WEBVTT

NOTE duration:"00:18:30.5520000"

NOTE language:en-us

NOTE Confidence: 0.860543489456177

 $00:00:00.030 \rightarrow 00:00:03.280$ To see so many people here welcome.

NOTE Confidence: 0.773105204105377

 $00{:}00{:}04{.}180 \dashrightarrow 00{:}00{:}07{.}260$ OK let's see.

NOTE Confidence: 0.860918581485748

 $00{:}00{:}10.470$ --> $00{:}00{:}17.460$ OK, we always let people know if we have disclosures as we have some commercial interests and I don't.

NOTE Confidence: 0.926517724990845

00:00:18.250 --> 00:00:48.340 So uhm because I'm starting I thought I would just give some quick facts and figures about lung cancer. An it's important to recognize that lung cancer by itself is actually the 3rd leading cause of death in the United States. It causes more pulmonary. Those if you will and I'm a lung doctor, then all of the other lung diseases combined. I don't think people really appreciate that those numbers actually are starting to come down and we're really happy about that, but you can see.

NOTE Confidence: 0.918042719364166

00:00:48.340 --> 00:01:17.890 How big of a problem this is and that is also true in the world so in men and women in the United States. It's the number 3 cause of death and in the world. This map is for men on Top and women on the bottom an A country that's colored blue lung cancer is a leading cause of cancer death. Pink is breast cancer and what you can see is for men. There's no question that lung cancer is the leading cause of death in men around the world.

NOTE Confidence: 0.914444208145142

00:01:18.560 --> 00:01:49.030 It is probably though going to be true of women very soon so breast cancer mortality has been falling for a long time. Lung cancer mortality women around the world is actually going up even though it's coming down in the US and that relates to a lot of things like cigarettes, environmental exposures and so forth, but in the world last year, 1.8 million deaths from lung cancer. So is an enormous problem and that is why we need all the scientific and clinical work. That's going into making people survive better an.

NOTE Confidence: 0.919260203838348

00:01:49.030 --> 00:02:20.680 Cured so Dan mentioned that we started the thoracic oncology program at Yale Cancer Center. Back in the early 2000s, 2003,

2004, is actually when we first started seeing our when we started seeing our first patients and this was really an idea that several of us had that was born out of this realization that for our patients who either knew they had lung cancer or we were concerned. They had lung cancer at this time when they were emotionally psychologically physically challenged.

NOTE Confidence: 0.924689531326294

00:02:20.680 --> 00:02:53.050 They had to run around and see all these different doctors because lung cancer inherently is a disease where you need to see lots of different people to get the proper treatment and so our patients were running up and down. These spokes doing the best they could to get the care that they needed an A. Few of us got together and said you know what we should really join this into a wheel that turns around the patient and patient centered Care now with something.

NOTE Confidence: 0.933160185813904

00:02:53.050 --> 00:03:24.240 We always talk about but this was patient centered care back in the day before that, that term had been coined and this really was the concept behind our thoracic oncology program. And so here is that patient same people around the circle, but now connected in many ways to the care that didn't exist before and we've been doing this arms around the patients patient centered care really since we started this program, 2000, three 2004.

NOTE Confidence: 0.909582078456879

 $00:03:24.240 \rightarrow 00:03:53.960$ And so there's a whole group of people that support the patient you of us in the you in the audience who are our patients know who your nurses and the nurse coordinators are we have this great administrative staff that holds it all together as 1 Phone number that you can get 2 for everybody that numbers 200 lung when I called that number back in 2002 and I said, who's got this number. It was in labor and delivery and honestly you don't need this number.

NOTE Confidence: 0.923251509666443

00:03:54.860 --> 00:04:25.190 I need it and so on, and then we all meet once a week formally in tumor board. Everybody sitting there and we've really talk about patients. It's a really good experience for us, we learn. We teach we get other opinions from other experts and our patients benefit because they get many expert opinions for their cases where they're they're complicated or uncomplicated and then lung cancer screening is part of this program and if you will.

NOTE Confidence: 0.914930522441864

 $00:04:25.190 \rightarrow 00:04:50.700$ It's the before we hope that most of the patients. We screened don't have lung cancer. If they do what we're trying to do is find them early and so lung cancer screening as an entity has really come into its own in the last just few years and I hope that after the next few minutes of my

talking. You'll agree that this is a really important thing to be getting done for people who are at risk.

