

HOUSE OF COMMONS CHAMBRE DES COMMUNES CANADA

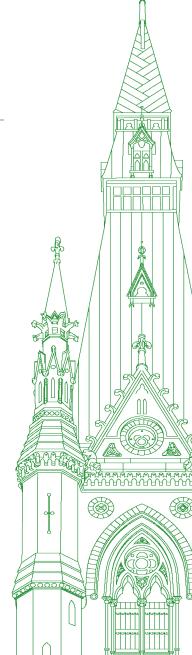
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# Standing Committee on Health

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Chair: Mr. Ron McKinnon

# **Standing Committee on Health**

Wednesday, June 10, 2020

#### • (1500)

#### [English]

#### The Chair (Mr. Ron McKinnon (Coquitlam—Port Coquitlam, Lib.)): I call this meeting to order.

I'd like to welcome everyone to meeting number 26 of the House of Commons Standing Committee on Health. Pursuant to the order of reference of May 26, 2020, the committee is resuming its briefing on the Canadian response to the COVID-19 pandemic.

To ensure an orderly meeting, I would like to outline a few rules to follow.

Interpretation in this video conference will work very much like in a regular committee meeting. You have the choice, at the bottom of your screen, of either floor, English or French. As you are speaking, if you plan to alternate from one language to another, you will need to also switch the interpretation channel so it aligns with the language you are speaking. You also may want to allow for a short pause when switching languages. Before speaking, please wait until I recognize you by name or, during questions, by the member asking the question.

When you are ready to speak, you can click on the microphone icon to activate your mike. As a reminder, all comments by members and witnesses should be addressed through the chair. When you're not speaking, your mike should be on mute.

I would like now to welcome our first panel of witnesses.

Appearing as an individual, we have Dr. Joanne Liu, physician and former international president of Doctors Without Borders. With the Canadian Association of Radiologists, we have Dr. Michael Barry, president, and Dr. Gilles Soulez, vice-president. From Southlake Regional Health Centre, we have Arden Krystal, president and chief executive officer.

We will start now with the statements from our witnesses.

Dr. Liu, please go ahead. You have 10 minutes.

Dr. Joanne Liu (Physician and Former International President of Doctors Without Borders, As an Individual): Thank you very much, Mr. Chair.

Good afternoon, standing committee members.

My intervention will be limited to my area of expertise, which is, basically, tackling regional epidemic-pandemic responses at the micro and macro levels as a humanitarian aid worker and then through my training as a master in education and health management. We're nearly going to hit the 100-day mark of the pandemic, and very sadly, in Quebec, we have reached 5,000 deaths of patients with COVID-19.

I want to remind everyone that we still don't have a vaccine, that we still don't have a specific treatment, and that we still don't know much about the immunity that we have once we have the infection. Therefore, our best friend and best way of tackling it is mitigating measures for the response, so my speech will be about preventing the preventable.

We have a duty to absolutely learn the lessons to be learned after these 100 days. I think that we have to understand, as well, that there's a cost for response, but that despite the cost, because of the pattern of recurrences of pandemics over the last 15 years—SARS in 2003, swine flu in 2009, MERS in 2012, Ebola in 2014 and 2015, Zika in 2015, and now COVID—whatever we're doing right now is a rehearsal for next time around, and it's an investment. We've learned a lot, and we've managed throughout the pandemic to manage a shortage of inventory. Some variables have been impacted and I think I will not go there because my first statement a few months ago highlighted that. The procurements, the patient beneficiaries, the personnel and the hospital were some of them.

The lesson that we learned over the last few months is about the brutality of the disease and the loneliness of patients dying alone. We learned about the different vulnerable communities: elders, people in prison and homeless people. We learned about how to isolate people in their communities. We learned the hard way how to personalize IPC, infection prevention control, in a meaningful way. We learned as well, hopefully, that we have to protect, mentally and physically, all our staff and front-line workers. We learned that we should manage the mobility of people. We learned that outbreaks happen in hospitals, even university hospitals, more than we want. We learned that communication needs the correct message, otherwise people will get confused. We learned that public health needs the basics to be implemented: tests, contact tracing, isolation and treatment. We learned that internal surge capacity was stretched and that access to care has been an issue for non-COVID patients.

What is the role at the governmental level, at the federal level, now that we have finally passed the peak and flattened the curve to a certain extent? We have breathing space, and we can probably switch from a mode of being reactive to something that is much more anticipatory. What I'm looking for and what I'm begging for are—knowing that the federal level is the only place where we have an overview of the whole country—some sort of norms and guidance for the best practices to be implemented.

I have five points that I'm going to share with you.

The first point is the second peak versus rebounds. There are a lot of people who talk with assertiveness about the possibility of a second peak. The reality is that we don't know what the seasonal behaviour is, if there's going to be a dormant phase for the coronavirus, so we don't know if it's going to become strong in the fall. We need to prepare ourselves for the worst-case scenario. Keeping that in mind, I think we should develop a specific strategy on vaccination for influenza, knowing that influenza is going to be back, because we don't want to overload our hospitals in the fall. We need to do everything to prevent the second wave, if ever it happens.

#### • (1505)

Meanwhile, my biggest fear is repeated rebounds, repeated micro outbreaks away from the epicentre. That's what we've seen with many other outbreaks, with Ebola, with cholera, and then with yellow fever. I know it's different, but nevertheless, I think there is repeat pattern. While we ease the lockdown and we increase mobility of Canadians, especially during the summer vacation period, we might be facing micro outbreaks in different places in rural areas.

Why is it a concern? It is a concern because in many places in rural areas, they haven't been exposed and they haven't had many cases, meaning they don't have much immunity. That's one thing. The other thing is that hospitals in rural areas are often staffed by what we call "depanneur doctors". From 20% to 80% of the ER shifts are basically covered by locum doctors. How do we frame the visits of those doctors? We probably won't quarantine them for 14 days. Are we going to make sure that they don't become vectors of COVID-19? Are we going to test them, test them before they go, or test them while they're there? That's one thing.

The other thing about rural areas is that I would strongly advise implementing rapid response teams or SWAT teams, as I like to call them, to go in and stabilize when there's a micro outbreak, and make sure that we optimize IPC and we support the response.

My other concern is about interprovincial mobility and what it can bring in terms of having micro outbreaks. The Campbellton case in New Brunswick is a good example of how someone can move from an epicentre to a province to places where there was low transmission, and there we go, we have an outbreak. I would say that at the federal level there must be guidance about how we are going to control interprovincial mobility.

At the international level, my biggest concern is about, yes, the border. I think we have an agreement that it will be closed until June 21, if I'm not mistaken, but how are we going to follow through knowing that, at the federal level, we control the border, but actually the follow through of people is probably going to be at the provincial level by public health? Are we going to follow up on the visitors? Are we going to hand over the information on visitors? Are we going to ask them to self-monitor? Are we going to trace them? Are we going to request that they isolate?

That was my first point on the second wave of micro outbreaks.

My second point is about personnel burnout.

What I've seen in many other outbreaks is that when we pass the first wave, we are facing burnout of personnel, front-line workers. Are we ready to fill the gap when this happens? What is the buffer in terms of staff? Are we going to have a surge capacity knowing that there is also going to be pullout of military from the places where they've been deployed?

I think that in the mid term and long term, we need to start thinking about a civilian reservist workforce that would be trained and could jump in and be functional. For example, the Red Cross has developed some of those models, but we need to think about that and it should probably be at the federal level.

The third point is that we need absolute guidance on best practices for testing and contact tracing in long-term care facilities. The reason for testing is that we have people who have mobility, and we know there are some people who are asymptomatic or people who are presymptomatic, meaning they don't have symptoms but they will develop the disease in one to seven days. These people can be vectors of the disease. We need to have an overarching strategy about testing. We need swabs and serology and we need to make the system happen, and guidance on that would be quite welcome.

On contact tracing, we need to find out if we are going to have the ability and the capacity to do that if we have a second wave. We know in some provinces it's been a real challenge. What is our surge capacity in that respect?

Last, in terms of guidance, I think we need to be clear on longterm care facilities in making sure that we test the people in longterm care facilities, that we protect them and that we staff them properly. We also need to learn from some of the experiences that have been successful. The fourth point is about access to care for non-COVID patients. In many other places we still have a health care system that is running at low regime. We need to come up with a priority list for our sector to scale up, because non-COVID-19 patients cannot be the collateral damage of the response to COVID-19. I think that guidance would be helpful.

#### • (1510)

My last point is about the international level. We've realized how much we are interconnected and interdependent, in a complex way, across the world. We know that making all of us safer depends on making each of us safer. To say it another way, making all of us healthier depends on making each of us healthier. We cannot tackle COVID-19 in isolation from the rest of the world.

Canada has been investing in R and D for a vaccine. There has been a massive investment locally in Canada of \$150 million in R and D for a vaccine. We're not sure yet what the scale-up capacity would be for manufacturing it, if it were successful, and we don't know how affordable and accessible it would be. More recently there's been a pledge of more than \$600 million for Gavi in the global polio response. I think if we are planning to invest that much in R and D for a vaccine, we absolutely need to get a seat at the table to influence the outcome—the outcome of the public good from the vaccine that comes from the R and D. It's important, because Canada needs to influence how we'll distribute whatever discovery happens. If we don't have a seat at the table, it would probably be really hard to influence the process.

Meanwhile, I really urge that we develop a strategy on how we would vaccinate Canadians if we were to have a vaccine available by the end of 2020 or early 2021. We should do that now, when we have a bit of a lull time. We need to find out who we're going to vaccinate as a priority, such as front-line workers or vulnerable subsets of the population. We shouldn't improvise that at the last minute. We need to think that through.

To summarize, I think it is really, really important that we do everything to do the mitigating measures. We still don't have a treatment. We still don't have a vaccine. We don't know about the immunity. We have to prevent the preventable. It's about preventing people from getting infected, and about preventing people from getting sick, but it's about lives.

Thank you very much.

The Chair: Thank you, Dr. Liu.

We go now to the Canadian Association of Radiologists.

Dr. Barry or Dr. Soulez, please go ahead for 10 minutes, please. • (1515)

Dr. Michael Barry (President, Canadian Association of Radiologists): Mr. Chair, I thank you and the committee for having us today. Gilles and I will be sharing the presentation. I'll tell you a little bit about who we are.

The Canadian Association of Radiologists represents about 2,800 radiologists from coast to coast who are dedicated to medical imaging excellence around the country. Today we're going to talk somewhat about the lessons learned through the COVID-19 crisis, where we were going in, where we are coming out, the lessons learned,

and our recommendations/asks, at the end. I may have met some of you before, through some of our days on the Hill, within the last few years. Some of this information we're sharing on lessons learned comes from the Conference Board of Canada's report, reported a year or so ago, that many of you have received through our national organization.

For those of you who are unfamiliar with radiology, we're the physicians who are trained for about 15 years post-secondary and who diagnose and perform CAT scans, MRIs and ultrasounds. We do interventional procedures, more recently stroke events, treatment for acute stroke presentation, cancer treatment of ablating tumours, and a number of complex procedures that occur in hospitals, community and radiology alike. We also do other things: broken bones in emergency rooms, lower back pain with an MRI, and things like that. Many of you have probably used a radiologist or had interaction with a radiologist.

That's who we are. Gilles will now talk a little bit about our experience so far, and I will come back at the end.

Gilles, it's yours from here.

Dr. Gilles Soulez (Vice-President, Canadian Association of Radiologists): Thank you, Mike.

My name is Gilles Soulez. I'm an interventional radiologist at CHUM hospital. I'm a professor of radiology at the Université de Montréal. I am also vice-president of the Canadian Association of Radiologists. Thank you for listening to us on this very important topic on the health of Canadians.

As you probably know, radiology and imaging are gateways to our health system. In other words, almost all patients having medical or surgical treatment will require diagnostic imaging and an imaging follow-up to monitor the efficacy of the—

The Chair: Pardon me, Dr. Soulez, could you please hold your mike.

Dr. Gilles Soulez: Okay, sorry about that.

As you know, measures related to COVID-19 postponed diagnostic imaging for hundreds of thousands of Canadians, resulting in a 50% reduction in medical imaging services across the country. On top of that, non-urgent cancer screening was suspended. This has created a real sense of urgency, causing an overwhelming backlog in diagnostic imaging services. As you know, before the crisis we already had extensive waitlists across the country, compared to other countries. Prior to the pandemic, patients were waiting an average of 50 to 82 days for a CT scan, and up to 89 days for an MRI, magnetic resonance imaging. Those wait times are 20 to 52 days longer than recommended. This wait-list for essential services is now putting the health of Canadians in dire straits for much longer. This is especially concerning for cancer patients who are awaiting life-saving treatment that is dependent on medical imaging.

The throughput in a radiology department, with the COVID crisis, is currently estimated to be at 70% of pre-COVID activities, mainly because of the disinfection and social distancing protocols. This reality will stay with us for a long period of time due to the eventuality of a second wave of the virus.

As an example, from Quebec City, a 20-year-old male patient presented with abdominal pain. His physician filled a hospital requisition for a CT scan at the CHUL in Quebec City. Because of the backlog of the waiting list, he finally had his CT scan after two months. The pain was debilitating. A large, 20 centimetre retroperitoneal lymphoma was found. Consequently, acute therapy was initiated with significant delay, thus hampering his prognosis.

At Quebec City, the MRI wait-list is very worrisome. There are currently 12,000 patients on the wait-list for an MRI at the CHUL. As discussed before, the throughput is currently estimated at 70% compared to pre-COVID. They are working on eliminating less relevant examinations on the wait-list. Even if they can eliminate 20% of those requisitions, the wait-list will still rise to 17,000 patients in one year, just to give you an example.

In Alberta, they calculated that with the suspension of breast screening by mammography during the last two months, they've already missed 250 cases of cancer that should be treated now.

We understand that postponing non-urgent medical imaging services was necessary during the height of the pandemic. Now that the first wave has passed and the spread of the virus has been contained, we stand to resume diagnostic imaging at its fullest capacity, but in a safe way.

The health and safety of Canadians is our number one priority. We also respect the emotional well-being of patients and staff. The resumption of diagnostic imaging needs to happen in a planned, efficient and safe manner so as not to overwhelm the health care system and our health care workers.

Our task force group on the resumption of radiology services recently provided guidelines to help radiology departments to resume medical imaging safely. It is a national emergency, given the already exhaustive wait times for these procedures, and incorporating the further delay that the pandemic has created, which caused patients to wait even longer.

