Episode 32: Surviving Cancer with Screenings and Tobacco Cessation

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Summary: As few as 1.5 percent of Oklahomans who are eligible to get a lung cancer screening actually get them – ***1.5 percent***. Episode 32 of the TSET Better Health Podcast will explore who qualifies for lung cancer screenings, reasons why rates are so low in our state, the high importance of getting screened, and the programs in place to increase awareness of, and accessibility to, these lifesaving tests. Speaking on this will be Dr. Mark Doescher of the University of Oklahoma's Stephenson Cancer Center and College of Medicine, and Eric Finley of the Oklahoma Hospital Association. In addition, Dr. Lurdes Queimado, of the TSET Health Promotion Research Center at the OU Health Sciences Center, will explain encouraging new research results that show much higher rates of remission of head and neck cancers among smokers who quit before starting their treatments compared to those who continued smoking.

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[Theme music]

James Tyree: Hello and welcome to the TSET Better Health Podcast. This is James Tyree, senior health communication consultant at TSET.

Dylan Jasna: And I am Dylan Jasna, a TSET health communication manager, hello everyone. We have an excellent topic to delve into today, and that is "Surviving Cancer with Screenings and Tobacco Cessation." It's an important and timely subject at any time of year, but we especially wanted to feature this now with the Great American Smokeout coming up on November 17. That makes it timely, but I understand that very low cancer screening rates in our state make this discussion very important.

J. Tyree: That is true, Dylan, and they're especially low when it comes to lung cancer screenings, which will be our focus today. How low? Well, we will find out from Dr. Mark Doescher of the University of Oklahoma's Stephenson Cancer Center, who will share with us why so few eligible Oklahomans are getting screened and the massive health benefits for getting screened.

D. Jasna: We'll also hear today from Eric Finley of the Oklahoma Hospital Association, who will tell us of programs in place to raise awareness and accessibility to lung cancer screenings.

J. Tyree: And on a different yet similar theme, we will hear from Dr. Lurdes Queimado who will explain exciting results from research regarding cancer treatment success rates of smokers who quit tobacco before undergoing therapies for head and neck cancers. So be sure to keep listening for that.

D. Jasna: Can’t wait. But first let’s learn more about low-dose cancer screenings from someone here in Oklahoma who knows a lot on the subject.

M. Doescher: Hi, I'm Mark Doescher. I'm the Associate Director for Community Outreach Engagement at the Stephenson Cancer Center and also a Professor of Family and Preventive Medicine at OU Health Sciences Center.

D. Jasna: The first questions to ask are what, exactly, is a lung cancer screening, who can get them and why are they so important?

M. Doescher: So, lung cancer screening is a means of detecting lung cancer at an early stage before it advances to more severe untreatable cancer. And it's performed by low dose computerized tomography or CT scanning. The guideline is to do annual low dose CT scanning in adults aged 50 to 80 years, who have a 20-pack year history of smoking cigarettes and either currently smoke or have quit in the past 15 years.

(2:02) Lung cancer is by far the leading cause of cancer death in the United States. About 225,000 or more individuals in the United States are diagnosed every year. Currently, most of those people are diagnosed at late stages of disease where the cancer's already spread to other parts of the body. And at that stage, it's very difficult to treat and most individuals who are diagnosed at that stage succumb to the disease. If you can catch the cancer early, you might have heard the term stage one or stage two disease, if you can catch it early, these types of cancers can be treated. They can be treated often with surgery or radiation therapy alone, often more localized surgery. It would require extensive surgery if it's later stage and chemotherapy or other therapeutics. So, the whole notion is to catch it early before it progresses to an advanced stage, and that improves survival outcomes. It also makes the treatment less severe.

D. Jasna: Lung cancer screenings are clearly important, but you mentioned that there are eligibility guidelines. So why can’t anyone just ask for one?

M. Doescher: (3:39) It's a complicated question, because again, to get the screening and to get it covered by healthcare insurance, you have to fit within the guideline because that's where the evidence is for screening to work. So, again, within that age band, with that amount of cigarette smoking history and with that recency or current smoking parameter. The other thing is it really is an informed decision between a person who would like to get the screening and their healthcare provider, be it the physician, or could be an advanced practice nurse or a

physician assistant, about whether they would be a good candidate for screening. If a person is otherwise healthy or doesn't have too many chronic conditions that would impact surgery or cancer treatment, they'd be a good candidate for getting screened.

