of people go through these buildings.

Schools, as an example: We had some pushback in Ottawa from the public school board, where they were looking at costs. But sometimes even the school board wasn't keeping in mind—they were saying, "We have this huge cost to put these in place, and there are children in the buildings." But those buildings are also used by other members of the public. There are Cub Scout meetings and Girl Guides. They are voting centres, where people can go and vote, provincially and federally. We look at those where they're being used by churches and so on. That's the thing: It's a public building that has hundreds of people in it throughout the week. It would make sense to have an AED in there. They would definitely get used.

Mr. Terence Kernaghan: Oh, absolutely, and that is why it is important that it be reflected specifically in the legislation, to ensure that in all schools, it is mandatory.

I would like to now pass it over to France Gélinas.

The Chair (Ms. Natalia Kusendova): Madame Gélinas?

M^me^ France Gélinas: Thank you so much. I also want to thank you for your very powerful presentation and video. I am truly sorry for your son, Griffin, Mr. Martin.

I'm not that familiar with the Mikey Network. I was wondering if you could give me a little bit more detail as to what they do and why they're there. What is this?

Mr. Damien Martin: Sure. Do you want me to take that one, Darryl?

The Chair (Ms. Natalia Kusendova): Can you please identify yourself when speaking?

Mr. Darryl Wilton: Yes. Absolutely. Go ahead.

Mr. Damien Martin: Sure. The Mikey Network is a not-for-profit organization. One of their—

The Chair (Ms. Natalia Kusendova): Is this Damien speaking?

Mr. Damien Martin: Oh, it is; sorry. It's Damien Martin speaking.

The Chair (Ms. Natalia Kusendova): Thank you.

Mr. Damien Martin: One of the founding members of their construction company had died of cardiac arrest on a golf course. In memory of him, they started this side charity that provides defibrillators, which they call "Mikeys," that they've put into thousands of different

places. I believe they were the ones who got them into all of the Peel school board's schools. They provide them to families with kids with known cardiac problems so that they actually have them in their homes. They donated a bunch, from our fundraising campaign, to Ottawa schools. Their reason for being is that they educate people on sudden cardiac arrest and get a lot of defibrillators out into public places.

M^me^ France Gélinas: Are they well received? Is it easy for them, or do they end up putting in the money themselves? Do they fundraise, or do they take the money from their company to do this?

Mr. Damien Martin: I believe it's a mix. Some of the money comes from their company, and a lot of it is fundraising as well. They have an annual walk. A lot of individuals partner with them to do specific fundraising campaigns, like I did. So it's a mixture of donations and from their own foundation.

M^me^ France Gélinas: You used a statistic. I think you said that in Toronto alone, 20,000 AEDs were sold but only 2,000 are registered. Did I get the geographical area right for those two numbers?

Mr. Darryl Wilton: Yes, you're right. Because there's currently not a mandatory AED registry—the numbers we have in the last 20 years were over 20,000 sold. I said that fewer than 2,000 are registered. The number is closer to 1,500, actually.

So when you think about those numbers, there are thousands of AEDs that could be made available during a 911 call, and nobody knows where they are.

M^me^ France Gélinas: I agree. I thank you for all of those answers. We've talked quite a bit this afternoon as to where the AEDs should be located. You've come out with the list. But basically, looking at where people gather—in schools, sports centres, public buildings—wherever people gather would be a good start.

Dr. Calum Redpath from Ottawa talked to us about doing a map of 911 calls that came in for cardiac arrest in a geographical area, and then overlaying a map as to where the AEDs are located, so we know where they're needed. Have you ever considered that or looked at this?

The Chair (Ms. Natalia Kusendova): One minute remaining.

Mr. Darryl Wilton: That's actually a good question. One of the things that paramedics look at provincially, especially when you're looking at not just demographics but our metrics for urban versus rural response areas for sudden cardiac arrest, is that we create maps of areas. Those areas are always based over 24 square kilometres. The reason why we do that is because there are anomalies that pop up in rural areas.

If you look at the 911 maps, you could look at every single call, but I'll give you an example: If you think of a rural area where there might be a retirement residence or a nursing home in a remote location, that one remote location could have an extraordinarily high number of life-threatening emergencies. However, that may or may not be a location that you want to factor in. We actually filter out places over a 24-square-kilometre radius. That information is readily available.

The good news is, the Ontario Ministry of Health runs and administrates all of the provincial central ambulance communications centres in Ontario. Those are what we refer to in the paramedic world as CACCs. Those CACCs have all of that data. Not only is all of that data readily available, but historical data, going back to the start of the Ambulance Act—which was actually changed last in 1990—exists back until then. So we currently have almost 30 years of data.

The Chair (Ms. Natalia Kusendova): Thank you very much. I will now turn it over to Mr. Fraser for a final six minutes of questioning.

1610

Mr. John Fraser: Thank you very much, Mr. Wilton and Mr. Martin, for sharing your story and Griffin's story. It is important in our deliberations about this bill because it does have a human impact. Sharing your story is not easy, and we all want to thank you for doing that.

One of the things, to go with what my colleague Ms. Gélinas was mentioning, is struggling about where these things should be and finding a way that we can provide a bit of a pathway. It's something that would be done in regulations, not necessarily in the bill. So guidance along that line, just in terms of your ideas, in terms of, should we—I know in public places that are publicly funded, whether it's a university, a school, a city hall, a community centre, we can really easily legislate that or dictate that; make sure that it's there. But if you look outside of that to private enterprises that have a responsibility to, say, residents or shoppers or tenants—this may be moot because maybe there are enough defibrillators out there already, and once we figure out where they all are, we don't have to worry about it. Do you have any comments along those lines?

Mr. Darryl Wilton: Damien, would you like to try that one?

