Funding for Yale Cancer Answers is provided by Smilow Cancer Hospital.
Welcome to Yale Cancer Answers with your host Doctor Anees Chagpar.
Yale Cancer Answers features the latest information on cancer care by welcoming oncologists and specialists who are on the forefront of the battle to fight cancer. This week, it's a conversation about screening for breast and lung cancers with Doctor Ilana Richman.
Dr Richman is an assistant professor in internal medicine at the Yale School of Medicine, where Doctor Chagpar is a professor of surgical oncology.
So Ilana, maybe we can start off by you telling us a little bit about what it is you do.
It's kind of a core part of what we do in primary care is to try to keep our patients healthy.
It’s part of what drew me to primary care in the 1st place, and also what has led to my research interests in cancer screening. So tell us a little bit more about that so you know one of the things that I think our listeners will be very familiar with is the fact that you know there are so many cancers, some of which you can screen for, some of which you can’t screen for. And even the ones that you can screen for it seems like the screening guidelines keep changing. So how do you approach screening from a primary care kind of standpoint?

0:01:01.727 –> 0:01:03.209 It’s part of what drew me to
0:01:03.21 –> 0:01:05.858 primary care in the 1st place,
0:01:05.858 –> 0:01:07.68 interests in cancer screening
0:01:08.29 –> 0:01:10.45 so so tell us a little bit more
0:01:10.45 –> 0:01:12.683 about that so you know one of the
0:01:12.683 –> 0:01:14.521 things that I think our listeners
0:01:14.521 –> 0:01:16.922 will be very familiar with is the.
0:01:16.93 –> 0:01:20.107 Fact that you know there are so many cancers,
0:01:20.11 –> 0:01:22.266 some of which you can screen for
0:01:22.266 –> 0:01:24.67 some of which you can’t screen for.
0:01:24.67 –> 0:01:26.434 And even the ones that you can
0:01:26.434 –> 0:01:28.486 screen for it seems like the
0:01:28.486 –> 0:01:30.126 screening guidelines keep changing.
0:01:30.13 –> 0:01:33.329 So how do you approach screening from
0:01:33.329 –> 0:01:36.458 a primary care kind of standpoint?
0:01:37.48 –> 0:01:40.98 So those are great questions.
0:01:40.98 –> 0:01:42.23 I’ll start with the first,
0:01:42.23 –> 0:01:44.438 which is why is it that some cancers
0:01:44.438 –> 0:01:47.056 we can screen for and others we can’t?
0:01:47.06 –> 0:01:49.49 The answer to that really has to do with
0:01:49.49 –> 0:01:51.794 lots of different aspects of what it means
0:01:51.794 –> 0:01:54.284 to have a successful screening test in
0:01:54.284 –> 0:01:56.66 order for screening to be successful,
0:01:56.66 –> 0:01:59.628 we need to be able to reliably detect
0:01:59.628 –> 0:02:02.302 a cancer we need to be able to find
0:02:02.302 –> 0:02:04.302 it at a point when it’s treatable and
0:02:04.302 –> 0:02:06.483 we need to have good treatments for
0:02:06.483 –> 0:02:08.22 that disease. So there are a few.
0:02:08.22 –> 0:02:11.346 Cancer is that fit that profile.
0:02:11.35 –> 0:02:12.718 The ones that we commonly screened
for are good examples, breast cancer, colorectal cancer, cervical cancer, and more. Recently lung cancer. But there are many others that don’t. For a variety of reasons, it’s sort of too hard to find them. The cancers generally tend to be aggressive, so screening once a year actually wouldn’t even be enough or we don’t have good treatments even for early stage disease. The last piece I’ll say is that cancers need to be common enough, or you need to identify a high enough risk population to make screening worthwhile. So there may be some cancers, for example that are quite rare and we would just never consider screening every patient who comes along with them, because just makes no sense to go looking for attention. It’s extremely unlikely to be there, so those are some of the features that make screening reasonable to think about in terms of why guidelines change. It’s a great question and tends to have to do with. A couple things. First is sometimes the evidence changes, so lung cancer screening is a great example. For years and years we had no effective way to screen for lung cancer. Lots of approaches to lung cancer
screening were studied, so for example, can we take a test X ray of people who smoke cigarettes every year and look for lung cancer? Can we examine the sputum that kind of phlegm that people cough up and look for signs of cancer? Those approaches were studied and were not successful, and so for a long time. The recommendation was not to screen using any of those modalities, but. In 2011, a landmark study was published that showed that we can effectively use computed tomography, which is CT scan the kind of test where you lie down on a table and get zipped through a donut takes a very detailed picture of your chest. We can use that to look for early signs of lung cancer among people who are high risk for developing lung cancer, and in fact it works if we use it annually for a number of years. We tend to find lung cancers early when they’re treatable. And we can actually successfully avert. You know the risk of dying of lung cancer for some people. So in 2013 our recommendations
changed and slowly this technology has percolated out into the community, so sometimes recommendations change in response to our scientific understanding of what works. And then lastly, I'll say that sometimes recommendations change because population health changes. Colorectal cancer screening is a good example of that. We are using the same technologies that we've used for collecting cancer screening more or less for the last 10 or 20 years, or maybe even longer. We use colonoscopy which is a test where we use a camera to directly look for early signs of colon cancer, or we can use stool based test. Sorry, look in the stool for signs of cancer, but more recently we've understood that actually the epidemiology of colon cancer is changing. Colon cancer seems to be more common among younger adults, and so we've actually lowered the age at which we recommend colon cancer screening for adults. So we used to say start at age 45, now we say start at age 45,
and that’s in response. Not to some new scientific understanding about colon cancer screening, but in response to changes in the epidemiology of the disease itself, so lots of reasons why recommendations might change.

