**Breaking the Stigma: The Truth About Lung Cancer Screening & Survival with Dr. Christian Finley**

**Speaker 1** 00:02

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**Speaker 2** 00:20

Welcome to the cancer assist show. I'm Dr Bill Evans and your host, and today we have a program focusing on lung cancer screening with a special guest. Dr Christian Finley,

**Speaker 3** 00:31

thank you very much for having me. It's exciting to be back. So we have

**Speaker 2** 00:34

talked before about various things, but this is a topic that we haven't touched on too much, and it's really an important one. And to set the stage a little bit for our listeners, lung cancer is the biggest cancer killer in Canada. Indeed, in the world, I think it's 1.8 million people die from lung cancer globally. In this province of Ontario, about 7000 individuals pass away from lung cancer. So it's terribly important, and the reason for that is that the vast majority, probably 75% of patients, present with advanced disease that's incurable. The only way you can cure lung cancer today, even though there's been improvements in drug therapies and in radiation techniques, is through surgery, and you have to find the cancer early to resect it once it extends to a lot of distant nodes or to the liver, brain bone, it's impossible to cure so that's why we have to screen for lung cancer the way we've been screening for breast cancer, cervical cancer, colon cancer, if we can find tumors early, we have a greater chance of curing them. So that's what this is all about. So we're going to talk about the why, the how, the when, the where, and all of this with Dr Finley today, we sort of touched on the why, but you may want to elaborate on that a bit yourself. Christian,

**Speaker 3** 01:52

it's always a challenge, because one wants to people to understand just how impactful this is without diminishing anybody else. And so I sometimes say that lung cancer kills more people than pros, prostate, breast and colon combined. And that's not to diminish those diseases, but really to say just the absolute quantity of people that we're talking about now on a Canadian scale, that's 30 some 1000 people that get it a year, and 27,000 that are dying from the disease. And I think it speaks to, as you pointed out, that lung cancer typically presents at late stage. But you know, we know from some of the work by the Canadian Cancer Society that lung cancer actually has the fastest improving survival of any cancer in Canada at this point. And it's to all the things that you spoke of, that we are doing a good job by smoking cessation, that we are now implementing lung cancer screening. We have great new chemotherapy drugs and immunotherapy drugs. We have great targeted radiation and and, you know, specific to my discipline, our surgeries are getting less invasive, and we're being able to operate on people who we would not even thought of it generations ago. So, you know, I think that it is a disease also that carries with it, a certain amount of nihilism, where people really always just thought it was a death sentence. And now it is not. It is, you know, people I see that that have very advanced disease, some of these newer treatments, or ability to identify them earlier, just mean that that at Christmas time, when people come in to see me in the office, it's, it's happy reunions as they come, back, 510, 20 years later. And some

**Speaker 2** 03:22

of that nihilism is maybe is related to stigma too. And we've always associated lung cancer with with smoking, and kind of blame the person who's become addicted to tobacco. But in fact, we got to realize there are a lot of cancer, a lot of lung cancers, that are not related to smoking, in fact, or maybe we don't know the causes of them because they're molecularly determined. And maybe it's related to pollution, maybe it's related to other kinds of exposures in the environment. But there are things other than tobacco that are causing lung cancer today, and we shouldn't stigmatize all lung cancer patients as some as people who've smoked and kind of deserved it, which is kind of thing I've heard over my career. Yeah,

**Speaker 3** 04:03

it's an interesting question, isn't it that that's, you know, almost half the population smoked in the 1950s and 60s, and now we're down to about 12% and clearly that's a lot of people who who used to smoke, who have who have thankfully found the ability to quit, because it is an addiction, and some people who have not been able to but, but I think we all know someone who used to smoke, or does smoke, and we love them very much and don't wish them ill in any way. And so I think that that stigma, when you bring it close to home, or when you think about it as a person, you know, that seems to wash away that, that stigma that we all carry with us, you know, I had a patient on the panel I was sitting on talk a little bit about when, when she was a kid, you know, her parents would never invite a divorced person to dinner because that was stigmatized. And nowadays, of course, you have someone who's divorced over for for dinner, but that somehow smoking is this thing to the side. But I think that that that those days, I think, are hopefully numbered, and that we can all see past that, that prejudice that we carry with us to to see the people better than. Sure,