(4:35) If the person has major, major underlying disease, say major heart disease, major additional lung disease, such as severe emphysema or other things that would make treatment for early-stage cancer difficult to do, then for those individuals, and that's the minority of individuals, but for those individuals, screening may not be the right test. So, it really is an informed decision between a person who'd like to get the test and their healthcare provider.

D. Jasna: So how many eligible Oklahomans are getting lung cancer screenings?

M. Doescher: I'll just underscore they're strikingly low. We don't have yet performance measures in clinic to know the exact rates like we do for breast cancer screening or colorectal cancer screening. But using self report, we think at a maximum in Oklahoma, about 10% of people or 1 in 10 have been screened. That means 9 in 10 have not been screened. That's an optimistic self-report estimate. (06:13): If you look at validated data from the American College of Radiology where they look at accredited lung cancer screening centers in the state, it's only about 1.5% of eligible individuals who've gotten screened. That means over 98 out of 100 individuals who'd be eligible have not yet been screened. So, it really is an alarming portion of the population that hasn't been screened. And it's to my mind, interesting at this point because the initial guideline came out in 2013, so we've had nearly 10 years of a guideline. It got revised to include more people in 2021, but our rates remain really low.

D. Jasna: Those are critically low percentages of eligible Oklahomans getting screened. So why, exactly, are our rates so low?

M. Doescher: I think there's a lot of reasons. So, one is just a general lack of awareness. People are not aware of the lung cancer screening guideline. There's not been the same push for it that there has been for some other cancer screens. (07:20): People understand the pink ribbon in breast cancer screening. There really is not yet that awareness of lung cancer screening. That's on the part of the public. And I would argue though we don't have great data on this. I'd argue that healthcare providers are also still somewhat confused or unaware of the guidelines. So, lack of awareness means lack of demand for screening. The other thing that ties in with that, even if people are aware, is that there is likely, I don't know the magnitude of it, but there's likely stigma around lung cancer screening. The

biggest risk factors for lung cancer are smoking cigarettes and age. And smoking has some negative connotations, and it means thinking about a lung cancer screen where it's going to point to the history of tobacco or cigarette use. And I think that in itself can be challenging for some folks. So, we need to come up with ways to effectively disentangle all that and remove the stigma around tobacco use.

(08:28): And then there's stigma around cancer itself. So a lot of people, there's some fatalism, they don't want to know. They don't want to hear about it. So, again, I think that means increasing awareness and tackling some of those issues around concerns or stigma about getting the test. The other thing is we're just not measuring it well at the provider office level. So, as I mentioned, we don't have measures. So, until we get measures in place, we're probably not going to have very high screening rates. And then finally, there's a lot of access barriers to getting the test itself. We only recently expanded Medicaid coverage. Medicaid as of 2021 coverages lung cancer screening, and we'll have more people with Medicaid coverage. But again, there's some lag there. Hopefully, we'll see some uptick now that more people have health insurance.

(09:19): But you also have to get it ordered from your healthcare clinic. So, you have to have a regular clinic that you go to, to get the test ordered. And those clinics have to work hard to remove barriers to get the screening. And then they have to link up with where there is the CT scanning facilities. And in locations such as many rural communities in the state where hospitals have closed, a CT scanner to do the lung cancer screen may be a several hour drive away from where one lives. So, that's another barrier. So, there's a host of barriers, but I think if you break it down into increasing demand and at the same time reducing stigma, that's one. Secondly, removing barriers to accessing the tests and making it available, and making sure clinics and radiographic facilities have the means to do this and readily do it. And then thirdly, starting to measure providers in healthcare systems on how well they're doing with it. I think all those things together will help improve screening rates.