NOTE Confidence: 0.924989819526672

00:04:51.310 --> 00:05:17.130 And so why do we screen for cancers and that has a very simple answer that if you diagnose the cancer early before people have symptoms chances are it won't have spread an we have a much better chance of achieving a cure and saving lives. And so, if we look at breast cancer and cancers are staged 1234 with one being early in for being advanced.

NOTE Confidence: 0.907863199710846

 $00:05:17.850 \longrightarrow 00:05:19.680$ This Big Blue area.

NOTE Confidence: 0.925921678543091

00:05:20.360 --> 00:05:51.030 Is half of breast cancer patients? Who are diagnosed early and that is because over the last number of decades screening mammography has really just become part of what we do people expect to have their screening mammograms. It's just part of now, normal medical care. It wasn't like that 40 years ago. But it is now and if you look at this green chunk here. These are people diagnosed with the next stage 2 and this 80% of women who are diagnosed with breast cancer being diagnosed at.

NOTE Confidence: 0.915562927722931

 $00:05:51.030 \rightarrow 00:05:59.650$ Early stage largely because of screening an their chance of living long or being cured is really good.

NOTE Confidence: 0.930951654911041

 $00:06:00.290 \rightarrow 00:06:31.190$ We're not in that situation with lung cancer because we haven't been screening for very long so this big purple piece are people who are diagnosed with advanced stage an relatively few people are diagnosed early and predominantly these kinds of people were discovered in the past by accident, so if you happen to have a chest X Ray because you are going to have a knee surgery or I was talking to somebody in the audience and her dad was diagnosed because he fell off a ladder and he ended up in the Ed and had.

NOTE Confidence: 0.917239665985107

00:06:31.190 --> 00:06:44.780 See T scan done so that we weren't doing anything in the past to actively find these people with lung cancer at early stage and obviously we want to look like this, or even better an we need to start screening.

NOTE Confidence: 0.913852453231812

00:06:45.310 --> 00:07:16.500 We need to screen for lung cancer and find these people early so I thought the easiest way to go about this was just to do a little bit of frequently asked questions So what is the screening test? Who should be screen and then I did want to touch on decision support for lung cancer screening. This is the discussion. You should have if you are going to be screened with

your physician or with us in the screening programme about the benefits and the potential downsides of screening with your risk is and so forth is there proof that lung cancer screening saves lives that answers yes.

NOTE Confidence: 0.909920871257782

00:07:16.500 --> 00:07:26.500 Are there downsides to getting screen? Yes, there are some it doesn't mean you'll experience them but you need to know about them. And then we can tell you ballpark? What your personal risk for lung cancer is.

NOTE Confidence: 0.904604554176331

00:07:27.190 --> 00:07:57.940 So the screening test for lung cancer is a chest see T scan. That's done with low dose radiation. And when we say low dose for low dose chassity that's done for purposes of screening. That's about double the amount of radiation. You get in a year of ambient radiation from your environment and the sun and what we get with the see T scan is really beautiful picture of the lungs an when I talk to patients. I say OK. The see T scanner makes like you're a loaf of bread.

NOTE Confidence: 0.906222105026245

00:07:57.940 --> 00:08:29.490 And we're sending your loaf of bread through the scanner. Anet slicing you now we're going to look at the slices and see whether we see spots or dots or anything, abnormal that might make us concerned about anything. This is the heart and the only thing I can say about the heart on a see T scan usually is. It's there an the size is OK and these big areas are the lungs and all these little squiggles and dots are normal blood vessels and other structures of the lung so this looks great. This is a screening scan done in 2016.

NOTE Confidence: 0.923825681209564

00:08:29.490 --> 00:08:59.500 This patient continued to come for her annual scans and in 2019. She had this spot. Here, which we call a nodule, which was a lung cancer and so because she was being screened. She was found early could have surgery could be cured. Essentially, but it was because we were monitoring her in this way. Over the past few years in a way that we hadn't done previously. So who should be screened. the United States Preventive Services Task Force, which is the body.

NOTE Confidence: 0.931751906871796

 $00:08:59.500 \longrightarrow 00:09:30.830$ That informs the Centers for Medicare services on screening evaluations in the United States says that people who are 55 to 80 who have smoked at least 30 pack years of cigarettes and are currently smoking or quit within the past 15 years are the high risk population who should get screened there about 9,000,000 people in the United States who meet those criteria right now. We're screening about 4% of that nine million an we really want that number.