**Speaker 2** 05:00

yeah, certainly, it's been dramatic. The incidence of smoking is declined, and the prevalence of smoking, as I should say, has really declined and down to the 12% but one statistic that struck me is that 43% of Canadians remain at risk of lung cancer because of past smoking history. So there's a lot of people have done the right thing and quit and maybe think they're, you know, not going to ever get lung cancer because they quit, not to negate the fact that they've done a good thing, but they still remain at risk because they may have been exposed to the carcinogens over a protracted period of time, and that may show up later, and hence a good reason for going through a screening program at intervals, if they've had a large volume or a long duration of smoking in their in their past.

**Speaker 3** 05:44

Well, I think you bring up a very interesting concept in that that we we currently use personal medical history of, you know, a family individual that had lung cancer as a risk factor, or COP diagnosis or tobacco exposure as elements when we select people who are high risk for lung cancer, but other risk factors that we know about are radon exposure, which we have a lot in Canada. You know, Sweden and Canada have about the same smoking rates, and yet we have far higher lung cancer rates because of our radon in our basement and our and environmental exposures. We We do think that the forest fire, smoke and the particulate matter that comes out of that is generationally going to be an increasing concern from a lung cancer risk going forward in Canada. So there are other risk factors that we have in this country that we need to to better understand and mitigate against. The

**Speaker 2** 06:33

concept of screening has been around for a long time, and we should probably explain that to our listeners. It's really performing tests at a time when a person's asymptomatic and well, looking for the earliest signs of a malignancy so that it can be diagnosed and treated. And I think a lot of people are familiar with mammography for detection of of a breast cancer, or pap smears for detection of cervical cancer, colonoscopy for colon cancer, and it would seem logical we've been doing chest X rays forever. There were studies done of a chest X ray and Mayo Clinic study and so on in the past. And you would have thought that that might have detected cancers earlier and made a difference, but it didn't. So what's made the difference now that we have a screening program? That's

**Speaker 3** 07:17

a great question. So you're right, like so I sometimes contextualize this that my grandfather was a thoracic surgeon, my father was a thoracic surgeon, and I am a thoracic surge.

**Speaker 2** 07:26

I was going to bring that up earlier, but thank you, because you're an unusual individual, generation thoracic surgeon. Quite amazing. So

**Speaker 3** 07:34

when I think back to my grandfather's era, you're right. They tried chest X rays, and it just wasn't good enough to see the things they needed to see it as at an early enough stage to be of benefit. And going into my father's generation, they started to get CT scans more readily available, and realized that you could find these things at a much smaller scale than we ever could with these, these X rays that were invented in the 1800s but it really took until my generation for the evidence to come to bear that showing that a yearly CT scan on appropriately selected people can improve survival by 20% and that is just unheard of in public health, the ability to identify disease and improve survival on that scale. And so there's a big American study, the nlst, that showed that. And then there's another trial in the Europe called the Nelson trial, that also showed that they're subtly different, you know, if you wanted to get into the weeds of it. But ultimately, you know, a CT scan every year or so for these high risk people just dramatically changes their fate. And

**Speaker 2** 08:32

these are low dose CT scans, which is different from sort of a diagnostic CT scan that many people may have had for whatever reason. So the dose of radiation is lower. Can you put the that in context of how much radiation they're exposed to? Yeah, that's a worry for some people. No,

**Speaker 3** 08:49

I think certainly that that one of the interesting things about a low dose CT scan is that you don't use contrast. So there's no need for an intravenous, which I think scares some people off. There's no need to have people other than the technologist who does the the CT around, because there's no risk of having a reaction to it, the dose of the radiation is quite low. It's the same as flying to Europe. And I'm sure most of us would rather fly to Europe and get a CT scan, but that's about the same radiation you're getting, and it has, you know, this dramatic effect on finding things. So I think it's the benefits are so much

**Speaker 2** 09:21

to the advantage side. Now most people haven't had a CT scan, so maybe you describe what that experience is like if, if you were someone who's identified as needing one, what would you be going through?