D. Jasna: Those are some major hurdles that are keeping too many Oklahomans from getting screened for lung cancer. The good news is there is a concerted effort to turn things around, as Dr. Doescher explains …

M. Doescher: … There are efforts that are starting and it's nice to see it. There's been state level groups that are now actively engaged in figuring out ways to improve access and availability of lung cancer screening, including the Hospital Association, including TSET, including the Primary Care Association, Healthcare Authority, ensures others. The American Lung Association, American Cancer Society, are all having efforts and sometimes coordinated efforts to improve awareness and access to lung cancer screening. So, I think all of these

coordinated efforts together are what's needed. And the way I'll circle back is, again, I think there needs to be large scale public awareness campaigns and also kind of micro-targeted ones to hit the highest need populations that need the screening to make sure that they're aware of it.

(11:50): I think there need to be targeted efforts at the system level, both on the primary care side and on the oncology side to get people coordinated around screening. And I think we need to remove all these access barriers to screening by making it more available, particularly in areas, low-income areas, rural areas where screening can be hard to get. We just need to increase the availability of services there. I think the one other thing to think about with lung cancer screening itself is that it's also an opportunity for those individuals who still smoke, current smokers that get screening, an opportunity to link people up with effective tobacco cessation services, such as the state assist line and through other modalities that are available through a variety of mechanisms.

D. Jasna: These systems can bring increased awareness and accessibility to lung cancer screenings, which will save lives. But while addressing and raising the rates of lung cancer screening rates are important, Dr. Doescher urges us not to lose sight of keeping on top of other cancers.

M. Doescher: (13:13): … And then on another note, the larger note, not just lung cancer screening, but cancer screenings large, I can't underscore enough that as a state, Oklahoma needs to improve on cancer screenings. We are in the bottom decile in most cases of states for all of the evidence-based cancer screenings. We, in the most recent ranking, came out, I think this is worst, lowest 48 out of the 50 states on lung cancer screening. But we're also like that for colorectal cancer screening. Or 40, I think 45th or 6th for breast cancer screening and 45th or 6th for cervical cancer screening. Those are evidence-based tests. And then there's some evidence around prostate cancer screening. We're in that similar category for that as well.

D. Jasna: Dr. Mark Doescher gave us a lot to think about and, even more importantly, act upon. This is the takeaway that he hopes we all remember:

M. Doescher: (14:28): We need coordinated efforts across the state to improve lung cancer screening, because that's the one that really has not had an uptake yet. And we have a huge, huge road ahead to get people screened with that. But we still have many, many thousands of people in Oklahoma that need these other cancer screens as well. And I just hope the listeners take that to heart too. ~~I think we have a range of evidence-based cancer screen that we need to be working on here.~~

(music)

J. Tyree: The Oklahoma Hospital Association will be a key organization in helping more Oklahomans get important screenings for lung and other cancers. I reached out to an old friend who can tell us all more about those efforts.

Eric Finley (00:35): My name's Eric Finley. I work for the Oklahoma Hospital Association. I've been with the Hospital Association since 2013. I am the Health Improvement Initiatives Manager for OHA, where I oversee two grant funded programs that we have for TSET. One, to help our hospitals and outpatients clinics clinically address tobacco use and the other half of the initiative, which is WorkHealthy Hospitals, which helps hospitals dress, employ wellbeing. And we are adding a new component to that too, clinically address obesity with patients.

J. Tyree: Before delving into *how* the Oklahoma Hospital Association is working to help more Oklahomans get lung cancer screenings, it will be good for us all to know exactly *what* the OHA is. (01:30):

E. Finley: The mission of OHA is to help our hospitals meet the health needs of their community and to provide all Oklahomans with quality healthcare. So, there is around 150 hospitals in the state of Oklahoma, believe it or not. So, I think that's probably more than what most people realize. And about 135 of those are actually members of the Oklahoma Hospital Association. The OHA provides several services to our hospital members, but our core services are legislative advocacy and support, continuing education for our hospitals, and then the side that I work on, which is healthcare quality, are helping our hospitals implement quality measures to ensure that we're providing our patients with the right care at the right time in the right way.

J. Tyree: Now that we know more about the reach and purpose of the OHA, let's hear how the agency is working to get more people screened in our state.

E. Finley: what we know is data from the American Lung Association says that only about one and a half percent of Oklahomans who are eligible for lung cancer screening are currently receiving a screen. And so, that's a very scary factor for our state, and especially in terms of cancer outcomes in our state. And as you know, we do not rank well in terms of cancer outcomes. So, by helping folks get a scan, we know that it can prevent the risk of dying from lung cancer, and early detection and treatment is always one of the best ways to help address public health issues that we have in the state, such as cancer or heart disease.