And then there are some diseases where it depends on who you ask, what the recommendations are and breast cancer seems to be one that falls into that bucket.

Can you talk a little bit about that? Because I think that that actually causes a lot of confusion amongst the general public. If they look at, for example, the American Cancer Society guidelines, they may be different from the US Preventive Services Task Force. From the American College of Radiology from the American College of Obstetrics and Gynecology.

So how do you kind of approach that? Why are there differences, and how can you help our listeners figure out which guidelines they should be following? I’ll give you an example for listeners that may not, you know, know some of the nuances around these guys ’cause they think it’s helpful.
to talk about some of the specifics and give a sense of how the guidelines might differ in primary care. We often rely on guidelines put out by a group called the US Preventive Services Task Force, which is a volunteer organization of experts in medicine and public health. For example, for women in their 40s, Women can consider getting screened every other year, and that should be a discussion with their physician or their clinician about the risks and benefits of screening. But it’s not sort of a strong recommendation that women should definitely get screened. In contrast, the American Cancer Society guidelines say women 40 to 44 can consider screening, and 45 to 50 should be screened every other year. So why would accounts for the difference?
I would say it’s sort of a different approach to balancing benefit and harm. The US Preventive Services Task Force looked at the guidelines and say you know what? In general women in their 40s are at low risk for developing breast cancer, and if we screen them in this population, there’s some incremental benefits. A small number of women will have a late stage breast cancer, breast cancer, death averted, but many many more women will have a false positive test. They’ll be some abnormality seen on their mammogram. That turns out to be nothing but that woman is then put through this experience of being told that the mammogram is abnormal. You might need additional imaging. You might need a biopsy and you now go through a few weeks where you are worried that you might have a breast cancer and that experiences. Unpleasant to to put it mildly so you know, I think it’s sort of the way that two people can look at the same situation and see it slightly differently. Different groups look at the same data,
and for some organizations they say, hey, our number one goal is to avert breast cancer deaths and others say we need to balance that with the very real kind of burdens and harms that come from screenings. I think it’s really you know how organizations Decide where the net benefit lies. Getting back to patients, I would say you know, for women in their 40s and. It’s an opportunity to think about what matters. Some women, you know I have seen other women go through the experience of breast cancer, and I never want to. I never want to deal with a late stage breast cancer and I would like to do everything I can to avoid that. And for those women, I think it for sure. Makes sense to be screened. Other women may have personal risk factors that make it sensible to be screened. You know, close relatives first, you know mother or sisters who’ve had breast cancer and their
personal risk is higher and they may feel compelled to be screened.