**Speaker 3** 09:32

I'm sure for so many of us, even a call from the hospital, let alone walking into one, is anxiety provoking, but a CT scan is pretty easy to schedule. And do you know? Certainly, people come to the hospital after getting their instructions from their healthcare provider, they go inside and it's a very large tube or donut that you have to go through. And even people who are quite claustrophobic don't find that to be difficult. I'd say most people tolerate it quite well. Some. People struggle to lie down for a variety of reasons. That's about the only group of people that that the table is hard. The table is not not the squishiest, for sure, but it is brief. It is usually, you know, in the seconds to minutes, as opposed to more than that. And so it's tolerable for almost anybody. So

**Speaker 2** 10:14

we have recently launched a formal screening program in Ontario. And prior to that, there was a pilot study. Uh, maybe you could talk a little bit about about the pilot, where it was done, and what were the results of that? Yeah,

**Speaker 3** 10:30

no, I think that when these trials came out and showed that lung cancer screening was so impactful, everybody in the world really wanted to get on board and see how they could do it. And, you know, in medicine, there are things like a new pill that you need to, you know, get the pill and manufacture it and get it out to the pharmacies. But when you're talking about a technology on this scale, there has to be a lot wrapped around it, because you can have to select the right people and find them, in particular, those that are that are more disadvantaged by geography or wealth or equity, get them to come. You need to select the right people, so you need to make sure that they have adequate risk to benefit from the CT scanner. You then need to do a good CT scan. You need to find an opportunity to help them. So the majority of these people are still smoking, or were former smokers. So you want to make sure that you help them to quit smoking if they're still smoking, or stay quitting smoking, if they they were in the past. Make sure you do a good scan and have radiologists trained to interpret in the most up to date way, and then take those results on the back end and make sure that the people that that have lung cancers go and get those taken care of, and then those that you find things by accident also get those things taken care of. And so all of that has to be done perfectly, and so you need to arrange it all. And so that was the goal of the pilot, to make sure that we in Ontario could deliver this to a diverse group of people in diverse settings and do a good job with it. And that was a great success. It was actually so successful that it was more successful than the international studies that were published. And so in terms of identifying cancers, yeah, so it's something we're very proud of. So we had great leadership by people like Martin kamagi, who is an international leader, and that that's from Canada, in making sure that we identified the highest risk people and trying to cut off where we should, should evaluate those people, and then once that was shown to be successful, you know, Ontario had the for thinking to broaden that across the province, and we're in the process of rolling that out, which is, you know, hard work, but I think people are feeling pretty passionate about getting into care as close to home as we can get. It for people, absolutely.

**Speaker 2** 12:30

So let's take a number of those different elements. First of all, what are the criteria for people to undergo a CT scan for screening purposes? Yeah.

**Speaker 3** 12:40

And also, if you look at the nlst, they took two things into account. How old are you and how much did you smoke? And so they said, If you smoked more than 30 pack years, or a pack pack a day for 30 years, and you were somewhere between 55 and 74 In you go. Martin Tamas brilliance was to take that data set and to look at other things. And so things like a diagnosis of COPD, a personal, family history of lung cancer, and other sort of factors to see if people should benefit from lung cancer screening that may have smoked a little bit less. There's

**Speaker 2** 13:11

a particular criteria, certain risk of developing lung cancer by six years. Yeah, as

**Speaker 3** 13:16

2% so in Ontario, we cut off at 2% BC cut off at one and a half percent, and different jurisdictions will saw that often there's risks and benefits to that decision. And so that was Dr tamagi calculator that was published in our highest esteemed medical journal that we've been using for that. And those are the sort of factors that we ask people so but we wanted people who had slightly less exposure, so 20 years of smoking on a daily basis, not even continuously gets you in the door. And about 80% of those people, when they're asked a bunch of questions, are eligible for lung cancer screening. So everybody gets smoking cessation, yes, but good, good. But only 80% of people, when you use that lower bar are eligible, but even but by doing so, you're able to identify more cancers and scan those people.