Prior to the pandemic it was estimated that in 2017 the economy lost \$3.5 billion in GDP due to people being unable to work while waiting for medical imaging procedures. This will be substantially increased due to the COVID-19 crisis. For example, a 25% drop in patients being seen will result in an additional \$1 billion of lost GDP, so close to \$5 billion. Mike, our ask.

• (1520)

**Dr. Michael Barry:** Thank you, Gilles, for going through some of those examples.

As the committee can see, with the delays in some of this imaging, people are still frightened to come back to the emergency room or the hospital to get their tests done. It's a really unnerving thing for people to come into the hospitals now. Almost everybody is wearing a mask.

We have two firm asks we are going to put to the committee. One you're familiar with. We asked it about a year or two ago, but a larger light has been shone on it. That is the \$1.5-billion investment in medical imaging over three years to bring us up to speed with our G7 partners. We're about ninth in the world for advanced imaging with CT, MRI and some of the other high-tech procedures. We're well behind other jurisdictions. COVID-19 has exacerbated that. The \$1.5-billion investment won't fix the whole wait-list, but it will be a strong start to get us in the right direction.

On the lessons learned, we found that our infrastructure is quite dated nationally. There are not enough wait rooms, consultation rooms or spacing in the hospital. There are even things as simple as engineering, like our air ventilation is from the 1970s without windows. With COVID-19 and future pandemics, that's a real concern, so CAR asks the committee to consider a large task force to look at not only new equipment with the influx of patients, but also waiting room spacing, additional cleaning and mechanisms to keep people safe during the pandemic.

As for lessons learned, in conclusion, our health care system was not ready to deal with the demand. In the large urban centres, in particular, Toronto, Montreal and, to a lesser extent, Vancouver and Calgary, we didn't have the medical equipment or the staff to handle extended wait times or deal with the acute onslaught of very sick patients. We also learned that our spacing was not strong and that our PPE was not strong. We had a lot of deficits, but we've learned, and we'll learn from that going forward. We're asking the federal government, through your committee, to support the resumption of imaging by making an investment through the federal transfers to look at new medical imaging equipment and infrastructure, hire additional radiologists, medical radiation technologists and stenographers in particular to improve our quality of care for our patients.

That's our presentation. I believe there will be questions later.

Thanks again very much to the Chair and the committee for hearing us today.

• (1525)

The Chair: Doctors, thank you.

We'll go now to the Southlake Regional Health Centre.

Ms. Krystal, go ahead for 10 minutes, please.

Ms. Arden Krystal (President and Chief Executive Officer, Southlake Regional Health Centre): Thank you very much.

I'll give you a bit of an introduction to Southlake and our role in Ontario, and then I want to talk about our experience with COVID-19.

We have over 525 beds. This is one of the largest hospitals in Ontario. We're located in Newmarket, which is 30 minutes north of Toronto. We provide community hospital services to a large catchment in York and southern Simcoe, as well as regional tertiary programs such as cancer care and cardiac care. We have the thirdlargest cardiac program in Ontario.

We've had quite an experience with COVID-19. We have seen quite an impact in our GTA hospitals. That impact has taught us many lessons. I'd like to talk a bit about those lessons and also about what some of the bright sides of this have been.

Just to give you an example of where we've been, we initiated an incident management team and an emergency operations centre in late January. This was earlier than most, and that was very helpful to us, because we started to anticipate the kinds of things that we would have to get up and running.

We had a daily emergency operation centre meeting. We staffed that for many hours a day, and we had many managers, administrators, physician leaders and others working many hours. We held daily town halls with staff and sent out a lot of information to our staff. There's no question that transparency in communication at both the local level and the provincial level, and also at a federal level, has made a big difference through this pandemic response.

One of the things we did is that we were very transparent in posting our volumes, what kinds of personal protective equipment inventory we had and our projections. We developed a logistic regression model to project demand for intensive care unit beds and also modelled the local epidemiological reproduction rate in our catchment areas to support our response.

We had our first patient in the ICU on March 16, which was five days after the pandemic was declared by the WHO. As of today, we've had 88 patients with COVID-19 admitted to our ICU and our wards, and we unfortunately have had 22 deaths. Starting in mid-March, we developed a drive-through assessment centre. We've tested literally thousands of patients, both at that centre and as outreach to our long-term care and retirement homes in congregate settings within our catchment. We most recently have become one of the first two hospitals in Ontario that were ordered by the Ministry of Long-Term Care, under a mandatory management order, to take over the management of a long-term care home in outbreak.

With that as the background, I want to talk about a few things that were our biggest challenges and where we believe the federal government can have some role.

The first one is in procurement supply chains and PPE. There is no question that one of the most stressful aspects of COVID-19 and our response has been PPE availability. It's clear that our current just-in-time procurement and delivery approach in Ontario—and I know that it is pretty common throughout the provinces, as I've also spent a lot of my career in B.C.—needs to be fundamentally reviewed.

The pandemic stockpiles that were present federally and in some provinces, including Ontario, and that were in place for SARS were allowed to expire. That not only resulted in a lot of expensive stock not being able to be used, but it also created a scenario where we were critically short when we should have been prepared. One of the recommendations we have around this is that the federal government and the provinces work together to rotate pandemic stock with the regular supply chain to prevent expiry, so that we will be ready the next time something like this happens.

Those shortages not only created sleepless nights but also created a lot of challenges around the time and effort to manage, count, order and go back and forth with central supply chains and numerous vendors directly to reconcile and model our PPE supply. This was a massive, massive amount of labour and time, and the churn of changes in terms of strategy and approach to PPE left significant levels of stress in morale. We have to study what we've done with that and make some changes for the future.

#### • (1530)

Long-term care is the other area where I have some advice and counsel. We have known for many years that the long-term care model we have in Ontario, but also across other jurisdictions in other provinces, has significant flaws. Those were clearly illuminated during COVID-19.

A lack of sufficient oversight, inspection and integration with the rest of the system have created substantial issues for many homes. Many of these homes are very outdated, very old and very crowded. It is almost impossible to prevent outbreaks in these situations.

There is lack of training for staff, a lack of staff in some cases and a lack of management capacity in many cases. One of the things that would be of help is to have national standards for longterm care, very similar to what we have in other hospital jurisdictions.

We also need some very fast capital investments. Many of these homes simply cannot operate the way they need to operate during an outbreak because of their size and the problems they have with infection control.

I want to talk about hospital capacity. There's no doubt that hospitals across Canada, and it doesn't matter which province you're in, have been operating at over 100% capacity even well before COVID-19. Further to the comments by my radiologist colleagues, one of the challenges with working over capacity is the only way you can recoup capacity to deal with a pandemic like this is to cancel elective procedures.

Our hospital went down to 30% of our normal volume. We've modelled that for hip and knee replacements alone it could take us seven years to recoup the number of surgeries we would need to do if we don't work evenings, weekends and everything else. Of course, the problem with that is human resources. As one of my other colleagues mentioned, they are pretty burned out. To try to get them to work those extra hours, even if we were funded for it, would be very difficult. Once again, we need to rethink our hospital sector.

I'll mention bright spots very quickly. Virtual care has been a really bright spot. After years of painfully slow uptake in Ontario and other provinces, this pandemic triggered widespread adoption of virtual care. We realize now we don't need to go back to exactly the way we were doing things. We will be able to convert a substantial number of visits, particularly ambulatory visits, to virtual care.

We've also noticed the good collaboration we have had between the hospital sector and some of the other sectors has helped us, but that is not widespread. There needs to be a move toward better integration across all provinces and certainly within all sectors. That amount of integration, something we had here in Ontario through Ontario Health Teams, was very helpful.

Last, I want to extend a very big thank you to our communities. Throughout this pandemic, our staff and physicians have been continually bolstered by an unprecedented outpouring of support from the communities we serve. For people who are very tired and overwhelmed, and in some cases experiencing some level of PTSD, that amount of support was incredibly helpful, and we were incredibly grateful for it.

I will leave it at that and wait for questions.

The Chair: Thank you.

We will start our questioning now. We'll do two rounds of questions. We will start the first round with Mr. Jeneroux.

Mr. Jeneroux, you have six minutes.

• (1535)

Mr. Matt Jeneroux (Edmonton Riverbend, CPC): Thank you, Mr. Chair.

Thank you everybody for all the work you're doing in your work lives, but also for joining us at committee today. It's obviously very important to see where we want to go in any potential waves or any other potential pandemics.

Dr. Liu, you made some comments about the vaccine. Would you agree that the Government of Canada is doing all it can right now to be at the table for a vaccine?

**Dr. Joanne Liu:** Mr. Chair, on the question of a vaccine and whether Canada is doing all it can to be there, I would say there's massive investment right now. I think the issue is the concern about the diversity of the investment. That's one thing.

The other concern is making sure that we are following through on the money when we have invested such a massive amount. On Gavi, the reality is that it's about regular vaccinations, but it still gives a better voice. We need to make sure we have a strategy and a recommendation about R and D and how it will be used.

Right now, I'm not totally convinced that the follow-through is done. There's no.... Maybe it's done and it's not yet public, but I think this is something that needs to be followed through.

**Mr. Matt Jeneroux:** Thank you, Dr. Liu. I would agree. Certainly, on the transparency front, we're not seeing whether or not it's available right now.

Because I have a limited amount of time, I want to move on to Dr. Soulez and Dr. Barry.

We heard of the delay in the number of screenings. I think you said it's 20 to 52 days later than recommended, Dr. Soulez.

One of the Conference Board recommendations was to spend money to replace the aging machines and buy new ones. You mentioned that as one of your asks. How much would that help? Do you have the data available in terms of helping that backlog and getting caught up? You referenced the 250 cases in Alberta. Are there others out there that we could be helping with these machines? **Dr. Gilles Soulez:** Yes, it's very important, in the sense that in the heat of the COVID-19 crisis, our capacity to operate our unit as before was decreased. For one unit, let's say, we were able to do 80 patients a day. Now we are doing 60 patients a day. We are not sure it will change in the short term, because of the issue raised by Dr. Liu that we may have a second hit coming. Also, other infections can change. I believe that, for all high-throughput procedures, we need to change the way we are doing them.

We have two ways to increase our capacity. The first is to further capital investment, as raised by Dr. Barry, to increase the number of units, because we cannot do the same amount as before. In Canada, we have the most productive radiologists for one unit, compared to the U.S. There's a really big difference. The second is to extend the operation time. It means that we need more personnel, more resources. Third, in all the waiting rooms we need to install...to be sure we are safe. We have some really important measures to do.

Mike, perhaps you want to comment on that.

**Dr. Michael Barry:** It's really difficult to know how long it would take to catch up, because we're still in it. As Gilles said, we could have a second wave and a third wave. It's been mentioned on the call by others as well. We are running at about 70% capacity. We might get to 80% within a year. We might slip back to 60% for a while. I don't think we'll go back to 30% because of lessons learned.

It used to take 10 minutes to do a CAT scan. Now it takes 30. It used to take half an hour to do an ultrasound. Now it takes 60 minutes. The turnover takes time with cleaning. I think we're going to be in this for a long time, as we redefine how we're going to improve our productivity. In the meantime, we'll try to slow the waitlist.

I don't think we're going to catch up to our OECD countries in a hurry without a significant investment of capital and, as Gilles says, HR resources. I think it has also been mentioned on the call by others, too. There's a real challenge ahead of us—

#### • (1540)

Mr. Matt Jeneroux: I think I have about 15 seconds. I'm sorry.

Are you familiar with the Synaptive 0.5T MRI at the QEII health centre? They're beginning to study COVID-19 patients' brains and hope to learn more about the virus. Could you perhaps quickly comment on the potential of that study?

**Dr. Michael Barry:** I am familiar with the scanner, but unfamiliar with the study. It's interesting work, and we will keep an eye on it. We can find out more for you, if you'd like, through the office, through Nick Neuheimer, our CEO in Ottawa.

Mr. Matt Jeneroux: That would be helpful.

Thanks, Chair.

The Chair: Thank you, Mr. Jeneroux.

We go now to Dr. Powlowski.

Dr. Powlowski, go ahead, please, for six minutes.

Mr. Marcus Powlowski (Thunder Bay—Rainy River, Lib.): Thank you.

My questions are primarily for Dr. Liu, and I guess a little bit also for Ms. Krystal.

Doctor, correct me if I'm wrong, but you kind of have two hats. You work for Médecins Sans Frontières, and you've done work on epidemics and public health, but you are also currently an emergency room doctor in Montreal. Am I correct about that?

**Dr. Joanne Liu:** Yes, I'm an ER doctor now in Montreal. I'm not with MSF anymore, but I still have communication with them.

**Mr. Marcus Powlowski:** Given your two hats, I think you're a good person to answer this question. It would seem to me that in Canada we're becoming two countries in terms of COVID-19. There are places like Thunder Bay, and I would suggest vast areas of Canada, most of Canada, where we have a really limited number of cases, the incidence is low and our testing capacity is getting pretty good, basically, and we're managing, whereas metropolitan Toronto and metropolitan Montreal are a different story; there still seem to be large numbers of cases, and they don't really seem to have it under control. I want to ask why there is a difference. Why are Montreal and Toronto not getting this under control?

The second part of the question will hopefully allow both of you to get a response in there. As long as it continues to circulate in Montreal and Toronto as we start to open up, if we allow people to travel from Montreal and Toronto, there's going to be a threat throughout Canada, including, as I think you know, Dr. Liu, in northern indigenous communities. Should it get into those communities, given their socioeconomic problems, their lack of health care is going to be a real problem.

What can Montreal and Toronto do to do better at getting it under control? Should there be some mandatory use of masks, particularly in mass transit? What can we in the rest of Canada do to help Montreal and Toronto get this under control?

Maybe I can start with Dr. Liu and then Ms. Krystal. Thanks.

**Dr. Joanne Liu:** Mr. Chair, with respect to the two countries, I think this is not an unusual scenario. In many places, when you have an epidemic, you have an epicentre, and then other spots where it's not as severe in terms of the number of cases. Why the difference? I wish I could answer this question, Mr. Chair, for the committee.

I think most of the time, it's a multifactorial environment, and at this stage, I think we're going to need to take a step back to figure it out. What we've seen is that in some places—especially in the longterm care facilities, which became a centre of amplification—having a health care worker working in more than one place adds to the contamination and community transmission, so there is at least some of that.

Then there is this thing about the timing and the influx of people who came in straight from the beginning. These are all assumptions. When people came back from the break week, there was no big follow-through on people who were coming in. I know that; I came back mid-March, and nobody asked my name. I just walked in, they gave me a pamphlet, and I went home. It was up to me to do my quarantine.