Mr. Damien Martin: Sure. I think, as you say, starting with public spaces is probably an easier road. I wouldn't say it is safe to assume anything about—of course, my personal experience, obviously, is with schools. There was only something like 30 out of 117 elementary schools that had them here. All of the high schools that have them here—they were donated by the ACT Foundation. So I don't have a lot of confidence—maybe now, but back then I would not have been confident—these things do have to be replaced after five years—that they would have actually replaced them. They may just quietly have left them to be not replaced. I think certainly those public ones will need a nudge. They will need legislation.

As for private enterprise, certainly shopping malls: A lot of them have them already, but again, knowing that they're there for sure and having regulations around how to—shoppers know that they're there. It's good. I've seen them in movie theatres. Obviously I'm a lot more aware of them whenever I go into a building.

I don't think, as you say, it will be a giant leap, that there will be thousands of places clamouring to get them, because I think there are a lot of them in the bigger privately owned places, like movie theatres and things like that. But the more, the better. It's not a financial hardship

for some place that has a lot of people coming through it. It's likely that they have the budget for that as well.

Mr. John Fraser: Thank you very much. My last question is for Darryl. Does every first-responder vehicle—for instance, in the city of Ottawa. I'm thinking more of the province of Ontario. Do they all have a defibrillator? Do all the trucks—

Mr. Darryl Wilton: It's a two-part question, and I'd like to jump in on the last one there, just behind Mr. Damien Martin.

The other thing that I wanted to mention about the last question is that that question can also be reverse-engineered. If you look at the situation that he was in with his son, Griffin, the assumption was made by a lot of people prior to that call occurring that the public school board had AEDs when they did not. Please keep that in mind: that if assumptions are made that there are a lot of them out there and they're just not registered—even the paramedics wrongfully made the assumption that every single school in the nation's capital had an AED when they didn't. We all know how that turned out—extremely unfortunate. So those assumptions should never be made. This is why the registry is so important.

For the other question about first responders having defibs, yes, police officers have defibs, firefighters have defibs.

The Chair (Ms. Natalia Kusendova): One minute.

Mr. Darryl Wilton: But, again, it's that time to first shock. There is no response time from a station to a patient's side. That's where you have to be very careful when you're asking questions, because fire measures from the time the truck goes mobile until the time the truck gets parked. Paramedics measure from the time the call is received until the time we're at the patient's side. We know that those numbers, realistically, in Ontario, for all three services as allied partners, are around the eight-minute range on sudden cardiac arrest. If you're looking at eight minutes, with a 10% reduction in chances of survival over eight minutes, and you're relying only on first responders, those patients are left with a 20% chance of survival if there is no AED on scene.

Mr. John Fraser: Okay. Thank you.

The Chair (Ms. Natalia Kusendova): Thank you very much to both of you for your testimonial today. As a reminder, the deadline to send a written submission to the Clerk of the Committee is Thursday, February 20, 2020, at 6 p.m. Thank you.

Committee members, we have requested a summary of today's presentations from the research officer by February 5, 2020. The Clerk could also provide written submissions received by that date by email, along with the summary of today's presentations. Is it agreed? Madame Gélinas.

M^me^ France Gélinas: I was wondering if you were as interested as I was when Dr. Redpath talked about the Denmark analysis of their success being published in the JAMA journal of medicine. I was wondering if it was okay to ask our nice research officer to give us a copy of that report.

The Chair (Ms. Natalia Kusendova): Agreed? Agreed.

Mrs. Martin.

Mrs. Robin Martin: I did ask in the discussion for Dr. Redpath to provide it to the committee, so I don't want to make work for the Clerk or for the committee researcher if we don't need to, but I would like to get my hands on it as well, because it would be very interesting.

The Chair (Ms. Natalia Kusendova): Once the submission is received, we will provide it immediately to the research officer.

Any further questions or comments? This therefore concludes our public hearings on Bill 141, An Act respecting registration of and access to defibrillators. I wanted to take this time to thank our wonderful staff from the Ontario Legislative Assembly: our Clerk, our research officer, Hansard, our wonderful interpreters and all staff who made today possible, and all the technicians who were here before us, I believe. So thank you very much—and of course, to all the members, for making it from near and far to Sudbury for these very, very interesting hearings.

The committee now stands adjourned.

The committee adjourned at 1618.

STANDING COMMITTEE ON SOCIAL POLICY

Chair / Présidente
Ms. Natalia Kusendova (Mississauga Centre / Mississauga-Centre PC)

Vice-Chair / Vice-Président
Mr. Aris Babikian (Scarborough–Agincourt PC)

Mr. Aris Babikian (Scarborough–Agincourt PC)
Mr. Jeff Burch (Niagara Centre / Niagara-Centre ND)
Mrs. Amy Fee (Kitchener South–Hespeler / Kitchener-Sud–Hespeler PC)
Mr. Michael Gravelle (Thunder Bay–Superior North / Thunder Bay–Supérieur-Nord L)
Mr. Joel Harden (Ottawa Centre / Ottawa-Centre ND)
Mr. Mike Harris (Kitchener–Conestoga PC)
Ms. Christine Hogarth (Etobicoke–Lakeshore PC)
Mrs. Belinda C. Karahalios (Cambridge PC)
Mr. Terence Kernaghan (London North Centre / London-Centre-Nord ND)
Ms. Natalia Kusendova (Mississauga Centre / Mississauga-Centre PC)
Mrs. Robin Martin (Eglinton–Lawrence PC)

Substitutions / Membres remplaçants
Mr. John Fraser (Ottawa South / Ottawa-Sud L)
M^{me} France Gélinas (Nickel Belt ND)

Clerk / Greffier
Mr. Eric Rennie

Staff / Personnel
Ms. Erica Simmons, research officer,
Research Services