**Speaker 2** 14:04

How do you invite people into the program? Because one of the issues, as I understand from the literature, particularly United States, is the numbers of people who are actually being screened is much lower than expected, and it has must have something to how you go about recruiting them, and not just recruiting the people who are well educated and read it in a magazine and think that, Oh, I better go and do that, but all the people who are really eligible, and they can be of lower socioeconomic status or lower education, with Team attainment and so on. How do you do that? Well,

**Speaker 3** 14:35

yeah, I think that that's the you've hit on. Some of the key things you think about, certainly when we did some research with the Canadian Partnership Against Cancer, we looked at equity in lung cancer. And so who is getting lung cancer? And you're right that poor people are more likely to smoke, they're more likely to show up with advanced stage disease, and they're less likely to get cured of intent treatment, even if they have curable disease. So they get hidden three different times, and they have a 35% lower chance of being of getting cured. Same with people who live in rural and remote places, people who are visible minorities, in particular, First Nation Inuit Metis, or urban indigenous people, are also less likely to survive. And so to me, we need to work extra hard to find those people so that we can try to bridge that gap. Those are the people that that are equity deserving is not as easy to find those people or make them trust you, because they've been been mistreated so many times. And so, you know, I've gone to and spoken with family doctors, I've gone and talked with patient groups. I've gone on podcasts like this. You know, we've, we've did a lung cancer summit to try to bridge some of those gaps. And so I think that you need to make people aware of it through through multiple different modalities, and then you need to try extra hard to gain the trust of the people who have been disappointed by healthcare by the healthcare team in the past. One

**Speaker 2** 15:50

of the things that was interesting about the pilot study was a heavy reliance, I would say, on a family doctor. Primary care provider may have been a best practice nurse as well, but it the patients who entered the pilot really spanned all the socioeconomic levels of education and so on. It seemed to be a way of optimizing the reach into those communities that are sometimes left out. And maybe it is because family doctors tend to be trusted by their those who come to see them over time, and if the family doctor is aware of not only the benefits of CT screening, but also smoking cessation and can speak to them about both of those things happening as part of the program, maybe that helps to encourage them to participate and accept referrals into smoking cessation programs. So it was a very high in the pilot, much, much higher, I think, than anybody expected. Essentially 90% now we used an opt out approach. That is, you were referred, if you use cigarettes, you went to run into the pilot, you could, of course, say, I didn't want to go to a smoking cessation program. But that was like 4% of the population actually said, No, I'm going to continue to smoke. I've tried. I'm not going to quit, but it was a very successful way of recruiting individuals using primary care. Yeah,

**Speaker 3** 17:08

I think the challenge in this day and age is that where people who have family doctors is decreasing over time that are that people's access to getting a family doctor is getting worse and worse over time. And so I think that either nurse practitioners or doctors are a great avenue, but increasingly, I worry that there's a group of people out there, particularly those that are marginalized, that

**Speaker 2** 17:27

don't now there were just a few pilot sites in the province of Ontario. Maybe you could just comment on how they were selected, because I think was partly to get at different populations.