This is going to need much more investigation than me just saying my opinion, but I think it's going to be multifactorial, and it's the addition of all those little things that makes it a recipe for disaster, plus the density of the population in Toronto and Montreal.

#### • (1545)

**Mr. Marcus Powlowski:** What can we do in order to try to get it under control? How about mandatory masks, for example, in mass transit?

**Dr. Joanne Liu:** On the masks, Mr. Chair, I think this is something that I have a bias for. When you look at the experiences of other countries, especially in Asia, you can see that this is something that has been imposed and perhaps is part of the culture to a certain extent. The reality is that with our incoherent message on masks it has been hard to foster compliance, and now we want to be stronger on the message and it's difficult to implement.

Yes, my personal view, which is not based on more than my personal view, is that in public transport or closed public spaces the mandatory use of masks might be helpful. Nothing is perfect. In this kind of scenario, with an unprecedented pandemic, we're always going to deal with imperfect solutions to implement. That's normal, and we need to accept that. Masks are not a magic wand, but they will contribute. They might decrease this by only 10% or 15%, but they will decrease it, and that would be helpful.

The Chair: Thank you, Dr. Powlowski.

We'll go now to Mr. Thériault.

Mr. Thériault, go ahead for six minutes, please.

#### [Translation]

#### Mr. Luc Thériault (Montcalm, BQ): Thank you, Mr. Chair.

I'd like to thank all the witnesses for their testimony, which will help us in the search for solutions.

Mr. Powlowski asked a short question that I wanted to ask, since Dr. Quach-Thanh and Dr. Tremblay, when they came here, told us that they found the decision of the Montreal authorities not to impose the wearing of masks in public places and on public transportation unjustified. So you have answered that question. I'm going to ask a slightly longer question.

As you said earlier, we don't know much about this virus yet. It was discussed at our meeting on April 15 as well. We still don't have a vaccine or antiviral drugs. Our country is still not self-sufficient. Screening strategies are variable and traceability is relative. So, as you said, we are condemned to managing time and space through the use of mitigation measures.

On your last visit, you expressed concern about misguided deconfinement and the effects it could have on a second wave. You stressed the urgency of restarting the health care system in the quieter interim period, to care for patients who do not have COVID-19. The radiologists talked about this earlier. You also insisted that we prepare for a second wave by creating a better seal between hot and cold zones.

Do we have a plan or a strategy? Where are we now? Are we ready for the fall? Is there a strategy or action plan that would allow us to be proactive rather than reactive? That seems to me to be key going forward.

• (1550)

**Dr. Joanne Liu:** Are we ready for a second wave? That's the question of the hour, and it's extremely difficult to answer.

Indeed, we see that the recommendations are still hesitant. I think it's extremely difficult, because we're always trying to be very careful with what we do. We're putting containment versus economic stimulus, which creates a general confusion in people's minds.

So, personally, what I see-

[English]

The Chair: Pardon me, Dr. Liu. Could you hold the mike a bit closer? Thank you.

[Translation]

Dr. Joanne Liu: All right, I'm sorry.

I think it's hard to be ready, because people are in the deconfinement and economic recovery state of mind. Right now, I don't know if the authorities in the country are working very hard on a plan to deal with the micro outbreaks that I think are going to happen over the summer, or a possible second wave.

I'm not involved in the planning and I don't know how we're preparing, but I get the impression that we're focusing more on deconfinement and economic recovery than on preparing a response to micro-spikes or a second wave. That's what I see as a citizen.

**Mr. Luc Thériault:** Two months minus five days ago, on April 15, you appeared before the committee. Two months minus five days is an eternity in a pandemic, because things happen. Thank you for being with us this afternoon. Indeed, it is important to have follow-ups, and your vast experience can enlighten us.

On April 15, you said that hot zones should be better sealed off than cold zones. Is there any hope that this is going to happen? We have time in the interim to prepare for the worst of a second wave. Do you have the impression that this is being put in place more proactively? We were reactive, and it was the cross-contamination that led to some of the disasters.

**Dr. Joanne Liu:** Sealing off hot and cold areas is difficult. What is unfortunate about all this is that strategies change as community transmission evolves. In a situation like the one discussed today, where community transmission is very high, it becomes increasingly difficult to get "cold" patients. All patients will be more likely to have COVID-19 and become "warm". As a result, it becomes extremely difficult to have separate areas because there is a lack of space.

From the beginning, it would have been nice to have a hospital for positive patients and a hospital for negative patients to ensure continuity of care. We decided to cut it in the middle and that has its limits.

I hope that at least in rural areas that have not been affected but may have cases of COVID-19 eventually, there will still be time to follow these hot and cold zone procedures. This was done for the intensive care unit in Montreal, but we have realized that it is extremely difficult to comply with all of this. That's why there have been eight micro outbreaks in eight teaching hospitals in the greater Montreal area.

#### Mr. Luc Thériault: Have you—

[English]

The Chair: Thank you, Mr. Thériault.

We will go now to Mr. Davies for six minutes, please.

• (1555)

Mr. Don Davies (Vancouver Kingsway, NDP): Thank you, Mr. Chair.

Thank you to all the witnesses.

Dr. Liu, it's good to see you back. I'll begin with you.

Last week, in an interview, you stated, "We need a testing strategy—we need to establish our testing priorities." It seems that every expert and researcher who comes to our committee tells us that having a rigorous testing and contact-tracing program is essential to our ability to control COVID-19, yet we can't seem to ramp up testing beyond about 30,000 a day, far below our capacity.

Can you tell us whether you think we're testing enough, and if we're not, where the barriers are and what your suggestions for a good testing strategy would be?

**Dr. Joanne Liu:** Mr. Chair, thank you very much for the question on testing.

Everybody sees the necessity to have a testing strategy. This was especially true a few weeks ago, when we were in the reality of not having enough tests. We have ramped up, though not to the extent we wanted to. The thing is, if we are still limited by the number of tests we can do—and I think we still are, to a certain extent—then we need a strategy, and we need to prioritize. Whom should we prioritize? We should prioritize the people who we think can be vectors of COVID-19. For me, what has been missing since the beginning is that we never had the priority of testing the front-line workers. I still do not understand that. This is something that, in all the epidemics I've worked on in the past, we always made readily available, especially when we knew that there were some asymptomatic cases, whereas for Ebola it's not exactly the same.

We know there's asymptomatic transmission; we know there's pre-symptomatic transmission. Therefore, I would advise front-line workers to be tested regularly, to make sure they are not going around...so we don't have a case like in Campbellton, where a doctor who was positive ended up exposing more than 150 people, and then there were at least 16 people who were part of that chain of transmission.

#### Mr. Don Davies: Thank you.

You also mentioned that you thought it would be prudent if we got ahead of a potential vaccine and started thinking now about how we would approach vaccinating Canadians. Do you have any suggestions at this early stage about how we would prioritize access to a vaccine, if and when we develop one?

**Dr. Joanne Liu:** Mr. Chair, about the strategy on vaccination, I think I alluded to it in my short intervention. In all the experience I have from other pandemics and regional epidemics, we always prioritize the front-line workers. The reason is that if they fall ill, we have no one else to care for the patients. For me, that would be a must.

After that, if it's feasible, advisable and safe, I think we should prioritize the vulnerable community, because we know that the elders have been very vulnerable to COVID-19. If they could sustain vaccination, I think we should think about them, but probably any sub-population of people who live in a vulnerable situation should be prioritized to be vaccinated.

**Mr. Don Davies:** If I can drill into that, there's been some talk recently about our not keeping data on racialized communities, indigenous populations or other populations that, it's been postulated, may be more vulnerable to COVID-19. Do you think we should be gathering data on these sorts of subgroups for the purpose of developing an idea of where the vulnerabilities are, say, for purposes of determining access to vaccination priority?

**Dr. Joanne Liu:** Mr. Chair, about getting data on people in subcommunities, this is a question that is about personal, private information. I think that possibly would be feasible if we were to ask people if they were willing to give their information and be part of a supra-repository of data.

• (1600)

#### Mr. Don Davies: Okay.

I'll ask you a final question, Dr. Liu. You mentioned the importance of Canada having a seat at the table, but I was unclear which table you were referring to. **Dr. Joanne Liu:** Mr. Chair, about Canada having a seat at the table, right now there are different high-governance platforms in terms of R and D, for example the WHO R&D Blueprint. On different boards of big NGOs, Canada is there on Gavi, but not on CEPI, the Coalition for Epidemic Preparedness Innovations, where Canada has pledged \$2 million and is adding another \$2 million, I think. Since this is a consortium developing a vaccine, it could be advisable to make sure that we influence.... Right now there are more than 10 candidates, and probably one of them is going to go to the finish line.

When we know that there are those sorts of opportunities for deliverables, and Canada is already investing, it should wave and say, "I'm present" and invest more in terms of presence to be able to influence the outcome.

Mr. Don Davies: Thank you.

Ms. Krystal-

The Chair: Thank you, Mr. Davies.

This ends round one. We'll start round two with Dr. Kitchen.

Dr. Kitchen, please go ahead for five minutes.

Mr. Robert Kitchen (Souris—Moose Mountain, CPC): Thank you, Mr. Chair.

Thank you, everybody, for being here.

Dr. Barry, I suspect that when most people listening to this conversation hear the word "radiologist", they are going to think maybe X-rays or MRIs or they might throw in ultrasound, but they don't realize the many other aspects of health care the radiologist provides to Canadians, such as CT scans, echocardiography, PET scans, tomographies, radioisotope scans, SPECT scans, all these things, such huge amounts of which are involved in looking after Canadians' health.

I appreciate and I thank you for your recommendations. You may or may not be aware that last year during the election, part of the Conservative platform was to propose a \$1.5-billion investment for purchasing MRI and CT scan machines to replace the aging equipment. I'm glad to see that this is part of your recommendation. That number is familiar and very helpful.

I'm interested to know, though, what data the Canadian Association of Radiology is using to determine how best to alter its practices to ensure the safety of both employees and patients.

**Dr. Michael Barry:** This is a real-time story, really. The data we have is empirical. We've done 12 publications since the beginning of COVID-19 over 12 weeks. The most recent article, and probably the most comprehensive one we've done, is on the re-entry task force that was chaired by Dr. Anderson—and Dr. Soulez was on it. It's a national committee looking at the impact of the reduction of services down to 20% or 30% and the slow reintroduction.

A lot of it is empirical, on the fly. It's hard-to-get data at the best of times, let alone in real time, but we do have a pretty strong network, through the office and nationally, to know where most provinces are and where most major metropolitan areas are when it comes to their ability to ramp up the system. **Mr. Robert Kitchen:** Would you be using PHAC data? If so, do you feel you're getting that in a timely manner?

Dr. Michael Barry: What is PHAC data?

Mr. Robert Kitchen: It's from the Public Health Agency of Canada.

Dr. Michael Barry: Gilles, go ahead.

**Dr. Gilles Soulez:** If I may comment, with the task force we really have reviewed all the recommendations worldwide—so from the U.S., Europe, China—and basically tried to adapt those recommendations to the Canadian realities: how to place our equipment, etc. It's very difficult to say.... Let's use air exchange as an example. Air exchange is very important for COVID prevention. So those that are based on good science.... We know the cycle of ventilation we need between patients, if you have a patient with COVID. So—

• (1605)

**Mr. Robert Kitchen:** I take it that PHAC has not been in contact with your organization at all. Am I correct in understanding that?

**Dr. Gilles Soulez:** Basically, it's based on recommendations from all radiological societies across the country.

**Mr. Robert Kitchen:** Okay, but they haven't reached out to you to provide information that might pertain to radiological services, etc., across the country.

**Dr. Gilles Soulez:** We have very close collaboration with the American College of Radiology and with the French Society of Radiology, so we really have [*Inaudible—Editor*] on exchange, so this is a close relationship.

Mr. Robert Kitchen: Thank you. I take it then that-

**Dr. Michael Barry:** According to my office, we did have coordination with PHAC, which I'm not familiar with, and with CADTH. We had federal agencies on our task force on re-entry. That's the answer to your question.

Mr. Robert Kitchen: Thank you very much.

Ms. Krystal, I appreciate your presentation. I had to look up Southlake Regional Health Centre. I knew it as York County. I spent a lot of time there when I was at St. Andrew's College. In fact, York County was where my life was saved when I was the victim of a hit and run. It was the first hospital I went to before they sent me to SickKids, at 16 years of age. So I have great admiration for that hospital, and it will always have a place in my heart.

You—and I think all three organizations—talked a lot about the lack of preparedness we've had for this COVID virus. That's interesting to hear. When I hear you talk about a lack of preparedness, I think I hear you talking about the need of being proactive instead of reactive and having testing procedures, protocols, procedures, simulation tests, etc. Would you agree with that?

**Ms. Arden Krystal:** Well, partly yes and partly no, Mr. Chair. I would say that certainly from the point of view of personal protective equipment and pandemic preparedness, I think there is some room for improvement, for sure. I mentioned that in my opening comments, around pandemic supplies that were put in with SARS and expired, etc.

However, remember that this is a unique virus. To try to develop some of the testing protocols, we had to do it on the fly, because it was something new and we didn't even know how we would be able to test for it.

The test is actually not an easy test. I think people think they can do something simple and go in for a test. When they come in, they get that nasal swab and it goes very, very deep. It is not a pleasant activity. We have a lot of availability of testing. We don't always have people who want to come and get tested, so there is sometimes a—

Mr. Robert Kitchen: I'm sorry for interrupting you, but-

The Chair: Thank you, Dr. Kitchen.

We go now to Ms. Sidhu.

Ms. Sidhu, go ahead. You have five minutes.

Ms. Sonia Sidhu (Brampton South, Lib.): Thank you, Chair, and thank you to all the witnesses for joining us today.

My questions are for Ms. Krystal. I want to talk about long-term care facilities even though this comes under provincial jurisdiction.

At the 24th meeting of the health committee, Region of Peel CAO Nancy Polsinelli testified about the long-term care homes that the region manages. She discussed how the region has approached managing its homes during the COVID-19 pandemic.

In your opinion, as someone whose hospital has taken over the management of a private long-term care facility, is there a difference in the quality of care in private long-term care homes compared to the public option?

**Ms. Arden Krystal:** I've had experience both in the B.C. sector for many years and here in Ontario. One of the things I did notice, which I think made some improvements in the B.C. sector, was the fact that all private and public homes were still connected to the regional health authority and were directly contracted, if you will, with specific contractual obligations around quality standards, staffing ratios and those kinds of things. That clearly helps. I think there is some evidence to suggest that here in Ontario, and in other provinces, private homes do have a tendency to have lower staffing levels, particularly the smaller private homes that do not have the large infrastructure that some of the larger cross-Canada companies have. Certainly, our experience has been that there has been a lack of infrastructure in teaching, in training, in the purchase of personal protective equipment and in infection control practices, which really did put them in a one-down situation going into this pandemic.