NOTE Confidence: 0.869497358798981

 $00:09:30.830 \rightarrow 00:09:45.640$ To go up an some people ask? What is 30 pack years mean if you smoke a pack a year for 30 years that's 30 pack years if you smoke more intensively than that. It's going to take you fewer years to get to that 30 pack years.

NOTE Confidence: 0.900487244129181

00:09:46.840 --> 00:10:18.650 This is the workflow for our screening program on I'm putting this mostly to acknowledge policy. There, who's sitting in the audience right there probably. Yeah, who really runs our screening program and does an amazing job of this and So what we what we do here is people's primary care physicians providers APR NS. Whoever they're seeing in the community can refer in for the screen. And when they arrive, they meet Polly, who does a decision support visit and this is the visit to discuss?

NOTE Confidence: 0.921678185462952

 $00:10:18.670 \rightarrow 00:10:49.080$ I'm going to have this scan should I have it? What are the upsides? What are the downsides? What is my risk and this visit takes about 20 minutes and probably actually does an individualized risk with every patient who comes through for the screening they go in and they have their see T scan. They go home. The results go pre immediately to the primary care person who ordered the study and then you get the results because the screening program at Yale is embedded in the thoracic oncology program if you need.

NOTE Confidence: 0.891588747501373

00:10:49.080 --> 00:11:20.960 More if you are if you have a nozzle and you need to be evaluated. You can come see pulmonary thoracic surgery. If you have a cancer then the whole thrust ecology program is really there to help you so the proof that lung cancer. Screening saves lives is coming from 2 big studies. The first was done in the United States and was called the national lung screening trial and had over 50,000 people who participated in this they met that age and smoking criteria that the USPS TF later.

NOTE Confidence: 0.895736753940582

 $00:11:20.960 \rightarrow 00:11:51.160$ Adopted and the Nelson screening trial was just finished in Belgium had about 16,000 participants and the Nelsons child still has not published its final results. But they've released the big results and both of these studies show that when you do screening with low dose ET you diagnose more lung cancers than you would if you didn't screen or if you just did. Chest X Rays. The majority of these cancers are early stage so you achieve early detection if you if you.

NOTE Confidence: 0.913718640804291

 $00:11:51.160 \rightarrow 00:12:21.850$ Find really early stage lung cancers people survival is terrific more than 90% at this kind of magical fiber 10 years, which is where

we tend to say you're cured. If you make it to 5 years. You're cured. It turns out more people quit smoking if they participated in these studies and interesting Lee and this is an interest of mine women seemed to benefit even more than men and there's a lot of concern that maybe women are more susceptible to the carcinogenic effects of tobacco than men and some of these data are.

NOTE Confidence: 0.912774860858917

00:12:21.850 --> 00:12:54.850 For you, that and the bottom line was that there were fewer lung cancer deaths in this groups that were screened with low dose ET in their comparative groups and that is the gold standard for screening. You need to save lives. So both of these studies have showed that so you know that's the benefit if you get your cancer diagnosed early you have so much better chance of having it cured with surgery radiation techniques for treating early stage cancer. There are some downsides to having this kind of scandal.

NOTE Confidence: 0.919133603572845

 $00:12:54.850 \rightarrow 00:13:26.940$ These are mostly the other things that you see when you get these amazing pictures of the chest. The first thing is that lots of people have these little spots called nodules smokers have more and if I sent 100 people who smoked 30 pack years through a scanner 25 to 50% of them are going to have little spots, one or more an it's my job really to look at that and say we're not worried about this and we were worried about this one and they're very standardized readings now for these load Oct scans.

NOTE Confidence: 0.928174257278442

 $00:13:26.940 \rightarrow 00:13:39.110$ To minimize all these false positive findings findings that are there, but shouldn't be worried about shouldn't be further evaluated should not cause anybody to have distress?

NOTE Confidence: 0.895628690719604

00:13:39.650 --> 00:14:09.940 And the other thing is as opposed to a mammogram that looks just at the breasts or colonoscopy that just looks at the colon or PSA that is only measuring prostate anagen. The arch SCT scan looks at everything from the base of the neck to the Top of the belly an all of the organs there in and we see lots of things that aren't like not important things like sys little spots. You know slightly anomalous, meaning slightly weird blood vessel that doesn't.