**Speaker 3** 17:39

Yeah, you're right that, I think, great thought went into making sure for that pilot. And then as we go out to having it available across the province, to have sites that were urban, and some sites that were that were more on the outskirts of bigger cities or smaller cities. And then, you know, through the pilot, we realized that we needed to get even closer to people. And so there's a now a spoken hub model. And so what happens is that Ottawa, for example, is is one of the sites that was selected, and is obviously a city. But surrounding Ottawa are now five spoke sites that feed into Ottawa so that people don't have to drive as far, so that that those scanners are in hospitals positioned, you know where the parking is better and cheaper cheaper, and so people can get them closer to home. And I think that that a lot of thought is and will go into getting care as close to home as possible, and trying to bridge those divides. And I think that spoken hub model is a great way to use existing scanners. And certainly, as the province goes forward and getting more availability to people, then we'll then we'll use every, every avenue to get it as close to people as

**Speaker 2** 18:46

possible. Maybe just talk a little bit about the frequency of scanning. So someone comes into the pro into the screening program in Ontario, and they're appropriate, and the risk is assessed, and they meet up with a nurse navigator, who talks to about the program and and also talks to them about smoking cessation, if they're still currently smoking, or if they recently quit. And then they get a scan, and then so assume it's it's normal. What happens? Then you go

**Speaker 3** 19:13

and get your scan, you get phoned by the nurse navigator, who tells you the results, and it's got a scale, basically from one to four, and one is totally normal, and four, as we found something. But that doesn't necessarily mean you have cancer, but it means certainly you need either more frequent follow up or need to go talk to a physician about the findings. In a proportion of people, there'll be things we find by accident. You know, you have calcium on your coronary arteries, which are the arteries on the heart, and that says, Well, maybe you should see and talk to your doctor about your heart and so that nurse will talk to you about your results, but also then forward it all to your family doctor, if you have one. And all the programs also have for unattached patients, physicians who will talk to you about the results, about incidental findings. And so in Hamilton, that happens to be me, but in other centers, I need another job. I know it's like, I need another job. It is just. Trying to find people to help. And so in every center, it's amazing the amount of people that will

**Speaker 2** 20:04

step up and help so and then is it an annual scan? Yeah, for how long if you were in

**Speaker 3** 20:09

the in the studies, it was from 55 to 74 you got a CT scan every year in Ontario, specifically on the back end of things that your physician still thinks that you are would benefit from funding and lung cancer, then you're you can participate and go past that 75 or 74 year old mark all the way out to 80. And in many jurisdictions, and including the United States, British Columbia and others, they talk about lowering the front end as well. There's also other conversations that people have about, if you have a bunch of normal scans. Do you still need a scan every year? Or can you spread that out a little bit? And that's an area of ongoing research,

**Speaker 2** 20:45

and I gather there are differences even in race, in terms of when you might start scanning black individuals with a certain level of similar exposure to a white person would develop lung cancer earlier. So

**Speaker 3** 20:59

yeah, first, First Nation Inuit, Metis, the other group. And certainly we know historically that different groups were not invited to participate in those trials. And so how we apply that evidence to those different groups requires being thoughtful and inviting those groups to be participatory in decisions. I've always liked that statement, nothing about me without me, so we try to include people who are in underrepresented groups in conversations about what to do. Let's

**Speaker 2** 21:29

take a little break now, and we'll come back in a moment to further our conversation with Dr Christian Finley about the lung cancer screening program in Ontario. We'd

**Speaker 1** 21:38

like to take a moment to thank our generous supporters, the Hatton Family Fund and Banco creative studio, who make the cancer assist podcast possible. The cancer Assistance Program is as busy as ever, providing essential support to patients and their families. We remain committed to providing free services for patients in our community, including transportation and equipment, loans, personal care and comfort items, parking and practical education. These services are made possible by the generosity of our donors, through one time gifts, monthly donations, third party fundraising, corporate sponsorships and volunteer opportunities. Visit cancer assist.ca to see how you can make a difference in the lives of cancer patients and their families. We're

**Speaker 2** 22:20

back with Dr Christian Finley, talking about the lung cancer screening program in Ontario, and I think we're at the point where we want to talk about findings on CT screening. So you find you mentioned you're looking for abnormalities, but we didn't really talk about what those abnormalities are. We talked about the incidenal OMA is the coronary artery calcification, and there's some other things that could be found. But be found, but principally you're looking for nodules. The problem is there are lots of reasons for nodules, and some people already have nodules, but they're benign. So how do you how do you deal with that? As I get sorted out in the screening program?