• (1610)

**Ms. Sonia Sidhu:** In regard to your statement on lack of staff, we had the CEO of the William Osler hospital in Peel, Dr. Naveed Mohammad, testify to the success of our local temporary program to allow foreign-trained medical experts to work in the health system on the front lines to mitigate the shortage. On top of preventing burnout among permanent medical staff, the program allowed foreign-trained specialists to get the necessary experience in our health care system.

What is your perspective on this solution?

**Ms. Arden Krystal:** Well, I think it's a solution to potentially another problem. I can speak from my experience and our local experience. Our experience is that we can actually hire people, but the structure for their hiring.... The people exist, but right now the job market is such that many of the private homes don't offer full-time positions. Some of the home health agencies don't offer full-time positions for personal support workers, and that creates a situation where they job-hop. They work at multiple organizations. As we saw during this pandemic, PSWs working at multiple organizations were a definite vector for the spread of COVID-19.

In some cases, it isn't necessarily about a need to go outside to hire. It's that we have to improve the conditions for our own people, who are ready to be hired but simply can't work properly within the structures we have provided them.

Ms. Sonia Sidhu: Thank you.

Mr. Chair, do I have more time?

The Chair: You have a minute and a half.

#### Ms. Sonia Sidhu: Okay.

You also talked about virtual care. How do you think it's beneficial for all the residents of Ontario?

**Ms. Arden Krystal:** I think in the long-term care sector, it can be very beneficial to connect some of those patients to some of the specialists that otherwise would not have the bandwidth to visit in person, people in palliative care, geriatricians and, in many cases, mental health professionals. In the hospital sector, we've found that a fairly large number of people can be seen at home.

For example, we used to bring in people to do pre-op assessments. There's no reason why we can't do that virtually with someone in their home. In many cases, a lot of post-operative assessments don't necessarily have to require the patient to come into the hospital. We can use the available virtual care, and many platforms are available. COVID-19 and the pressure from that allowed for some very rapid trials and testing of some of these solutions, which worked. So we essentially cut the bureaucracy, if you will, and jumped right to the solution, into trials, and found out that they worked.

The Chair: Thank you, Ms. Sidhu.

We'll go now to Mrs. McLeod for five minutes, please.

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

It's certainly a pleasure to join you. I know the committee has been working very hard for quite a while now.

I think we have a bit of a window right now to prepare for what was said to be either a microburst or a second wave, especially as it relates to the long-term care homes. I know many people talk about national standards, but I would suspect that if you look at the community care facility licensing acts in every province and territory, the standards are there and they would be remarkably similar, so I'm more concerned with what we are doing right now.

Ms. Krystal, does every facility in Ontario have both a health and safety inspection and an infection control inspection? To me, every facility across the country should. It would make sense to have a complete and thorough assessment as step one. Is that happening?

#### • (1615)

**Ms. Arden Krystal:** The question is a hard one for me to answer about everywhere in the province, but in our experience, we believe there were some inspections of the particular home we took over. There were some violations of the standards, and there wasn't always a rapid follow-up to ensure a rapid improvement cycle to address the inadequacies. I think that's probably the case across the province.

I think we have some lack of integration in the system in Ontario, where Public Health is charged to look at some of the community structures, some of the quality standards that need to be inspected. The Ministry of Long-Term Care is responsible for inspecting others, so I think there has been a disconnect and a lack of integration in rapidly detecting problems and in rapidly addressing them. **Mrs. Cathy McLeod:** Perhaps that would be a good first step. An important second step is the dollars being allocated for some of the capital issues that might be identified.

You talked about the real challenges with the PPE issues. Do you have a sense that the whole flow is getting better? Do the people who work in these facilities have adequate and proper training? Is that something that needs a focus right now in terms of PPE?

**Ms. Arden Krystal:** We have had a better flow of PPE over the last month or so, for sure. I think it is still somewhat tenuous, especially as we ramp up or start to try to ramp up some of our elective and scheduled procedures throughout this system. That will put a drain on some of the PPE.

With regard to PPE in the homes themselves, I can speak from my experience and probably that of some of my colleagues, and say that in some cases they actually did have PPE, but they didn't have the right PPE. They were not using it properly. They were not trained to use it. In some cases, they were using two masks, thinking that would help protect them when all it did was waste a mask. They didn't always have face shields, and they didn't always change their gowns. There was, and remains, a lot of work to be done around education and training. That can't just happen in a one-time shot. Even in a hospital that is very prepared, we set up a PPE headquarters, and we had people working around the clock as what we call "PPE observers". These are people who would watch you put on and take off-"don and doff", as we call it-your PPE. That's really important because many of the staff who tested positive were infected from taking off their personal protective equipment improperly and contaminating themselves. I believe that's a factor.

The Chair: Thank you, Ms. McLeod.

We go now to Mr. Van Bynen.

Mr. Van Bynen, please go ahead for five minutes.

Mr. Tony Van Bynen (Newmarket—Aurora, Lib.): Thank you, Mr. Chair.

Thank you to all the witnesses for joining us today.

It's great to be able to welcome a local witness to the committee, so I'll be focusing my questions on Ms. Krystal. It's largely because I've been able to see the challenges that she has needed to deal with in a rapidly growing community. The resources of the hospital for the last nine years that I've seen have been extremely stressed.

When you're facing a growing community like this, how do you create and how do you protect surge capacity?

Ms. Arden Krystal: That's probably the \$1-billion question.

It is very challenging. The only way that we've been able to create surge capacity is by reducing elective and scheduled activity. Of course, that has a very deleterious effect on all of the people on wait-lists for surgeries. In particular, they're not necessarily people who are waiting because of what we would all recognize as lifethreatening conditions, such as cancer or cardiac, but, absolutely, those who are waiting for hip and knee replacements and various types of surgeries that are considered "elective", but which create undue hardship and pain for people while they're on the wait-list. Unfortunately, those have been the ways that all hospitals across Canada have found their surge capacities. That's very challenging.

Remember, as well, that hospitals struggle with something called ALC, alternative level of care, patients. Typically, these are patients who are waiting for admission to long-term care homes and others. With all the long-term care homes having outbreaks, we have a bit of a double whammy going on right now.

#### • (1620)

Mr. Tony Van Bynen: Thank you.

We've also heard from other witnesses that their recommendation is to treat COVID patients away from emergency wards in hospitals. I see that on May 9, CTV's *W5* featured a special edition that broadcasted an exclusive look inside Southlake's COVID ICU to showcase the challenges that were faced on the front line.

Could you share with the committee what some of those challenges are and how Southlake was working to overcome them?

**Ms. Arden Krystal:** Some of those I addressed in my opening statement, things like personal protective equipment availability in the supply chain, rapidly planning for increased capacity, ramping down surgeries, trying to discharge patients, developing an assessment centre. There were a lot of medical unknowns. This was a novel virus; it had never been seen before. There was a lot of fear among our staff and in the communities, which we had to address, and we had no known treatments.

You test and try on the fly. We used an awful lot of international experience to guide us, and we certainly collaborated a great deal with colleagues.

I think those are the main challenges. Human resource-wise, I think we did quite well.

Mr. Tony Van Bynen: Thank you.

I know that COVID-19 has had a significant impact on the mental health of Canadians and that Southlake offers a wide range of mental health services to assist individuals. Has there been a change in the number of individuals seeking assistance from Southlake since the beginning of the pandemic?

**Ms. Arden Krystal:** It's interesting. I agree with you that there's no question that living through this pandemic has certainly created an increase in anxiety and depression among not only health care workers and others, but also people dealing with these things in the community. However, interestingly, our mental health ED visits were down 48%, and I think that was because of the fear factor of people not feeling comfortable going to the emergency department. Having said that, we were also providing a great deal of service vir-

tually to get out to people who wouldn't feel comfortable coming in.

**Mr. Tony Van Bynen:** A lot of our questions are aimed at determining how well the government has responded. I believe we're living in a very small universe with a lot of mobility. Therefore, beyond what you've already explained, is there a way that we can build back better, assuming there's likely going to be, if not a resurgence of this pandemic, another pandemic that we're going to need to face, based largely on how globalized we are?

What would your recommendation be beyond what we've seen?

**Ms. Arden Krystal:** One of my colleagues mentioned earlier that when she came in through the airport, she received a pamphlet. That was in mid-March. I was hearing those stories well into the end of March. One of the things we could get better at is screening visitors.

We've begun screening absolutely everyone who comes in to the hospital. I'm not convinced that's going to be a short-term phenomenon during the pandemic only. That may well become part of our norm. We can not only use those opportunities to keep patients and staff safe but also use those as teaching opportunities and remind people to do those simple things like washing their hands.

• (1625)

The Chair: Thank you.

Thank you, Mr. Van Bynen.

We go now to Monsieur Desilets.

#### [Translation]

Mr. Desilets, you have the floor for two and a half minutes.

Mr. Luc Desilets (Rivière-des-Mille-Îles, BQ): Thank you, Mr. Chair.

I also thank all of the witnesses. Your insights are very important to us.

My first question is for you, Dr. Liu. You rightly pointed out the importance of best practices. As someone who knows Quebec well, would you be able to tell us, in the context of a second wave, what best practices should be promoted, particularly in the case of CHSLDs?

**Dr. Joanne Liu:** Insofar as seniors' homes are concerned, stakeholders protected a vulnerable population and banned visits, but failed to apply the principle of reciprocity. That was the problem. They needed to ensure that people in seniors' homes were well fed and well cared for, whether mentally, physically or socially. That is what was not done well. We failed to apply the principle of reciprocity to a vulnerable population that we were protecting. Mr. Luc Desilets: My second question is also for you, Dr. Liu.

What concerns you most about the prospect of a second wave?

**Dr. Joanne Liu:** What worries me the most about a second wave is not being able to gear up our response strongly enough to meet it.

Maybe the second wave will happen in a few weeks. In my opinion, at that time, we will probably have good habits to minimize the transmission of the virus, such as physical distancing, handwashing and wearing a mask. The challenge for people will probably be to continue to do this in the longer term.

As for our hospitals, despite all their preparation, they've had eight outbreaks. I don't think we need to see that happen again in the second wave. So our infection prevention and control procedures must be ironclad.

All personal protective equipment supply issues must be settled and taken off the agenda. This needs to be addressed. We need to have supplies. Our staff must be assured that they will not run out of equipment.

I work at the Sainte-Justine University Hospital Centre. Even today, the masks are still counted. The head nurse gives them to us; we don't help ourselves. I would like to say that the fear related to the lack of equipment remains.

Mr. Luc Desilets: Thank you.

[English]

The Chair: Go ahead, Mr. Davies. You have two and half minutes.

Mr. Don Davies: Thank you.

Ms. Krystal, on May 25, the Ontario government issued mandatory management orders appointing local hospitals to temporarily manage two of the province's long-term care homes for 90 days. Of course, Southlake Regional Health Centre was appointed to manage River Glen Haven nursing home in Sutton, Ontario. That is a forprofit facility that has seen at least a 102 infections and 32 lives claimed by COVID-19.

We've seen similar things happen in British Columbia, where the government had to take over private care homes.

In your view, why was River Glen Haven unable to control spread of COVID-19?

• (1630)

**Ms. Arden Krystal:** I mentioned, I think, in my earlier general comments some of the older homes and some of the challenges they have with four-bed or three-bed rooms. River Glen Haven is an older home. What we found is that some of the rooms there had maybe a foot between beds. That is a very difficult situation in which to contain somebody who maybe has positive COVID status.

We also found that, although they had some PPE, the staff were not wearing the PPE appropriately. To your question about why there was a difference between profit and non-profit places, my answer would be that I can only assume that there is more of a concentration on the cost of preparation at a for-profit than there would be at a non-profit. I think that some of the homes.... I would say River Glen probably fits into the category of those that are funded for more beds than probably what that older home can realistically house and contain.

**Mr. Don Davies:** It would seem to me that, even without COVID-19, warehousing seniors within a foot of distance of each other, a vulnerable population with all manners of infections and comorbidities, was probably not a good idea even before COVID-19.

I was intrigued as well about national standards.

The Chair: Mr. Davies, you're at 2:38. Could you just be quick?

Mr. Don Davies: Sure.

Can you elaborate a little bit on what you would like to see in national standards? You mentioned that it's similar to other types of health care delivery. What would you like to see in the long-term care sector with respect to national standards?

**Ms. Arden Krystal:** I would like to see specific hours of care per patient day. Each province has some differences in that regard. I've worked in both B.C. and in Ontario, and the integrated model in B.C., I do think, had an advantage in enforcing those types of standards.

The Chair: Great. Thank you very much.

That brings round two and this panel to a close.

I'd like to thank all of the members of our panel for sharing your time with us today and for all of the great information you have shared with us.

With that, we will suspend for a few minutes while we bring in the next panel.

• (1630) (Pause)

• (1635)

The Chair: We now resume the meeting. Welcome back.

For the benefit of our panellists on our second panel, we are continuing meeting number 26 of the House of Commons Standing Committee on Health. We are operating pursuant to the order of reference of May 26, 2020. The committee is resuming its briefing on the Canadian response to the COVID-19 pandemic.

I'd like to make a few comments for the benefit of our new witnesses.

As you are speaking, if you plan to alternate from one language to the other, you will need to also switch the interpretation channel so that it aligns with the language you are speaking. You may want to allow for a short pause when switching languages. Before speaking, please wait until I recognize you by name or, during questions, by the member asking questions. When you are ready to speak, you can click on the microphone icon to activate your mike. I remind you that all comments should be addressed through the chair.

Interpretation in this video conference will work very much like in a regular committee meeting. You have the choice, at the bottom of your screen, of floor, English or French. When you're not speaking, your mike should be on mute.

I would like to now welcome you individually.

From the Canadian Dental Association, we have Dr. Jim Armstrong, president, and Dr. Aaron Burry, associate director, professional affairs. From Doctors Without Borders, we have Dr. Jason Nickerson, humanitarian affairs adviser. From the Ottawa Hospital, we have Dr. Dave Neilipovitz, head of the critical care department.

Each group will have 10 minutes to make a statement. We will start with the Canadian Dental Association.

Dr. Armstrong or Dr. Burry, please go ahead for 10 minutes, please.