(04:08): So, we are currently working with hospitals across the state, or our hope is to work with hospitals across the state to implement a program similar to our

Clinical Tobacco Treatment Program where we're screening folks for eligibility for preventative lung cancer screening. And then those folks that would meet their criteria, we want to make sure that they are getting a scan. And so, our goal is to increase the number of eligible Oklahomans who are receiving a preventative lung cancer screening scan. And it really ties very well into the work that we're already doing around clinical tobacco treatment because clinical tobacco treatment is a key component of preventative lung cancer screening. And it's also going to be a key driver of how we identify those patients who are eligible for preventative lung cancer screening, which are not currently being identified.

J. Tyree: This is very helpful for making sure more eligible Oklahomans can get screened. But what about the facilities? How do we know which hospitals and health care facilities even have the equipment and trained staff to conduct the screenings?

E. Finley: (06:26): This is a great question, James. And so, We have done a statewide scan of our hospital partners to identify which hospitals are currently capable of providing preventative lung cancer screening, which hospitals are currently providing preventative lung cancer screening, which hospitals have the equipment and interest in providing these services. And then those hospitals who have the greatest uphill battle, which is they do not have the equipment or support to provide the services. So, with our goals, one of our big sites is to help Oklahoma rural hospitals. And we know that many hospitals out in the state have the equipment, they have the staff, but they don't have their machines certified. And so, one of our goals is going to be help our hospitals get those machines accredited and certified. And this means that they can provide the services that they can build the Center for Medicare Medicaid services for the provision of the preventative lung cancer screening. And hopefully we can work to get those rural hospitals accredited where they become centers of excellence.

(07:44): And that's really a key feather to have in their cap and is a recognition that is provided by the American College of Radiology. On the flip side, as I mentioned, we have those hospitals who do not have the staff or equipment to provide these services. And so, for those folks, we are working in partnership with the Oklahoma Tobacco Helpline to set up a system where they could refer those patients to the helpline, and then the helpline could then proactively a range for those patients to receive preventative lung cancer screening support. An alternative model that we've also looked at is identifying a hub in our rural areas, which would be a rural hospital that would have the capability to provide those services, and then those hospitals from the other rural communities who maybe don't have the ability to provide those services could refer a patient to those hospitals. And we would want to make sure that we're providing them with the recognition and support that they're doing in that case to get those

patient, those services, even though they don't have the equipment and ability to provide them.

J. Tyree: Is there data that shows how effective these interventions can be?

E. Finley: (09:11): ~~Thanks, James. Yeah, we've put a lot of plans together and we're just now really trying to dig in and get things moving forward. James, I think with preventative lung cancer screening, the guideline is so complex that a lot of clinicians are just having a hard time following it to get it up and running. And so,~~ I'm not actually aware of any studies where it shows that this type of public health intervention is going to... I know that folks are doing it, but I'm not specifically aware of any data showing the outcomes from that. I think it's still kind of early ground on all that. But what we do know is that from clinical tobacco treatment, if you build a systems-change process into a healthcare system, where that healthcare system can then seamlessly and easily address this kind of more complex issue and guideline, and there's support there available for it, that once you build in those sustainable processes, that it will increase support for those patients and it improves population health outcomes. And so, that's really what we're hanging our hat on in terms of this preventative lung cancer screening. And I think that we're very confident from if you'll take a quote from the movie Field of Dreams, "If you build the system, they'll come," right? So, I truly believe that if we put these things in place and make it where that our healthcare systems can easily and efficiently address this, they understand the need, they understand the importance, they just need help building the system to get it done.

J. Tyree: So what else does the OHA and its member hospitals do to try and lower cancer risks and rates for Oklahomans

E. Finley: (11:51): ~~Yeah, thanks James. I will.~~ I'll go back to the helpline because that's where my expertise really lies, and that's where we've had such a great impact on Oklahoma hospitals. So, our program, Hospitals Helping Patients Quit has helped over 70 hospitals in the state implement a kind of comprehensive clinical tobacco treatment systems change to ensure that they're providing every patient who visits the hospital with cessation support services. That doesn't mean that every patient who receives those services that they're going to quit or that it's going to result in a referral to the Oklahoma Tobacco Helpline. But what it does do is allow our hospitals to not only plant seeds with those patients who are not necessarily willing to quit at this time, but reach those patients who are looking for help and support. And as you know, and as many people probably know, a lot of tobacco users are kind of continually struggling with, Hey, this is something I'd like to quit, I need help with.