**Speaker 3** 22:55

Yeah, so I'm a thoracic surgeon, so everybody I see has something wrong in their chest when they see me. And so what I usually tell people is that we're imperfect on the inside, like we're imperfect on the outside. You know, I've got moles all over my skin, and I keep an eye on them, but you can't see things on the inside without a CAT scan. And a CAT scan really gives us a picture of the inside of your body with a slice every millimeter, like a loaf of bread, and we're able to see these little spots. And so clearly, you know, it's common to have these, these blemishes on the inside, and weirdly, we care if things are getting bigger, if they're of a sufficient size. So a centimeter is a good, you know, rule of thumb in terms of something that that actually has our attention, there's some features of them, you know, if they look more like a sea urchin than a marble, that's more disconcerting. If it'll spike sticking out the side of them, if they have calcium in them, that's usually more reassuring. And so we use those, those factors, you know, radiologists, whose job it is to look at these, use all those factors to say, Hmm, Dr Finley, this is, you know, two and a half centimeters. It's pretty big, and it's got little spiky things on the outside, like a sea urchin, and it grew from the one we had before that that gets our attention real

**Speaker 2** 23:59

fast. And so what's the next step? It's got your attention. Somehow we got to get a diagnosis, to nail it down, to know what to do for the patient, right? So

**Speaker 3** 24:07

you're right that in medicine, we don't like not knowing what things are. And so to get from suspicion to a diagnosis, we have a number of different factors. And so the three strategies I typically use when someone shows up with a spot that has my attention are either one, I wait a set period of time and I re image it and see if it grows. And so if you show up with an eight millimeter nodule in your lung, and it's really deep and it's hard to get to and it was the first time we've met, and it's uncertain, then what I might do is wait three months and repeat the CT scan and see if it gets bigger and it gets bigger, then I really care. Well, I care always, but I but I'm paying more. I'm paying even more attention to me. The other strategy we use, if it's slightly bigger and I'm slightly more worried, is a PET scan. And a PET scan, I think of it a bit like the speedometer on a car, as opposed to how far the car has traveled. So if we use it like a speed limit, and so the speed limit on a PET scans two and a half and. And so if you've got a spot in your lung that is over two and a half, I'm more worried about it. And the last thing that we use is a biopsy. And so biopsy, we pass a small needle through the skin into the spot and get a very small piece of it, and we can look at it under the microscope. And if we're doing it appropriately, about 90% of the time, that will give us an answer. It doesn't give us an answer all the time. And I guess the secret sauce of my job is how to is to know which of those things to use when, and then when they don't give me consistent results. What do I do at that point? No, what do you do? Yeah, sure. And so in someone who's reasonably well, who I think can tolerate it, if they're if they've got a growing nodule, that's pet, pause them. Biopsy shows a cancer, then I'm going to assess to make sure the lungs are okay, and then I'll remove it. And so how big of a piece I take out depends a bit on where it is and how, exactly how big it is. And so anything over two centimeters gets a lobectomy, which is about a third of of the lung. Anything smaller than that, it's probably going to get something called a segmentectomy, which is a little a little bit less of the lung or wedger section two, and that's been shown to be equally effective at curing people, and has a very high cure rate, you know. And as you get, as you get, some of those tests being inconsistent, so the biopsy misses it, but it's pet positive and sitting on the edge, well, then I'm probably going to go and offer an operation to that person as well, if they're in good health, and if I'm and if it's something sounds more like it's non cancer, then I'll just watch it really closely.