#### • (1640)

**Dr. Jim Armstrong (President, Canadian Dental Association):** Thank you very much, Mr. Chair, and good afternoon to the members of committee. It's my pleasure to present to you today on behalf of the Canadian Dental Association.

I have been serving as president of the CDA since April, but previously I served on the board for the past six years and have volunteered in dental associations across the country for three decades. I am also the managing doctor of a dental co-operative with 10 practices and 150 team members throughout Vancouver. As well, I'm an adjunct professor for the Sauder School of Business at the University of British Columbia. I'm an M.B.A. dentist.

I am pleased to be joined today by Dr. Aaron Burry, who is CDA's associate director of professional affairs. Dr. Burry is a public health dentist with more than 30 years' experience in navigating issues with both practice and public policy. He's also an M.B.A. dentist. In addition to the work that he has done to lead the CDA's work in understanding and addressing the challenges of COVID-19 for our profession, Dr. Burry has been serving emergency patients in a public health clinic throughout the past few months and can share with you that unique perspective.

We come today with three essential recommendations to share: first, that greater consideration be given to dentistry as vital frontline health care workers when considering access to PPE; second, that the federal government create a specific oral health envelope of \$3 billion as part of the Canada health transfer; and, third, that basic oral health standards be part of any future review of the state of health in long-term care facilities.

I'll come back to each of these recommendations throughout my remarks, but first I'd like to walk you through the challenges that

dentistry has faced as a result of the pandemic, as well as those that are emerging.

In March, by public health orders, dental clinics across Canada ceased providing oral health treatments, with the exception of very restricted emergency care, which was designed to keep patients away from the emergency operations of hospitals. Now, dental clinics are cautiously beginning a staged return to practice in accordance with the guidance set out by their provincial dental regulators, public health authorities and workplace safety regulators.

This guidance has varied from one province to the next and has resulted in great confusion among dentists and patients. Also, within provinces, unfortunately, between those regulators, there sometimes is conflict in regard to regulations that require different protocols or procedures to be used when providing the same type of treatment. This also leads to significant confusion and angst for dentists as they attempt to establish the new normal.

What dentists are finding as they return to practice is a physically demanding and mentally exhausting experience. Dental offices are essentially mini outpatient hospitals and, like any hospital offering outpatient care, we follow strict infection control procedures and practices. That's not new. However, the new guidance and regulations stemming from COVID-19 have made performing outpatient procedures more difficult, physically draining and time-consuming.

Dentists must do considerable additional preparation before seeing each patient, and our early experience in getting back to work suggests that they treat 50% to 67% fewer patients per day. Communication with those patients is also much more difficult. It's not simply a single aspect of the new approach that is problematic, but rather a cascading effect of changes to how every aspect of care has changed. From the pre-work before coming to the office, to the parking lot, which has now become our reception area—

• (1645)

The Chair: Pardon me, Doctor. Could you hold the mike a little closer?

Dr. Jim Armstrong: Sure.

The Chair: Please carry on.

**Dr. Jim Armstrong:** —to the clinical areas where far greater separation between patients must be maintained.

Also, ensuring that the expanded range of PPE is properly worn, removed and decontaminated has significantly changed the way we work. The workflow of the office has changed to where there is absolutely no flow at all. HESA-26

Some of this may resolve over time, but these challenges are putting a strain on dental practices and our ability to provide care. Of course, these challenges presuppose that one has access to the PPE to perform the necessary procedures.

From the onset of the current crisis, dentistry identified the impending shortages of PPE as a critical issue for us. We reached out through the Public Health Agency of Canada and the office of the chief dental officer of Canada to reflect that a critical shortage would hamper the ability of dental offices to provide emergency care.

We recognize the multi-dimensional challenges that led to the shortages of PPE. The current and unprecedented demands for these materials have been exacerbated by the problems in supply chains, especially in China.

In fact, early in the pandemic, when all hospitals were critically short of PPE, many dentists across the country stripped their offices of their own supplies to donate to the front-line causes in their communities, but with dental offices reopening, it's important that we emphasize that dentists are front-line providers as well. While we had initially hoped that access to PPE through our traditional sources would improve as supply chains reopened or new supply chains emerged, that has not yet happened. Some materials, such as latex gloves, have become much more difficult to acquire.

Individual dental offices are also attempting to acquire the same kinds of PPE as large government entities, most notably N95 respirators, which are essential and, in many cases, mandatory for dental care today. These government organizations, including the Government of Canada, can leverage their might to acquire mass quantities or impose guidelines on suppliers that have them prioritizing supply delivery to those entities actively on the front lines of the COVID-19 fight.

The result is a supply of PPE that remains very scarce, if not impossible to access, and at rising prices due to demand. For dentists in Canada right now, to serve our patients appropriately, we currently need one million pieces of PPE per day. This need will increase to up to four million pieces if we can reach full capacity again.

As governments and health care providers work together to find long-term solutions to sourcing and maintaining a consistent and dependable supply of PPE in Canada, dentistry needs to be at the table.

This echoes the concerns that we have stated for several years about the state of public funding for oral health care services in Canada. Most Canadians are able to access care through employersponsored benefit plans. Unfortunately, our public programs have been chronically underfunded across the country. Just 6% of our dental care is provided to Canadians through public programs; however, growth in the usage of publicly funded oral health care programs is particularly acute among low-income seniors, children and individuals with physical and developmental challenges. The new normal will mean even greater challenges in providing care for these individuals, if care can be provided at all.

Over the past decade, the erosion of provincial-territorial funding of these programs has created a circumstance where the needs of these vulnerable groups are no longer being adequately met. With the profound economic challenges from COVID-19 to come, many Canadians will lose access to their employer-sponsored benefits. This will place an even greater strain on these public programs.

The federal government has a clear role to play in helping to ensure that these provincial and territorial programs can appropriately address the challenges to come. Specifically, we recommend that the federal government create a specific oral health envelope of \$3 billion as part of the Canada health transfer. At a time when there will be many demands on public health care dollars in Canada, we simply can't afford to allow these programs to wait at the back of the line and hope that funds will flow through.

Finally, as we consider the challenges ahead, we clearly recognize the crisis within long-term care facilities across the country.

Several years ago, CDA asked the Department of Veterans Affairs to include basic standards of oral health care for veterans in long-term care facilities. It was our hope that these standards could have been instituted, benefiting not only the veterans in the facilities but all of those who resided in the facilities. Unfortunately, we were informed that Veterans Affairs did not have contracts with these facilities, but only contribution agreements. That left it to the provinces to ensure that appropriate care was provided.

• (1650)

Our suggested standards are not onerous, but are, at the very least, the minimum we believe should be provided to any senior in care. They are an oral health assessment on intake, a daily oral health plan, a yearly visit with a dentist, and a location within the facility where dentistry can be performed.

We recognize that there will be large and far-reaching discussions on how to best care for seniors in these facilities. These oral health care standards might seem minor in the current context of COVID-19, but these small steps can help to contribute to the development of a culture of care, oversight and responsibility that will be critical to setting things right for Canada's seniors. On behalf of Dr. Burry and I, thank you very much for your attention. We'd be happy to take any questions.

The Chair: Thank you, Doctor.

We go now to Doctors Without Borders.

Dr. Nickerson, please go ahead for 10 minutes.

**Dr. Jason Nickerson (Humanitarian Affairs Advisor, Doctors Without Borders):** Thank you, Mr. Chair, and thank you to the members of the committee for the opportunity to speak with you about the COVID-19 pandemic and the actions that Canada can take to ensure that people everywhere are able to access the medical care they need.

By way of introduction, I am the humanitarian affairs adviser for Doctors Without Borders, or Médecins Sans Frontières, MSF, based here in Ottawa. I'm also a respiratory therapist with clinical and public health experience across Canada and internationally. I have a Ph.D. in population health and have worked as a clinical scientist in Canadian hospitals and universities.

MSF is an international medical humanitarian organization that provides impartial medical assistance to people in more than 70 countries. We deliver essential health services in some of the world's most complex environments to people affected by conflict, epidemics, natural disasters, and other emergencies.

Today we are facing an unprecedented crisis, created both directly and indirectly by the COVID-19 pandemic, which has reached all of the countries where MSF works. In these places, the pandemic amplifies and deepens existing inequalities. MSF sees this on the front line every day. We are witnessing COVID-19 cases that are occurring alongside existing emergencies and creating a dangerous set of public health risks.

In the refugee camps of Cox's Bazar, Bangladesh, nearly one million Rohingya refugees live in overcrowded, unsanitary conditions that are perfect for spreading COVID-19.

In Haiti, a country where I have worked many times, our teams have opened a COVID-19 treatment centre that, within days, became full and had to double its bed capacity. We've had several patients who have died on arrival, and many more who have arrived critically ill. There are only two laboratories in the country capable of conducting COVID-19 testing, and the health system is ill-prepared for what may come.

Amidst all of this, we are all coming to grips with an uncomfortable reality, which is that our only way out of this pandemic is likely through a vaccine that does not yet exist and that needs to be globally accessible quickly to virtually every person on the planet.

Two months ago I wrote an article that warned that, given the way the global medical research and development system operates today, we face a real risk that, despite the public—that is, taxpayers—investing in the science to develop COVID-19 vaccines and medicines, these may become unaffordable, inaccessible, privateheld commodities rather than globally accessible public goods. Public investment in COVID-19 science is essential, but we need to rethink our policy approaches to maximize the benefits of this investment. Today, the pipeline of COVID-19 vaccine candidates is robust, with more than 100 candidates in pre-clinical development and 10 in human trials on eight different vaccine platforms. Many vaccine candidates are benefiting from billions of dollars of public and philanthropic funding, including more than \$850 million of Canadian funding for COVID-19 diagnostics, treatments and vaccine R and D.

But the global research and development system is not designed to prioritize affordable access, especially outside of wealthy countries. Access to life-saving medicines is inequitable. This is not a problem that's unique to COVID-19, rather it is a failure of the global medical innovation system to prioritize diseases with the greatest public health threat. COVID-19 is only the latest example, and it has made it clear that we need to rethink the way we do drug and vaccine developments to prioritize patients and public health over profits.

Today, here's how the system often works. Pre-clinical discovery and work, which is what much of Canada's domestic funding is currently supporting, is done by university researchers or other publicly funded institutions. This committee has heard from some of them who are working on COVID-19. From there, promising drugs and vaccine candidates, often at a very early stage, are sold or licensed to the private sector for subsequent development, in most cases with no strings attached, no requirements that the final products be made affordable or priced fairly, and no requirements to develop them quickly or to share the data and technologies with anyone who needs them. They become private market commodities and we lose control over them, save for perhaps some small royalty payments.

Two years ago I sat before this committee during its study on federally funded health research and described how, as a result of this system, MSF teams have struggled every day for nearly 50 years to access medicines, vaccines and diagnostic tests for our patients. When they exist, they are too often inaccessible, either because of their exorbitant prices, which bear no relationship to the costs of developing or producing them, or because companies simply choose to not register them in the countries where we work because our patients do not represent a lucrative enough market. For decades we have witnessed millions of people denied treatment for diseases such as HIV, tuberculosis and hepatitis C as a result of unaffordable patented medicines. The system cannot continue as it is, either for COVID-19 or for any other health condition.

• (1655)

The committee's 2018 report made nine important recommendations that should be guiding the Canadian innovation response to the COVID-19 pandemic. To my knowledge, unfortunately none of the committee's recommendations that could have helped ensure fair global access to health technologies being developed with Canadian public funding have been adopted yet.

The report included a recommendation that Canada implement common sense safeguards to ensure that licensing agreements would include specific requirements to ensure affordable global access. These provisions have already been voluntarily implemented by some Canadian universities. In their most basic sense, they would require recipients of public funds to have enforceable safeguards in place to ensure that any medicines, vaccines or other health technologies developed with Canadian public funding would be made available at fair prices in every country where they are needed, including in Canada. Essentially, it's a requirement that an investment of public funding will deliver publicly accessible and affordable health technologies—in other words, a fair return on investment for the Canadian and global public.

I'm sure we can all agree that it would be unacceptable if a vaccine to prevent COVID-19 or a medicine to treat it was developed with Canadian public funding and yet not made available or accessible to billions of people living in low- and middle-income countries, or to Canadians, for that matter. Without the right policies in place to share these technologies and the rights to them, access to them is at risk.

Now is the time to put patients' lives ahead of private profits. Here's what Canada needs to do.

First, recognize that the pandemic is global and that if we allow the race to develop and access COVID-19 vaccines, treatments and diagnostic tests to descend into nationalism, or for access to be determined by who can pay the highest price, we all lose. Not only would allowing wealthy countries to have access to essential medicines while poorer countries were going without be unconscionable, but it would also be ineffective. Until all countries and all people have access to new COVID-19 vaccines or medicines, we cannot end this pandemic.

Second, operationalize the Prime Minister's commitments to ensure that vaccines and other public health tools are produced at a scale and a cost that is accessible to all countries. Despite the current rhetoric we have seen globally around making COVID-19 vaccines and therapeutics "global public goods" or "the people's vaccine", public funders, including in Canada, have so far failed to impose enforceable public interest conditions on recipients of public funds.

Ensuring a public return on public investment should be a guiding principle behind all Canadian funding for the development of new medicines, particularly during a pandemic. Canada should also demand transparency in all stages of the R and D that it funds, including the registration and public reporting and sharing of clinical trial data, R and D costs, manufacturing costs and product prices. If the public is investing to develop these life-saving technologies, we should be able to keep control and transparency over what we have paid to help generate.

Third, endorse open science and reject monopolies on COVID-19 technologies by sharing the technologies, data and knowledge with a global platform. Researchers have worked collaboratively and openly to share an immense amount of data, knowledge and materials to understand this virus and its weaknesses. This has consequently shortened the time frame from years to mere months to develop candidate vaccines and medicines. This openness has been an exception to the rule, and given the way the global research and development system works outside of a pandemic, there's a real risk that this innovation process will instead become closed and proprietary.

Unless significant safeguards are put into place to mandate access, affordability, transparency and knowledge sharing, we will be allowing our discoveries to be privatized and sold back to us and to people around the world at prices we don't control, because, as a rule, we don't even try to negotiate these rights. To put it in industry terms, not doing these things is simply a bad business decision. No privately run company in the world would sell a technology it invested in and knows it will need access to in the future without negotiating fair and reasonable access rights for itself, and neither should we.

We are not alone in calling for these actions. An ongoing petition on the MSF website calling for Canada to impose these common sense safeguards on the health technologies we are paying to develop has garnered more than 28,000 signatures in just over three weeks. Canadians want action to ensure that people around the world are able to access the vaccines and medicines we are investing in developing.