(13:00): And so, what we know is that when their healthcare provider comes to them and provides them with that support and service, that it really truly increases their chances of success of quitting, and it provides them with the platform that they need to make those positive steps to quit. So, we've helped around 70 hospitals in the state do that over 400 outpatient clinics. Those partners of ours have made about 54,000 referrals to the Oklahoma Tobacco Helpline, and we know that due to in increased quit rates from those services that it has saved about somewhere north of 30,000 years of life that have been put back into Oklahoma communities from these services. And so, tobacco use is the number one driver of cancer in our state. So, as we're helping to stomp out tobacco use, we're also helping to reduce the rates of cancer in our state. And again, adding valuable healthcare dollars back into our communities through these preventative services and most importantly, saving lives.

J. Tyree: That's fantastic. We appreciate what the Oklahoma Hospital Association and health care staff throughout the state do for treatment and prevention.

E. Finley: (14:33): Thanks, James. I really appreciate the kind words. The truth is that this work, it wouldn't be available. We wouldn't be able to do this without support from TSET. And then also most importantly, it's our hospital partners and these communities and our outpatient partners that are taking on this work. And it's truly a thankless job that a lot of people don't realize they do not get reimbursed for these services. And so, they're doing it because it's the right thing. They're doing it because they want to provide the best care that they can to our patients. And so, we're really grateful to have great partners like TSET and our hospitals because without those two folks, this work and these kind of amazing outcomes wouldn't be possible.

(music)

D. Jasna: It was great to learn about the Oklahoma Hospital Association and some of the programs they have that help health care professionals and local hospitals provide resources needed to live healthier, whether it be cancer screenings, tobacco cessation or whatever else. Shifting gears a bit – but not too much – James recently got to talk with a scientist and professor at the TSET Health Promotion Research Center who recently published encouraging findings from research she and her team conducted. Let's meet her now and what it was she studied.

L. Queimado: (00:13): My name Lurdes Queimado and I am a professor at OUHSC. I am also the Director for Tobacco Regulatory Sciences at the HPRC.

So we all know that smoking causes cancer. We have also known for a long time that cancer patients who smoke at time of diagnosis have inferior clinical outcomes than never smokers or previous smokers. However, the impact of quitting after patients have cancer have not been quantified. So we asked, if a patient is still smoking when he is diagnosed with their neck cancer, what does he gain by quitting before treatment starts? And to answer that question, we did a retrospective study that included only head and neck cancer patients who actively smoke at time of diagnosis and were treated at University of Oklahoma Health Science Center with the intent to cure.

J. Tyree: And what did you and your team discover?

(01:48): So we discover that chemotherapy and radiotherapy were four times more effective at completely eliminating cancer for those patients who quit smoking prior to treatment than for those who continue to smoke during treatment. Patients who quit smoking following cancer diagnosis but prior to undergoing chemotherapy or radiotherapy were also 67% less like to have cancer coming back, a cancer reoccurrence. And thus they significantly increase their disease free survival. That is essentially the time they are without cancer, compared to those who continue to smoke during therapy. And this benefit lasted during the 12 years of follow up that this study looked at.

(02:49): We also observed that this higher complete response to therapy and the reduction in cancer reoccurrence was uniquely attributed to the fact that they had quit smoking after cancer diagnosis and result in a significant increase in long term survival, up to 12 years. So on our series, quitting smoke was the only predictor of complete response to chemo radiation, disease free survival, and longtime survival.