**Speaker 2** 26:24

Okay? And I imagine that not all of the abnormalities found on CT screening are necessarily even operable. That sometimes people present with more advanced cancers didn't know they haven't because lung cancer was silent, and they went for the screening thinking this will find something early and that wasn't the case. Yeah, so

**Speaker 3** 26:44

that you write that that that prior to the to when screening was widely available, or is available, that 70 something percent of people show up with advanced stage disease. And when we do lung cancer screening, about 85% of people have early stage disease. So the vast majority of the people that are found early stage but on the first skin in particular, you can uncover a bunch of some people that have more advanced stage disease, 10 to 15% in Stage Four disease, or the most highest stage of cancer. Whereas spread is typically not curable, but it is treatable, we have a bunch of very good new medications. And now, interestingly enough, in the last couple of years, with some research that was actually largely done in Canada, we know that stage three disease, which is, you know, just down from four, and it's pretty advanced, actually, we can cure a bunch of those people now by giving them chemotherapy and immunotherapy and then surgically resecting them. So the amount of people that actually we have curative plans for has increased a lot in the last number of years. So, you know, going back to earlier in the conversation, I don't think anybody should be nihilistic about lung cancer. It's a time of great change when you know we're doing miraculous things. So I think it's all the more reason that we needed to get those scanners. People to those scanners, but they have all the reasons in the world to do it, and that, that stigma that others are imposing on lung cancer, you know, physicians, funders, government, people themselves, needs to be, you know, rebranded, and we need to look at it with some optimism, and

**Speaker 2** 28:16

certainly the stigma we need to get past that for these individuals who have smoked, the vast majority of people who smoke started when they were young. They may have been influenced by their parents or their peer group, or maybe there was just a sort of rebelliousness of youth, and then they're, they're get addicted to nicotine, and it's terribly, terribly hard to get off of it, and that's the problem with ever starting to smoke or vaping, for that matter. So both of these things are problematic. I know there some people listening who may want to know, well, if I vape a lot, do I need to have a lungs? Can't. And answer is probably, we don't know enough yet.

**Speaker 3** 28:53

Yeah, we don't. We don't know enough yet. We are very concerned and that we're basically going to relive the tobacco experience, that it's going to take us 20 years to figure out that this is what this is doing to people, and certainly anecdotally, we know that it is doing damage. And I think the a lot of the tobacco companies bought the vaping companies and are branding it as a safer alternative. But I think that we are kidding ourselves if we think that inhaling foreign substances deep into our lungs isn't going to do something really.

**Speaker 2** 29:22

The only thing that should be going into your lung is pure air, as clean air, as clean as possible. So we live in a city that has a lot of not so clean air, unfortunately, which is one of the reasons I think, that the lung screening program has come here amongst the first in the province. Now that we're three cities and four sites, I guess, in the pilot study. And then I think University of Toronto and university network was a fourth or fifth site, and we were the next in line. How is that going? And when did you start rolling out the lung screening program in Hamilton? Yeah, no,

**Speaker 3** 29:57

we just started last late last spring. Yeah, and it's been massively successful. So I think that we've had strong support by St Joseph's Healthcare, which is hosting it and showing great leadership there, and they've expanded it to the point where we now have 36 slots a week for people to come and get lung cancer screening, which is great. I went and spoke with all the family doctors in the area and out into Niagara and into Brantford and into Burlington and and they've had huge buy in and are supportive. And that, you know, I think we've cut out our first number of cancers that we found. And, you know, I've had those people back into to talk about their experiences and how how appreciative they are. And so, you know, I think that

**Speaker 2** 30:38

so you've been finding early cancers that are at the curable stage. Yeah, lots

**Speaker 3** 30:42

of them. It's such a, it's it's such a wonderful is not the right word, but it is wonderful just to see these people be so appreciative that they found this thing and that somebody cared to try and that that their cancer was found and is gone, and they're moving back gone with their lives. And that's something that is to be proud of and celebrated. I think now

**Speaker 2** 31:02

those individuals who have a primary lung cancer resected for cure, do they continue to get screening? Because I guess the whole lung is at risk of developing lung cancer. Have been exposed to tobacco smoke or other carcinogens? Yeah, I tell them that