NOTE Confidence: 0.928078055381775

 $00:14:09.940 \rightarrow 00:14:43.630$ Really mean anything but look scary if you see it on the report. And so the interpretation of these things is really important, and that's part of the reason that we read here. These scans in a very structured way. And once in awhile will find things that are clinically significant in those other organs like somebody may have an aneurysm of the aorta. They didn't know about and so that is not why we're doing this scan, but because we're visualizing everything else. We will see these things that then we can act on alert the primary care provider and make sure that that gets taken care of.

NOTE Confidence: 0.933243453502655

00:14:44.440 --> 00:15:15.320 Polly does this individual risk assessment for lung cancer. There are now a number of these calculators that include different factors about individual people beyond? How old are you and how much did you smoke so things like education? Do you have other lung disease like emphysema? Do you have a family history of lung cancer all of those are factors and I listed here and this list is much longer than this things that we know can.

NOTE Confidence: 0.925808787345886

00:15:15.320 --> 00:15:45.490 Increase people's risk for lung cancer, although not all of them are quantifiable, but using this kind of Calculator. What probably does is do risk of lung cancer over the next 6 years with every patient. Sometimes the risk is really, really, really low. So it's a reasonable discussion to say, Well, do you really need to have this see T scan if it's really, really, really, really high we're going to push you really should go and have this done, but I think it helps people to understand.

NOTE Confidence: 0.931168437004089

 $00:15:45.510 \rightarrow 00:15:50.230$ What the magnitude of the risk is in terms of going forward with the screening?

NOTE Confidence: 0.921283721923828

00:15:50.860 --> 00:16:21.670 And so to summarize screening allows detection of early cancers with better chance for cure. You should talk to your primary care provider. But whether you should have screening done if you know, people who you think should get screened tell them to go talk to their doctors. You know a friendly nudge in the right direction is often more meaningful than all the literature in the world. an A discussion with your doctor or with us will help you understand your specific potential benefit and maybe risks of undergoing for screening.

NOTE Confidence: 0.928818941116333

 $00:16:22.380 \rightarrow 00:16:47.340$ It takes a village to do all of these things and so we have a pretty big group. Here, who is participating in the lung cancer screening program back in 2014 before Medicare had approved payment for doing the screening that they would pay for it. If it were done. We did a bunch of free clinics and these were all the people who participated then and I'll take questions.

NOTE Confidence: 0.712487936019897

 $00{:}16{:}50{.}270 \dashrightarrow 00{:}16{:}54{.}200$ I would think one over the hurdles.

NOTE Confidence: 0.837110996246338

 $00:16:54.830 \rightarrow 00:16:59.930$ Is insurance companies agreeing to pay?

NOTE Confidence: 0.485681414604187

 $00:17:00.490 \longrightarrow 00:17:02.650$ Preventive scan.

NOTE Confidence: 0.835811018943787

00:17:03.180 --> 00:17:33.790 So is there any sense of headway progress someone making so that when the United States. Preventive services task force recommends screening which it did for lung cancer back in the last day of 2013 December 31st actually Medicare should pay for it, so that Medicare now will pay for screening if you meet.

NOTE Confidence: 0.890746057033539

 $00:17:33.790 \rightarrow 00:18:05.780$ The criteria that it has stated OK Medicare actually this is a small technicality approves to age 77 as opposed to the 80 that USPS TF recommended but they will pay for screening. The private carriers like Aetna Blue Cross, Oxford. All those people. Follow those recommendations. They often the private carriers will screen beyond they may screen beyond those much stricter criteria so that.

NOTE Confidence: 0.896340906620026

00:18:05.780 --> 00:18:18.820 If you didn't fall in those in that group. It's still an you have different insurance and Medicare. It's still worth worth checking but but screening for lung cancer is covered.

NOTE Confidence: 0.91027820110321

 $00{:}18{:}19{.}330$ --> $00{:}18{:}23{.}510$ If you are Medicare recipient and that generally drives the other insurers.

NOTE Confidence: 0.916005611419678

 $00{:}18{:}29{.}330 \dashrightarrow 00{:}18{:}30{.}530$ OK thanks.