J. Tyree: We can only imagine the excitement you had over these findings and their new discoveries.

L. Queimado: (04:06): We are very excited with these findings, as they demonstrate for the first time that smoking cessation after head and neck cancer diagnosis, it's critical to increase complete cancer remission and long term survival. About 60% of our patients continue to smoke after a cancer diagnosis. Recently, a study that look at over 26,000 patients reported that only 17% of cancer patient who smoke at time of diagnosis accept a referral for tobacco cessation treatment. We all know that cancer diagnosis is a teachable moment for tobacco cessation. Our findings document for the first time the quantitative benefit of quitting after cancer diagnosis. These findings will provide patients with a tangible goal and

healthcare providers with supporting data to further encourage patients to quit smoking or at the very least to stop smoking during chemotherapy.

J. Tyree: And to repeat, these findings here in Oklahoma really did open a brand new door in cancer research.

L. Queimado: (05:47): So previous studies have only compared patients that continue to smoke with patients that, with a mixed group of patients that either never smoked, were previous smokers. So there is some indirect evidence that this effect will be seen in other types of cancer. However, in 2020, there was a smoking cessation report from the Surgeon General that reviewed all the territory and did not identify a single study that investigated impact of smoking cessation on response to first line therapy among patients who smoke at cancer diagnosis. Our study was the first, but will for sure not be the last. I am convinced that quitting after cancer diagnosis will increase therapy response for most cancers.

J. Tyree: Very important information. So what's next for this research?

L. Queimado: (07:09): We are following these studies at three different fronts with distinct approaches. On one hand, we are studying different tumor locations. Our first study focus on oral and esophageal cancer patients. We have just completed a second study looking at [inaudible 00:07:35] cancer patients. And these patients also have a significant benefit from quitting after smoking. We are extending these studies to thyroid cancer patients.

(07:48): On the other end, we have been studying the mechanisms contributing for these findings. For example, last year we publish that at least in vitro, when we treat cancer cells with a drug, a chemotherapy drug called cisplatin. We saw that these cells do not, the cancer cells do not have as much cisplatin inside, as if they are not exposed to smoke. So we are now submitting a grant proposal to the National Cancer Institute in an effort to extend this mechanistic studies to cancer patient samples.

(08:33): Finally, and not lastly, our findings indicate that there is a need to further develop programs and policies that incorporate tobacco cessation programs into cancer treatments. So together with Dr. Darla Kendzor, the HPRC Co-Director, we are pursuing additional funding from the National Cancer Institute. And in effort to expand cessation programs directly to all cancer patients and to expand upon this important research. We hope that with these studies we will decipher the mechanisms by which smoking interferes with therapy response and also increase the number of cancer patients that quit smoking. This would save lives and have an impact in the health of our community.

J. Tyree: Like Dr. Mark Doescher, Dr. Lurdes Queimado also had a takeaway for us all to remember:

L. Queimado: (09:38): Thank you. I think the most important thing I would like to leave for our patients is that quitting smoking, even after a cancer diagnosis, can save your life. Quitting on your own is very difficult. Please consider tobacco cessation treatment.

[34:13]

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D. Jasna: There are so many good reasons to quit tobacco for health and well-being, and her research revealed yet another one. Congratulations to Dr. Queimado and her team at the TSET Health Promotion Research Center at the OU Health Sciences Center. It's great to have such a center here in Oklahoma and for TSET to be a funder of its work.

J. Tyree: Agreed. You know, Dylan, we at TSET join so many others throughout our state – whether they are medical staff, researchers, or just regular people in any other field – in wanting people to be healthy and live longer so we all can live our best lives and make great memories with family and friends along the way. That's why we encourage anyone who uses tobacco to quit. Not as social judgment, but rather as part of the Oklahoma Standard of being there for each other.

D. Jasna: It's in that spirit that we invite you to talk with your health care provider about quitting tobacco and checking out the Oklahoma Tobacco Helpline at okhelpline.com or calling 1-800-QUIT-NOW. Remember, the Great American Smokeout is coming up on November 17, though any day is a good day to think about quitting tobacco. And if you don't use any form of tobacco or vape, please don't start.

J. Tyree We want to thank our guests once again, Drs. Mark Doescher and Lurdes Queimado, and Eric Finley, for joining us today and sharing their insights.

D. Jasna: And we always appreciate you, our podcast listeners, for your time and attention. Be sure to check out past and future episodes anytime at tset.ok.gov/podcast or wherever you listen to podcasts. So, until next time, this is Dylan Jasna …

J. Tyree: And James Tyree, wishing you peace

D. Jasna: And better health.