We need you to take responsibility for what is coming next. We are increasingly worried about countries like Bangladesh, Haiti and others, where the cumulative impact of COVID-19 on top of existing crises is producing critical humanitarian needs.

#### • (1700)

Canada needs to continue its global solidarity and support for international humanitarian assistance, but Canada also can and should demand a better deal that ensures global patient access and affordability in exchange for the use of COVID-19 technologies that are developed with Canadian public funds.

This pandemic is teaching Canadians many things. One of them ought to be that we need to rethink the way that we do drug and vaccine development so that we put patients over profits.

Thank you very much for having me today. I want to emphasize that if members of the committee have any additional questions or want clarification, they're welcome to contact me directly. Thank you.

The Chair: Thank you, Doctor.

We now go to Dr. Neilipovitz for The Ottawa Hospital.

Dr. Neilipovitz, please go ahead. You have 10 minutes.

Dr. Dave Neilipovitz (Head of the Department of Critical Care, The Ottawa Hospital): Good afternoon. Thank you, Mr. Chair and members of the committee.

I am Dr. David Neilipovitz. I am an intensive care unit physician who has cared for COVID-19 patients in our intensive care unit during this pandemic. I have seen patients make miraculous recoveries from this virus. I have also cared for patients who died from this disease, including a tragic story of a husband and wife who had been married for over 50 years who both succumbed to this virus.

I'm also the lead for critical care for Ontario east. As well, I've been the head of critical care for The Ottawa Hospital for almost 10 years. As such, I was part of the groups responsible for organizing how intensive care units prepared for caring for patients during this pandemic. As such, I hope to bring the perspective of both ICU health care professionals and critical care administrators who have been challenged by this pandemic.

The COVID-19 pandemic certainly brought out the best in many health care professionals. It also brought to light some weaknesses and failings of our Canadian health care system. An obvious failing was how our long-term care facilities operate, which I suspect will be a major focus of this committee.

However, I would like to highlight another weakness, which is that of the capacity of intensive care units, particularly in how they operate and how patients enter them. Had Canada experienced a response to COVID-19 in a manner similar to New York City or Italy, the focus, I believe, of the reviews would likely have been on intensive care units and their shortcomings.

An early concern with COVID-19, as many will recall, was whether we would have enough mechanical ventilators for critical care patients. That, however, is only one important aspect of ICU care. If I don't have the space, monitors or, most importantly, the staff to care for patients, more ventilators are essentially useless.

My team at our hospital was able to increase our level 3 ICU capacity—level 3 being the highest possible level of critical care from our existing 57 beds to over 200 beds, an increase of well over 300%. We were not alone, as many sites across Canada were able to increase their capacity by more than doubling their existing level 3 ICUs. This, however, would not have been enough if we were New York City or Italy, so how could we improve the situation and do better?

There are three strategies that I'd like this committee to consider.

First and foremost, there are no national standards or expectations for intensive care units in Canada. How ICUs are structured, how they operate, how they are staffed and even how they are equipped have no national standards or real expectations. Some ICUs that claim to be a level 3 ICU only had enough ventilators for 20% of their beds, for example. That, quite frankly, is unacceptable. Many sites lacked formally trained ICU doctors and critical care nurses, in spite of funding being available to train nurses, and more importantly, there are trained doctors who are out of work. This cannot continue. I would hope that our federal government will address this forthwith.

Second, if we had telemedicine capacity for critical care, we could certainly improve the ability of all hospitals to provide a higher level of care to all patients in Canada. I think we all know that Canada is a vast country, so the ability to provide care in all locations is challenging at best. If, however, we had a real telemedicine capacity, larger facilities like my own could help more remote locations, be they in the north or in other various isolated areas, provide better care to their ICU patients and their citizens, our Canadians, who most certainly deserve such a high level of care.

A high level of care could have been provided in these communities, and transfers of their sick patients improved or even avoided. As I'm sure you'll appreciate, sometimes, unfortunately, there's nothing that we can do for certain patients. Avoiding a transfer, however, would allow these patients to be able to pass away in their own communities, surrounded by their families and their loved ones, which is something greatly preferable to passing away alone in a facility that is remote from their home. A comprehensive solution from our federal government to improve telemedicine capacity in Canada would be crucial to improving this situation.

• (1705)

I have a third and final issue that would assist the capacity of intensive care units in Canada as well as improve the care provided in intensive care units.

All Canadians have a right to health care. For this there is no dispute, in my mind. The difficult and contentious issue, however, is what care do they have a right to insist upon? ICUs in New York City and Italy had to ration critical care. That is horrible and not right. However, some families insisting that their ICUs revive their loved ones and subject them to therapies, including machines and medications, when there's no reasonable chance of recovery, is equally not correct. It is not appropriate. It also greatly limits the ability of health professionals to care for other patients and puts an undue strain on our critical care resources. Only a change initiated by our federal government can address this issue. I would respectfully ask our government and this committee to please address this issue; even though it is unsavoury, it is sorely needed.

Thank you again for giving me this opportunity to express the three ways in which the federal government could improve and increase critical care capacity in Canada: improving ICU care by creating national standards, improving telemedicine capacity for critical care, and addressing the difficult issue of what care is or is not appropriate.

I would be happy to answer or address any of these questions or other concerns. I can also be reached directly.

Thank you.

The Chair: Thank you, Dr. Neilipovitz.

We'll now start our questioning. Once again, we will have two rounds of questions.

Ms. Jansen, please go ahead for six minutes.

**Mrs. Tamara Jansen (Cloverdale—Langley City, CPC):** Thank you very much for these presentations.

I'd like to start with you, Dr. Nickerson. The Canadian [*Technical difficulty—Editor*] the company CanSino, which is working jointly with the Chinese Communist regime to develop a vaccine for COVID-19.

When the outbreak first appeared, the Chinese government silenced doctors and scientists and initially quashed information about the virus. I know I wouldn't want to take a vaccine produced by a country with such a questionable track record. If we want to get Canadians vaccinated, should we be working with a Communist regime that's shown so little transparency? Do you think Canadians would trust a vaccine that they produce?

• (1710)

**Dr. Jason Nickerson:** I don't know the particular details of the CanSino vaccine. I know that there were results published of the phase I trial, I believe, in The Lancet roughly two weeks ago.

I think the systemic global issue you're pointing to is the fact that we need more transparency and open reporting of data for all medical innovations. That's not a comment about this particular vaccine, but a comment on the broader global research and development architecture and system. We need to ensure that there is a responsibility to transparently report and share, I would say, clinical trials data—

**Mrs. Tamara Jansen:** Would you be concerned, though, about particularly the non-transparency in working with...? I mean, we're putting I don't know how many millions of dollars into this study. Would you be concerned?

**Dr. Jason Nickerson:** As I say, I don't know the particularities of this vaccine. We're trying to keep track of more than a hundred vaccine candidates around the world that are being evaluated.

Again, I think what you're pointing to is the fact that data need to be openly accessible and available, regardless of who is producing it, so that the international community of experts who know about these things can independently evaluate it and assess the scientific merits of any medical product that's being evaluated.

Mrs. Tamara Jansen: Fantastic. Thank you.

I understand that for this particular vaccine they're using an HEK 293 cell line that they developed in 1973 from an aborted embryo. Many Canadians will have an ethical issue with this.

What are your thoughts on this? Do you believe it's wise to move forward with a cell line if we can't really reasonably expect all-Canadian participation in a vaccination program like that?

**Dr. Jason Nickerson:** I have the wrong Ph.D. to be commenting on cell lines and vaccine vectors. I'm a population health specialist. I'm sorry, but I really can't offer an answer to that question.

Mrs. Tamara Jansen: Okay.

I understand that the National Research Council has signed a contract with CanSino. We're trying to figure out whether, if we sign something like this, we can ensure that this vaccine will actually be produced and distributed in Canada. It sounds to me, from your presentation, as though we can't. We reached out last week and we couldn't get an answer from them.

I'm wondering if you have any thoughts on that. This makes me nervous.

**Dr. Jason Nickerson:** The global vaccine manufacturing landscape, I think, is coming into full view at the moment.

As with all these things, the devil is always in the details, and I don't know the particularities of what's in the licensing agreements or the collaboration agreement. Certainly I know there's near-global consensus that no one manufacturer is going to be in a position to mass-manufacture doses of this vaccine or of any vaccine.

I think the key point here is that the only way of ensuring sufficient quantities of vaccine or indeed of therapeutics for COVID-19 is going to be through a disseminated strategy of having multiple manufacturers in multiple countries producing quantities of these vaccines and medicines.

We're going to have to collaborate to have equitable distribution and allocation of all these medical tools. There's no logistical alternative. Everybody in the world who is working on this right now is discovering this reality.

Mrs. Tamara Jansen: They all need it.

We're putting \$1.1 billion, I think, into the research funding the Prime Minister has promised, and if there's no obligation for the companies receiving these Canadian funds to ensure we have access to the treatment or the vaccine, we're not gaining that much bang for our buck. That's a real concern.

It seems there's no upside for Canadians. If we're putting in all this R and D money with no guarantee, how are we going to ensure we get access?

**Dr. Jason Nickerson:** I think there are a few things to remember here as well.

We don't know which vaccine candidate or therapeutic is going to be effective. We're only a matter of months into the clinical trials and the development of these things. The development process is rushing ahead very quickly and, quite frankly, I think you have

As I mentioned in my presentation, the global medical research and development system is not designed around principles of global access and equitable distribution. We need a different way of developing these—

some of the best scientific minds in the world working on it.

#### • (1715)

Mrs. Tamara Jansen: Do you have a suggestion for another way?

**Dr. Jason Nickerson:** There are proposals on the table. Global international intellectual property pooling mechanisms are being proposed. That's effectively the idea that any intellectual property being generated would be put into a pool that allows multiple manufacturers to be able to produce it and countries to use it and so on. This is effectively a pooling of resources.

During the previous study I participated in at committee, the answer was around principle-driven open science. We should have scientists working collaboratively, sharing data, sharing knowledge, building off each other's technologies, with this knowledge and know-how being fairly disseminated and distributed to anyone who can benefit from it and use it.

The Chair: Thank you, Ms. Jansen.

We go now to Mr. Fisher. You have six minutes.

Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.): Thank you very much, Mr. Chair, and thank you to all our witnesses for being here today.

Dr. Nickerson, I'll stick with vaccine development just for a moment. I believe Dalhousie is having Canada's first clinical trials for a potential vaccine.

I was very taken by the idea of ensuring equitable access to a vaccine. I'm wondering if you could tell me if there are any good precedents or good practices from other jurisdictions that Canada can use as a model for ensuring equitable access.

I also appreciate the "common sense safeguards" line you used.

Dr. Jason Nickerson: Thank you.

Certainly a number of alternative models of research and development are under way around the world. There are organizations active in Canada. I'm probably going to keep coming back to the previous study because there were some very good comments that were made by the Structural Genomics Consortium. They're an open-science outfit that is doing drug development in a different way.

MSF is one of the founders of an organization called the Drugs for Neglected Diseases initiative, which is effectively a not-forprofit pharmaceutical research and development organization that has developed, I believe, seven different either new formulations of existing medicines—for example, pediatric HIV or anti-malarial combination therapies—or entirely new medicines, one example being a drug called fexinidazole, which is a treatment for human African trypanosomiasis, or sleeping sickness.

It's an organization that's guided by a core set of principles. They work with researchers, the pharmaceutical industry and the private sector, but I think the key thing behind the work they do, and indeed the work that the Canadian government should be doing at a federal level to create standards, is that the work is guided by a set of principles. Those are effectively that there's a need to ensure that the final products, whether drugs or vaccines, are affordable and accessible in an equitable manner to patients who need them, and there's a desire to develop medical tools that will be treated effectively as global public goods.

You do that by negotiating fair access provisions, with enforceable clauses and licensing agreements and contracts and so on that stipulate what is expected of any recipients downstream of the intellectual property—the data, the know-how, the substance of what's at the core of either drugs or vaccines—and that clearly stipulate how they're going to be priced, how they're going to be registered in endemic countries, how you're going to work with manufacturers to ensure global production and equitable allocation and so on.

There are actually many examples of how licences and different drugs and vaccines and so on can be developed in a different way. There are examples from the Medicines Patent Pool, from our organization, and from, as I say, DNDi, and I think the intent is not to replace the good work that's being done already in Canada but to recognize that we do live in a world where medicines are becoming increasingly unaffordable and expensive, including common sense safeguards. If we, the public, are paying to develop or discover something, we know the strings attached to it need to be fair-pricing clauses and an assurance that it's going to be made available to all patients everywhere who need access to it.

#### • (1720)

**Mr. Darren Fisher:** Sticking with equity and sticking with Dr. Nickerson, Patty Hajdu has said that a pandemic anywhere can quickly become a pandemic everywhere. Given that mantra, can you tell the committee why you feel it's important that we work to ensure that every country has resources to be able to respond to COVID-19?

**Dr. Jason Nickerson:** As I say, I work for an organization that's operational in some of the most complex public health emergencies in the world, in more than 70 countries. I've worked in many different places that have very weak health infrastructure, where the ability to provide the kind of care that Dr. Neilipovitz was describing almost certainly does not exist or exists in very limited capacities.

In those kinds of places, a vaccine or a treatment that may prevent people with a mild disease from progressing to a more severe form of the disease is absolutely essential to potentially averting a public health catastrophe being overlapped on an existing emergency. I think it's as simple as that. We need these public health tools to be made available to everyone everywhere because, quite frankly, it's ethically and morally the right thing to do, but also just pragmatically, this is an infectious disease that's communicable. We are in a global pandemic and we've seen how quickly it can spread from one place to another. **Mr. Darren Fisher:** Canada has done a pretty great job. As borders get ready to reopen, what are your biggest concerns about places that have yet to do a great job, countries that have yet to flatten that curve?

**Dr. Jason Nickerson:** We're still trying to assess the impact of the global pandemic on a day-to-day basis. There are cases now in virtually every country where MSF works. Interestingly, a lot of the countries where we work have public health professionals who are experienced in responding to disease epidemics and working in different types of emergencies. There is, in a sense, some capacity that exists on the ground that is actually quite experienced in doing things like contact tracing and so on. We are very much still assessing and responding to needs as we see them.

As I mentioned, in places like Haiti.... We put out a statement or a press release last week describing the realities that we're seeing on the ground, which is that as moderate to severe cases start to occur, the potential for health systems to be overwhelmed or struggling to cope is patently evident.

The Chair: Thank you, Mr. Fisher.