**Speaker 3** 31:17

their only punishment is being stuck with me for the rest of their lives and so, and they can't divorce me. And so, you know, we do scans as a new baseline and then at set intervals, and that people who've had lung cancer have a chance of recurrence depending upon their stage, but it's usually actually relatively low if we catch that early enough stage. But then they also have about a 3% chance per year of getting a second lung primary, and so they should get a CT scan every year while they're in good health. Now, the

**Speaker 2** 31:45

rollout started in as well along I should say in Hamilton, you're the provincial lead for the screening program too. So what are the plans for the province as a whole? Yeah,

**Speaker 3** 31:55

I think that that we had great support from Ontario Health to broaden the program out to to reach the rest of people in Ontario, and so in the next two years, it should be available in every major thoracic center in the province, and then spreading out to the spoke sites from there. So I think that it's, it's our reach is, is vast. And I think for the country, for those listening from a farther afield, that it's, we're at a tipping point. You know, BC has a province wide program. Most provinces have pilots, and that there's a strong belief that we should have have lung cancer screening across the country in the next number of years. So time of Optimus,

**Speaker 2** 32:29

great. And you see any new innovations coming with with the screening programs, and I don't know, in the intervals between screens, or, you know, or or new techniques beyond the logo CT approach, yeah,

**Speaker 3** 32:45

there's, there's so much stuff coming down the pipeline that is wonderful to see. So there's the every year, there's the world lung conference there we talk about things that are happening on an international scale. And it is mind boggling, you know, to sort of come to those meetings and see where people are at. You know, from a lung cancer CT scan standpoint, trying to evaluate an individual's risk is, I think, in constant flux, and whether that's genetically, understanding the risk, what they've inhaled, occupational exposures, geography. So I think people are doing lots of work in that area. The CT scans themselves, using lower radiation doses, using AI to interpret them, so that the human doesn't look at them, but a computer so they can find things at even earlier stage, people are looking at screening, not just using CT scanners, using proteomics and genomics and things where they take a sample of your blood and are able to look for cancer cells in your blood, or DNA or proteins from cancer in your blood. People are have are finding smaller and smaller fibers that can go out your airways, out to the very ends of your lungs, to where there's sub one millimeter scopes that can drive out and find things. So we just had this meeting, and the technology, which is just straight out of Star Trek, so I think it is, it's, it's an exciting time. I think the CT screening is here and is is coming of age, but our pipeline is of new and wonderful things. Is one

**Speaker 2** 34:11

is very bright. Well, certainly a big change from when I started in oncology, and there were a few few drugs and little optimism, and a lot of what we did at that time was really just palliative advanced disease, and it's really come a long way. Any final words you want to leave our listeners with about low dose CT screening, things we haven't covered today, other than maybe a pitch. If you're someone who has smoked, you know, for a substantial period of time, and you're in the age group of 55 to 74 about getting in touch. Maybe you want to say how you get in touch in Hamilton for find out if you're eligible for screening here. Yeah, it's actually

**Speaker 3** 34:50

the most in fact, effective people are getting people to participate or their loved ones. And so I think I'd probably pitch the people who love, people who used to smoke, and say, you know, if you know someone who. 55 to 74 and smoke for more than 20 years at any point in their life, just Google olsp Ontario lung cancer screening program, and you can find a site near you and find out how to participate. Is very easy to do, and we are happy to hear from anybody you can. You can go through your family doctor, or you can refer yourself if you just want to call go for it. Love to have you.

**Speaker 2** 35:22

Fantastic final message. It's been great talking to you as always. Dr Finley, you're a great communicator. A lot of excellent information for our listeners. Thank you so much for coming to the podcast today. Well, thanks for having

**Speaker 1** 35:37

me. Thank you for listening to the cancer assist podcast. Find more episodes, resources and information@cancerassist.ca or follow the cancer assistance program on Facebook, Twitter and Instagram. Thanks for listening. You.