You know other women might look at the same situation and say, you know what I feel healthy. I don’t have any specific risk factors and for me it makes sense to minimize the number of tests that you know I have to go through and I'll start screening when I'm 50.

And that’s also, I think, a reasonable decision. And so you know, it sounds like women should really think about what is their personal risk, what’s important to them, and talk to their doctor.

How does this intersect with? You know, insurance companies and governments who have to pay for these tests. I mean, many plans would cover preventative services. But do they cover them?

Kind of based on one set of guidelines versus another. So for example, if you are a 40 year old and you decide I want to get a mammogram every year because that’s important to me, I’ve had close friends who have gone through the experience.
I never want to go through that, even if I don’t necessarily have a personal family history myself, or am necessarily at high risk, but that fits. Within some society guidelines but not within others, is that still covered by insurance? The history of insurance coverage of screening is actually really interesting and I can tell you a little bit about kind of the back story for context and then we can talk about current policies. Actually, you know when Medicare was first signed into law in 1965? Amazingly, Medicare didn’t cover any preventive services at all because it was intended as a program to cover medical care for the treatment and diagnosis of disease. So prevention actually doesn’t fall into that right? We’re talking about healthy people. But over the next few decades, it became clear that things like vaccination, cancer screening have benefit to individuals and to the population health, and these are really things that ought to be covered under insurance. So beginning in the late 80s and early 90s, Medicare began to cover, for example,
cervical cancer screening and breast cancer screening, and then in 2003 there was a larger sort of more systematic update to Medicare that generalized coverage for preventive services. The next Iteration, the big next big change came in 2010 with the Affordable Care Act and the Affordable Care Act made important revisions or amendments. The way that preventive services are covered, the Affordable Care Act took the step of linking insurance coverage to evidence based recommendations. They said that for private insurers, those private insurers have to cover preventive services, including cancer screenings that are given a top rating by the US Preventive Services Task Force. That’s that committee. That I mentioned that’s composed of doctors and public health experts that evaluate the evidence in the data around cancer screening and other preventive services. And if that group gives it its, one of its strongest two ratings insurance companies have to cover that service,
and they have to cover it without cost sharing, which means that they can’t charge an out of pocket component. No deductible or copay or coinsurance, so that was a step forward.

Now interestingly, breast cancer screening for women in their 40s is given AC rating. By the US Preventive Services Task Force, which means that there’s some evidence for small benefit, but it’s not. It’s strongest A or B rating. So under the Affordable Care Act.

Insurance companies would not be required to cover. Breast cancer screening for women in their 40s, however, there was a separate statute signed into law that requires coverage for women in their 40s. There’s kind of a carve out legislation that said, we think it’s important that women in the 40s have access to breast cancer screening, so it’s generally covered by most private insurers.

I will say that the Affordable Care Act doesn’t apply to every insurer,
and it actually doesn’t apply to Medicare and Medicaid, although those programs generally cover breast cancer screening without cost because of other legislation. So it’s always important to check with your insurance, ’cause there’s all kinds of asterisks and exceptions, but I think for most women with private insurance with Medicare and Medicaid breast cancer screening, even for women in their 40s is generally covered. We’re going to pick up this conversation right after we take a short break for a medical minute. Please stay tuned to learn more about screening for breast and lung cancers with my guest Dr. Ilana Richman. Funding for Yale Cancer Answers comes from Smilow Cancer Hospital where the breast cancer Prevention Clinic provides comprehensive risk assessment education and screening for women at increased risk of breast cancer. To learn more, visit Yale Cancer Center org genetics. Genetic testing can be useful for people with certain types of cancer.
that seem to run in their families. Genetic counseling is a process that includes collecting a detailed personal and family history or risk assessment and a discussion of genetic testing options. Only about 5 to 10% of all cancers are inherited, and genetic testing is not recommended for everyone. Individuals who have a personal and or family history that includes cancer at unusually early ages. Multiple relatives on the same side of the family with the same cancer. More than one diagnosis of cancer in the same individual, rare cancers or family history of a known altered cancer predisposing gene could be candidates for genetic testing. Resources for genetic counseling and testing are available at federally designated comprehensive cancer centers such as Yale Cancer Center and Smilow Cancer Hospital. More information is available at yalecancercenter.org. You’re listening to Connecticut Public Radio.