We'll go now to Monsieur Thériault.

#### [Translation]

Mr. Thériault, you have the floor for six minutes.

Mr. Luc Thériault: Thank you, Mr. Chair.

I'm going to address Mr. Nickerson, but I'm going to let him catch his breath.

Mr. Nickerson, Doctors Without Borders has considerable international field experience with pandemic issues. Doctors Without Borders has always believed in mitigation measures. You have considered border or school closures and quarantine. Even if that didn't stop the pandemic, you said it would slow it down.

The WHO has given conflicting advice in this regard. On March 14, it was said that border closures and quarantine were not a solution. Three days later, the director of the WHO European region said that this had the advantage of slowing down the pandemic. On Monday of this week, Maria Van Kerkhove, the technical lead of the pandemic management unit at the WHO, said that transmission of the virus by an asymptomatic person seemed to be very rare, which prompted a reaction from the community. Professor Liam Smeeth explained that asymptomatic infections could be in the range of 30%-50%. The best studies suggest that almost half of the cases were infected by asymptomatic or presymptomatic people.

My question is quite simple. What do you think of the effectiveness or the consistency and conflicting opinions of the WHO in the management of this pandemic?

#### • (1725)

[English]

#### Dr. Jason Nickerson: It's a big question.

We are a medical care organization that employs physicians, nurses and public health specialists. These are people who are incredibly adept at responding to public health crises as they occur in the field. We're no stranger to public health emergencies and outbreaks.

I can tell you what our response has been in terms of trying to evaluate and keep track of the emerging evidence. We have teams of medical processionals with expertise in this area who are putting together guidelines and trying to keep track of the evolving recommendations that are coming out. We are all learning as we go through this. I think there is great value in having coordinated voices and having clear guidance from public health officials around the world.

I think that my key message in all of this is simply to say that the evidence is emerging. It's evolving, and we're all doing our best, trying to read articles in The Lancet and other medical journals as they emerge and appear.

#### [Translation]

**Mr. Luc Thériault:** Your answer is quite cautious, despite your young age. However, do you believe that the main actor, the WHO, should have less contradictory positions and less hesitant guide-lines, which would allow more progress to be made? Are you concerned about that?

What is your opinion on the controversy over contamination by asymptomatic or presymptomatic people?

#### [English]

**Dr. Jason Nickerson:** I think we're all learning a lot about public health messaging as we work through this pandemic.

To a degree I empathize with people who are in a position of having to communicate rapidly emerging evidence and give an assessment of, quite frankly, imperfect evidence, because we're all learning effectively in the middle of a pandemic.

I agree with the point that clear risk communication and public health guidance are absolutely essential, but as I say, we're all learning in the middle of an unprecedented global public health emergency, and it's a challenge.

The Chair: Thank you.

I'm sorry, Mr. Thériault; you have one minute left.

#### [Translation]

**Mr. Luc Thériault:** Studies conducted by researchers at the University of Montreal Hospital Research Centre provided interesting data on antibodies generated by COVID-19.

A study showed that six out of ten infected people produced neutralizing antibodies only two weeks after the onset of disease symptoms, but the neutralization lasted six weeks. This suggests that the vaccine implementation strategy, if available, would include a booster vaccine. Since you are concerned about international accessibility and equity, what is your opinion on this level of difficulty added to the solution of vaccinating and immunizing the whole planet?

### • (1730)

[English]

**Dr. Jason Nickerson:** Yes, absolutely. One of the roles of international organizations is, in fact, to develop what are called target product profiles. What is the ideal profile of the vaccine that would be deployed around the world? In designing the ideal set of parameters that we would want a Canadian vaccine to have, it's absolutely essential that we and any other public health organization take that into consideration.

Indeed, at the table are representatives of countries that are going to potentially be particularly disproportionately impacted by this.

We know from other vaccines that the way in which they're developed is important. Whether it's injectable or administered with a dropper, at what temperature it needs to be stored, how long it can be out of the fridge, how many doses are in a vial and all of these things have to be included in the design and the development of vaccines at the early stage. That is absolutely essential for making sure we have a vaccine that is well adapted for global use so that it has the maximum potential impact and efficacy.

What you're describing, I would say, is a good example of that.

[*Translation*] **The Chair:** Thank you, Mr. Thériault.

[English]

We go now to Mr. Davies.

Mr. Davies, please go ahead for six minutes.

Mr. Don Davies: Thank you, Mr. Chair.

Thank you to the witnesses for being here.

Dr. Nickerson, beginning with you, are there any international safeguards in place currently to ensure that COVID-19 treatment and vaccine supplies are distributed based on need rather than on national wealth or political clout?

Dr. Jason Nickerson: Thanks for the question.

As I mentioned in my statement, the short answer is that we are seeing these statements being made by a variety of different heads of state and other actors that seem to be committing to these sorts of principles, let's say, of global public goods, of people's vaccines and of ensuring equitable access and so on. That is certainly a positive step.

As I mentioned, the global research and development system and global pharmaceutical system is not developed around the use of these principles of equitable access. The system is designed in such a way as to effectively generate profits and to maximize those. We need enforceable language to be included in funding commitments and included in licencing agreements and, frankly, to be imposed to achieve those objectives.

Mr. Don Davies: Let me move to a proposal for that. I understand that the Government of Costa Rica has proposed that the World Health Organization set up a global pooling mechanism of intellectual property rights, research and data for all COVID-19-related technologies. They say that this would accelerate open innovation and support the scale-up in production of necessary COVID-19 technologies and other things. Has the Government of Canada made a public statement of support for that initiative?

**Dr. Jason Nickerson:** To the best of my knowledge, no. I did check the WHO website earlier today, and I did not see Canada listed there. I may have missed it, but to my knowledge, no.

Mr. Don Davies: Thank you.

Beyond just political commitments, you talked about the importance of safeguards. Has the Canadian federal government implemented any safeguards to ensure that COVID-19 vaccines, diagnostics and therapeutics developed with public funding are affordable and accessible to the people and health systems that need them?

**Dr. Jason Nickerson:** Again, to the best of my knowledge, the answer is no. I've been following the work of the committee for the past while, and I know that this question was posed at one point. I believe the answer was that there was no language to that effect in at least one of the funding agreements that was made.

As I mentioned earlier, this is not typically the way that funding is rolled out in Canada. There is no requirement on recipients of public funds to have some sort of global access licensing or fair access policy in place at the institutional level.

Often, the system works the way that I described it. We have researchers who receive public funding, and university labs and other places do the discovery work, and then promising candidates are sold to the private sector with effectively no strings attached. That should change.

**Mr. Don Davies:** In March, you wrote an op-ed. I'll quote from it. You said:

Canada may not even have to depend on commercial partners to bring medical innovation from the lab bench to the patient's bedside. The experience of the Ebola vaccine's development shows that public sector researchers did much of the heavy lifting in the development and even manufacturing of early batches of the vaccine. We have experts in clinical trials in our hospitals, universities and vaccine research groups who are more than capable of doing the necessary clinical trials to develop and deliver new health technologies quickly and affordably.

In your view, would a public drug and vaccine manufacturer of the kind Canada used to have with Connaught Labs help ensure affordability and the development of medications and vaccines that are developed, obviously, through public funding?

**Dr. Jason Nickerson:** I've said this a few times now, but the pace at which the science is unfurling in the COVID-19 vaccine and therapeutics development is absolutely unprecedented. When I wrote that op-ed, the CanSino collaboration agreement didn't exist yet.

<sup>• (1735)</sup> 

I think that point is emphasized by what Mr. Fisher mentioned. The clinical trials work is going to be done by researchers at Dalhousie University, who have expertise in doing these kinds of clinical trials. There is expertise in doing at least some kinds of phase I through phase III clinical trials that exists in universities and other research institutes and in other places. There are models of innovation that do not have to rely solely on the sale of early-stage promising drug and vaccine candidates to the private sector. There are different ways of doing this.

Mr. Don Davies: Thank you.

To the Canadian Dental Association, thanks for being here.

We know the work that the CDA has done. Somewhere between 33% and 35% of Canadians have no dental coverage at all at any time. Now, as you pointed out, we know about three million Canadians have lost their employment as a result of COVID-19 and with that, any dental coverage they may have had through their employer.

Do you believe it's time to reevaluate Canada's method of delivering dental care so we can ensure that all Canadians get access to essential oral health?

**Dr. Jim Armstrong:** Would you like me or Dr. Burry, the public health expert, to answer?

Mr. Don Davies: Whichever you prefer.

Dr. Jim Armstrong: I'll go first.

I do think it's time. That's why we made our proposal. I think there are a lot of different ways we can look at it. As Dr. Nickerson said, we're in the midst of trying to figure out how our systems.... There's so much that we're learning about the shortcomings of the systems through this COVID crisis.

There are interesting aspects to the Affordable Care Act in the U.S. There are European models. We've done a lot of research over the last 18 months on different types of models to care for those patients. More Canadians are going to lose their oral health coverage. They're going to need access. We absolutely agree.

The Chair: Thank you, Mr. Davies.

That brings round one to a close. We start round two with Dr. Kitchen.

Dr. Kitchen, please go ahead for five minutes.

Mr. Robert Kitchen: Thank you, Mr. Chair.

Thank you, all, for your presentations.

Dr. Armstrong, I'm going to start with you. Just so you understand, I was the registrar for the chiropractic profession in Saskatchewan, and then I was the president of the organization. I recognize the difference between the association and the regulatory body. I suspect that, during these times, you have been in close contact with the college of dental surgeons.

If you feel there's an answer that you can throw in there, I would appreciate that.

According to the federal economic response plan, on your CDA website, the financial assistance programs introduced by the gov-

ernment may not be applicable to certain dental practices as each situation depends on the business structure of the individual practice.

Have you experienced a lot of turmoil amongst the many practices?

• (1740)

**Dr. Jim Armstrong:** There are about 18,000 practices in Canada. We probably have 19,000 different ways we're organized. We have found that the federal government has been very good at being able to address and change some of these. For some of them, the wage subsidies have been really important. We hope those continue; it would be nice if they continued past August.

Normally I don't love politicians, but I love all politicians right now because I think by and large we've got more things right in our economic response to COVID. Certainly the federal government seems very flexible at looking at some of these things.

**Mr. Robert Kitchen:** In your projections and deliberations, has the CDA relied at all on PHAC and the data that it provides for COVID-19?

**Dr. Jim Armstrong:** I'm going to let Dr. Burry answer this one. He's more knowledgeable on this.

**Dr. Aaron Burry (Associate Director, Professional Affairs, Canadian Dental Association):** Yes, absolutely. We participate in a lot of different conference calls with PHAC around everything that's been going on with respect to COVID.

We, as an organization, have done a national wrap-up virtually every week since this started. We are using data from PHAC and other organizations to make sure that dentists across the country understand what's happening.

The biggest part for dentists is to understand what is going on in their community, as well as the trends, particularly if they look at reopening and reestablishing practices. Many of us have stayed open to provide emergency care throughout. Others are now starting to bring more services online. We need to understand the course of this pandemic, as well as any other information that PHAC provides to us.

**Mr. Robert Kitchen:** I realize there is lots of change. First of all, I'd like to thank the whole dental profession because I know they stepped forward with PPE at the onset. A lot of them gave up their own PPE. Your recommendations about getting priority access to PPE are important.

How much discussion are you having with PHAC in order for you to get access to that equipment, such that you can provide oral care to Canadians? **Dr. Aaron Burry:** In terms of those conversations, I think what the federal government has done in trying to clarify who is actually a legitimate seller and reseller of PPE in this country has been helpful. What is unfortunate is that dental suppliers that have it simply don't have the supplies to give to dentists, and it seems to be a national problem. That's what we hear. It's a growing issue for dentists that the supplies they do have will run out as we start to increase the amount of care that we need to provide and address things that have been put off for several months. In that respect, I think it is a global frustration in not being able to refill supplies as quickly as we would like at this point.

Mr. Robert Kitchen: Thank you. I appreciate that.

I realize there are a lot of changes interprovincially. In Saskatchewan there are different issues. For example, in Saskatchewan the dentists seem to have the strictest adherence and regulations, whereas Ontario has changed theirs in the last three days from being strict to not, and we have some of the fewest cases here in Saskatchewan.

Does the CDA feel that the jurisdictional approach to reopening is working for their sector, or would some kind of national standard or guidance have been more helpful?

**Dr. Aaron Burry:** I think across the country, everybody would benefit from a more standardized approach and more national leadership around what the guidance should be at the provincial level. I think the variety of guidance that you have in every province and at every level is challenging.

At the same time, you also have to respect and understand that local decisions are based on local capacity. We heard earlier about the capacity of a health care system to be able to respond. I think what you're seeing is that medical officers in certain parts of the country are responding to the fact that they don't have the same level of medical support. They're worried about it, so they're asking the dental community to do more in those particular jurisdictions. It does speak to having a very large, diverse system in Canada in which people who are looking at the same information are coming up with different answers.

• (1745)

The Chair: Thank you, Mr. Kitchen.

We go now to Ms. Jaczek. Please go ahead for five minutes.

**Ms. Helena Jaczek (Markham—Stouffville, Lib.):** Thank you, Chair. Thank you to all of our witnesses today for their presentations.

Each of you has alluded to a stronger role for Canada in the areas in which you each work.

I'd like to ask my first question of Dr. Neilipovitz. You alluded to national standards for intensive care units practice. Given that health is, in essence, a provincial jurisdiction, how do you see the development of those national standards?

Dr. Dave Neilipovitz: Thank you for the question.

It has always been a challenge of provincial versus federal, and I'm not so naive as to think there's a simple solution. However, a national standard is what most of our societies go by, and I think it's an easy opportunity for the federal government to work with the provincial counterparts to set expectations for critical care units. It would be led by the federal government working with the various provincial counterparts, along with our national society. It could set what we expect a level 3 ICU to provide, and the various other components, and I think provinces and physicians would welcome that.

Maybe I'm naive to think it is easy, but I think a national standard is what we would all look to. We have national standards in the operating room and various other locations, so why would we not have them for our intensive care units?

**Ms. Helena Jaczek:** It appears the Ottawa Hospital was well prepared. You planned in advance. Obviously, experiences from before, such as with SARS, seem to have made the Ottawa Hospital very aware of pandemic planning.

How are you preparing for a potential second wave? What is that looking like for the Ottawa Hospital?

**Dr. Dave Neilipovitz:** I can speak to the Ottawa Hospital but also Ontario. I think Ontario, as you pointed out, with our experience with SARS, was perhaps better prepared than some of our counterparts in that we've been planning this for about 15 years. We've had practice runs, be it with H1N1.

What we're doing for the second wave, which may or may not come, is that we continue with our preparation in ensuring that there's an adequate amount of PPE, personal protective equipment, for us. There are additional ventilators coming in almost weekly, so we have that.

I'm working with counterparts in other areas to see how we can work together with it. It has actually been a very positive experience, seeing the co-operation between all the sites. I think that's something Canadians should take some solace in knowing. We're working on that.

We're revising our protocols and practices with it, and we're sharing along the lines of what's going on internationally, which was being advocated by Dr. Nickerson. We are certainly doing that in Ontario and working with that.

We're also trying to develop ways to identify when perhaps a second wave is beginning. We're looking for measures and signals such that we would be able to prepare quickly but not impact other health care, as seemed to happen in the first wave.

**Ms. Helena Jaczek:** What about the issue of burnout in frontline workers, intensive care unit workers? It's obviously extremely stressful for those working in those units. How have you been dealing with the mental health aspects that inevitably occur under such stress?

**Dr. Dave Neilipovitz:** I think it's through talking and sharing experiences. I've actually been quite impressed with what has been provided by some of our societies as well as by government, at least my own government in Ontario, to allow us mental health and mindfulness types of strategies.

I do worry, the longer this goes on, about how protracted it will be, including the restart. It certainly will be taxing our nurses, our respiratory therapists, our other specialists and our physicians. I do think the assistance that has been provided for corporations has been helpful for physicians. The added pay for our health professionals was certainly welcome.

I do think that a long-term strategy on the mental illness effects secondary to COVID on health professionals as well as on Canadians in general should be a major consideration for our government.

#### • (1750)

The Chair: Thank you, Dr. Jaczek.

We go now to Ms. Jansen for five minutes.

Mrs. Tamara Jansen: Thank you.

Dr. Neilipovitz, I was wondering what percentage of ICU beds Ottawa used at the peak of the pandemic. I think you mentioned it.

**Dr. Dave Neilipovitz:** We were at 57 beds with the two campuses. Fortunately, believe it or not, critical care wasn't stressed in most centres across Canada, so we were roughly at about 80% in use. We never had to go into our pandemic areas.

#### Mrs. Tamara Jansen: Okay.

We heard the Prime Minister right at the very beginning say that our health care system has plenty of surge capacity. My first thought was that every Canadian knows there's no surge capacity in our system once they've sat in emergency for a few hours.

Do you feel that shutting down important medical services like cardiac surgeries and so forth constitutes actual surge capacity, or is it just that we rob Peter to pay Paul, in a manner of speaking?

**Dr. Dave Neilipovitz:** By the nature of your question, you know the answer, in that we were affecting other people's care. I think that is the reality. It's one thing to take away emergency surgery, which really did not happen; most of it was elective surgery that was impacted. There was some surge capacity that isn't inherent in our system. I think there are ways to improve it.

**Mrs. Tamara Jansen:** What are your thoughts on that? Is it field hospitals? I don't think we really utilized that at all, keeping COVID away from other processes perhaps with field hospitals. Has that been thought about at all?

**Dr. Dave Neilipovitz:** Field hospitals were explored. I was part of groups that explored and discussed them, but that's easier said than done. If we open a bunch of surge hospitals, we could open them, but how do we staff them? How do we supply them with equipment and things, and such?

I think there are other more effective strategies. I believe most Canadians are now aware that acute care hospitals have a lot of patients who would be better cared for in a long-term care facility, which is certainly, unfortunately, in short supply. That is a huge issue going forward. Now, with changes in long-term care, it has stressed our acute care even more. I think a comprehensive longterm care strategy is long overdue for all of Canada.

#### Mrs. Tamara Jansen: Right.

Hearing all the needs that the health care system has following this pandemic—I mean, this panel obviously has a tremendous amount of needs—it seems almost too big of a problem to solve. You know, if every hospital needs to be updated, it feels like it's a little bit like trying to eat an elephant. Where do you even start?

Is there a way to prioritize things? What would you say would be the most critical change that needs to be made to our infrastructure or whatever? What would be the low-hanging fruit? Is there something specific you could point to that would make a lot of difference and that you could get done right away without doing everything?

#### Dr. Dave Neilipovitz: It's a good question.

Trying to boil the ocean is impossible for all of us, but I would really start with looking at long-term care. How do we get patients out of an acute care hospital who don't need to be there?

I did allude to some of the challenges with end of life, and it certainly is a difficult topic to address. I believe, however, it is important that we look at all aspects of end of life and not simply the main component that was addressed several years ago. There are other aspects.

Long-term care, I really do believe, would go a long way to addressing some of the challenges that hospitals are experiencing. By far and away, our biggest issue and challenge is space. If we were able to get what's roughly about 20% to 30% of all hospital beds empty of patients who, unfortunately, have nowhere else to go, I think that would go a long way to improving our health care system.

• (1755)

**Mrs. Tamara Jansen:** With the big wait-lists that have been created, are there any creative ways that we can clear those up? Are there procedures we could deal with outside of the regular health care system that could perhaps take off the pressure, like, I don't know, private mobile radiology services or something like that? Is there a way to do this creatively? I mean, a seven-year wait-list for a hip replacement sounds like a bad idea.

**Dr. Dave Neilipovitz:** There are always creative ways to do it. Any time there is a change in the system, there's actually an opportunity to make it better.

We certainly have found a lot of efficiencies during COVID. Telemedicine certainly helped a lot of aspects. All patients don't need to come to a hospital to be seen by a physician, so I think that is an opportunity. If we invest in our telemedicine, we'd be able to unload some of the burden that's going on with that. In terms of your ideas of going private and outside of the traditional setting, there is a downside to that, but there is also an opportunity. Certainly, I think we should explore it, but recognizing that our ultimate goal should be to ensure that care is provided to all Canadians in an equal fashion.

#### Mrs. Tamara Jansen: Yes.

The Chair: Thank you, Ms. Jansen.

We'll go now to Mr. Kelloway.

Mr. Kelloway, go ahead for five minutes please.

Mr. Mike Kelloway (Cape Breton—Canso, Lib.): Thanks, Mr. Chair, and hello to my colleagues and to the witnesses today.

I've said this before. I forget the number of meetings we've had. I should know that offhand, but there's been plenty during this COVID pandemic. However, each of the witnesses has provided so much information and knowledge to us, to me and to the Canadian public, and I just want to thank you folks for this today.

I'm going to start my questioning with the Canadian Dental Association.

You have aha moments when you're asking questions or, more importantly, listening to the answers. Dr. Armstrong, you talked about looking at dentistry as many outpatients, and I found that to be an incredible aha moment for me in terms of reframing perceptions versus realities in health care. You made a really interesting comment, and I want to drill a little deep into it. You talked about the \$3 billion that could be invested, or should be invested, into the province from the feds. I think you've alluded a little bit to it, but I want to give you this opportunity to maybe do a little deeper dive on what those specific elements, those areas of investment, would be.

A second question, and I'll stay with the Canadian Dental Association, is that dental services are beginning to resume across the country as are a lot of other health care services. Can you tell us what dentistry is going to look like in the next day, 24 hours or next couple of weeks, as opposed to pre-COVID?

Thank you very much.

**Dr. Jim Armstrong:** Thank you for both questions. I'm going to start with the second one first because it's easier.

I can't tell you how it's going to look because it's evolving daily. We had 3,000 new papers published last week on COVID. There are too many things: how long does this last, when will we get a vaccine, how long are we going to have change our processes.

I want to go back to Dr. Neilipovitz's comment about telemedicine. We're starting to use teledentistry. I think that has great potential for being able to make care more equitable.

We at the Canadian Dental Association certainly want to make care more equitable, and we also want to drive costs out, and we want to increase quality.

Coming to your first question, the \$3 billion, Canada underfunds compared to many countries, the public health aspects and the public support. As one of your colleagues, the honourable Don Davies, has pointed out, somewhere between 30% and 35% of Canadians lack funding or have inadequate funding. What we're really concerned about is the number of Canadians who are going to lose it because the recession that follows this pandemic may be very deep and long.

If there was a tranche of financing that was specific to oral health care, that would help, because what happens in dentistry right now is often our funding comes through social services, not actually through health. We're the last dollar in, and we're the first dollar that gets clawed back. We have really good private facilities, but we also have really good hospital dental facilities that are just underfunded. If we could get that funding.... I think all of us have said that we would be open to any suggestions. We'd be open to looking at all ways in which to target this, but the issue is equitable access for all Canadians.

• (1800)

**Mr. Mike Kelloway:** A bit of a running theme in today's discussions has been around equitable access for sure.

I'm really interested in learning more about teledentistry as well. What we're seeing on the telemedicine side in Nova Scotia is that there's been obviously an increased uptake because of COVID, and people are getting a little bit more familiar with that concept. I'd be interested in learning more about teledentistry. Thank you for that.

My next question is for the witness from the Ottawa Hospital.

I'm hoping you can walk through what it's like for a person to be hospitalized with COVID at your hospital. I'm interested in the treatment but I'm also interested in the aftercare as well. I wonder if you could, for the panel here, for my colleagues, and for Canadians, walk through that for us if you could.

Dr. Dave Neilipovitz: It's a big question.

As for patients who present with it, there are several different types of presentations. What is one person's experience isn't necessarily the experience of everyone.

The patients I see unfortunately are the sickest of the sick. When they come in, many of them are struggling to breathe. There's also the fear and anxiety just with the syndrome itself, and all the hype that's been around it. Certainly, the caring that the nurses have demonstrated has been fantastic.

The one aspect that patients are experiencing that unfortunately makes them unique compared to any other disease and disorder is there are no friends or family that are around them. I think that is a tragedy of this situation that we'll be talking about for years from now. We have done our best, at least in the Ottawa Hospital, to provide means, such as videos, to permit them to see the people they really want to see. Someone touching them and holding them who's not their family is certainly better than no one, but I don't think it's the same. In answer to how they experience...they feel short of breath. Some of them are struggling to breathe, and others, surprisingly enough, aren't struggling, albeit that the oxygen levels in their blood that we measure are quite low.

As for the recovery, certainly I know my rehab colleagues are doing their best to accommodate this. There certainly are a lot of unknowns that have been alluded to, such as whether or not people are actually infectious. They are doing their best to rehab these individuals. Some of them are staying on ventilators for almost a month, so you can imagine how much muscle...and the changes they have experienced.

Mr. Mike Kelloway: Thank you very much, folks.

The Chair: Thank you, Mr. Kelloway.

We'll go now to Monsieur Desilets.

[Translation]

Mr. Desilets, you have two and a half minutes.

Mr. Luc Desilets: Thank you, Mr. Chair.

Good evening everyone. Thank you for being here.

My question is for you, Dr. Neilipovitz. You talked about national standards, but you also said that there should be significant collaboration with the provinces. In this context, what do you say about health transfers, which are often requested, obviously, by the provinces?

#### [English]

**Dr. Dave Neilipovitz:** What would I think of the health transfers? Should they be increased? Should they be adjusted?

Certainly, with regard to the idea of increasing funding, there's not going to be any physician who says that we shouldn't fund more, although I think we need to fund smarter. I think that is something that we all share.

In terms of the transfers, certainly we would like to see that increased. However, I would also put back that I think we all need to be smarter with what we're doing. There's no bottomless pit of money that can come. There is an opportunity for us all to work together. I do work with my colleagues across the river in Gatineau. When this was coming about, we offered our services to them, and I worked with my counterpart there. There is collaboration between provinces. We can do this together, and funding can certainly follow where collaboration is leading the way.

#### • (1805)

[Translation]

**Mr. Luc Desilets:** In your second recommendation, I believe, you want the government to support the development of telemedicine in the ICU.

Can you explain to me how telemedicine can be experienced in the ICU?

#### [English]

#### Dr. Dave Neilipovitz: Thank you.

The opportunity needs to build on what's actually being done around the world so that a centre like mine would be able to get a video feed, as well as information from the investigations and monitors, to be able to assist the teams that are there providing care, providing opinions and guiding treatments. That way, experts, even in various other centres, could be brought in to help improve the care that's going on in our more remote facilities. It's an opportunity, both by video and also by better linkage, to be able to see and know what's going on.

#### [Translation]

The Chair: Thank you, Mr. Desilets.

[English]

We go now to Mr. Davies.

Mr. Davies, you have two and a half minutes.

Mr. Don Davies: Thank you, Mr. Chair.

Dr. Nickerson, in the previous Parliament, the health committee prepared and produced a report on open science, which recommended developing global access licensing requirements for medicines and vaccines with CIHR funding. To your knowledge, does CIHR have a global access policy for COVID-19 medicines and vaccines developed with public research funding, or does it require institutions receiving CIHR funds to have a global access policy?

**Dr. Jason Nickerson:** I'm not a recipient of CIHR funding at the moment, but to the best of my knowledge, no, I'm not aware of there being such a requirement.

**Mr. Don Davies:** I take it you would recommend that we implement such a requirement.

**Dr. Jason Nickerson:** Absolutely. This is one of the things that we recommended to the committee in the previous Parliament during this exact study: that funding provided for the development of drugs, vaccines, diagnostic tests and other health technologies should be conditional on recipients of public funds having a policy in place which stipulates that if they are going to license it to someone else, it be done in a way that includes provisions that ensure that it will be affordable, accessible and priced fairly when it eventually comes to market. I think that enacting these provisions early upstream gives a degree of control to be able to negotiate some of these provisions fairly effectively.

#### Mr. Don Davies: Thank you.

Dr. Armstrong and Dr. Burry, I know that you co-chaired the CDA's return to practice task force. I have a couple of questions.

In your view, are all regions of the country in a position to begin safely reopening dental offices, at least for non-emergency services?

**Dr. Aaron Burry:** In terms of the areas of the country, for example, on the east coast where they haven't had any COVID infections for several weeks, I think they're in a very good position to resume services safely. I think we are still struggling in places like Quebec and Ontario, where we have outbreaks and we're still monitoring that.

Going forward, it would be good to have some national standards and some sliding ability to look at, when there's a pandemic, what should happen in practice versus "we're trying to do this". All guidance coming out has largely been interim. We have to remember that it's interim guidance for a new experience. This is unprecedented; we haven't seen this before.

I think most practices are in a good position to be opening, while there are questions, like in the Northwest Territories, where the medical officers are very worried about the fragile nature of their health system and so on. The Chair: Thank you.

That brings round two to a close.

Panel, I'd like to thank you for all of your time, your expertise and for sharing your knowledge with us. I'd also like to thank the members of the committee.

The meeting is adjourned.

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