Welcome back to Yale Cancer Answers. This is doctor Anees Chagpar and I’m joined tonight by my guest Doctor Ilana Richman.

We’re learning about screening for
breast and lung cancers and Alana.

You left off right before the break talking about the Affordable Care Act and the fact that it mandated that insurers have to cover screening for cancer.

The Affordable Care Act mandated that for people with private insurance, those insurers have to cover screening for cancer.

But you also made one comment which I wanted to go back to, which was there’s a lot of asterisks and it’s most private insurers tell us a little bit more about that. I mean, how do you know if you are in the most private insurers, or whether there’s a carve out which might leave you with a bill?

So the insurers that are covered under the Affordable Care Act don’t include firms that are self insured, so lots of large companies actually don’t pay for traditional health insurance. What they do is set aside money to directly pay for the health care of their employees, which is not considered traditional insurance and not is not covered under statutes like the Affordable Care Act.

On the other hand, lots of those companies that do that
still conform to the general kinds of coverage that other large insurers offer, so that’s why I say it’s important to check with your insurance company just to make sure you won’t be surprised. Unpleasantly surprised if you end up with a bill. I don’t think there’s one other asterisk to be aware of, which is that. Not all kinds of breast cancer screening are covered equally, so for example. Most insurance as we talked about covers breast cancer screening, but that’s sort of narrowly interpreted to mean traditional digital mammography. Other newer technologies like 3 dimensional mammography, also known as digital breast tomosynthesis. Or add on tests like ultrasound may not be covered. So if if those tests are recommended or considered again it could be important to ask whether they’re covered or whether you might be responsible for share of the cost. You know that’s really interesting, because I think that there are a lot of women who go for their mammogram. It just so happens that the place where I get my mammogram only has tomosynthesis,
but what you’re saying is that?
That might not be covered.
It depends on the state you live.
Some seats actually have
additional protections to ensure
that that service is covered.
Including the state of Connecticut,
but not all do.
So again, it’s important to, I think,
ask what you might be responsible for,
and even if you were to receive
one of those additional tests,
it might be that you’re only
responsible for a portion of
it and not the whole thing.
But yes, you’re right, women.
I think often don’t always go into the test,
know exactly what they’re going to get,
it’s pretty tough to be in the
moment and and concerned about.
You know whether or not you’re going to
have a bill for what’s what tests you get.
Is there any legal mandate for.
A you know a facility to tell you hey,
you know we are going to do a 3D mammogram,
and oh, by the way, that isn’t
covered in this particular state.
I don’t know that there’s a
regulation of around disclosure.
Most facilities will have you agree
to pay if you’re if there’s a
component that you’re liable for, but I don’t know if they’re required to disclose the cost upfront. Yeah, that’s really great information, because it really does then behoove people to ask you think? I know that my insurance coverage preventative care. I know that they’ll cover a mammogram, but they may not cover it. The mammogram that that particular? A facility is offering in some states, but it’s good to know that Connecticut does cover it. The other thing that was interesting is it may not cover the accessory tests, so you get a mammogram. The mammogram sees something, and your doctor says, well, we need to look at that more closely with an ultrasound, or you’ve got dense breast tissue. So we need to add on. Ultrasound, or maybe you’ve got a genetic predisposition and your doctor says, well, you know you really need to be screened with MRI, but those tests may not be covered either. That’s right, or they may be covered in
part and you might have in it, you know, copay or it might be part of your deductible, at least under the Affordable Care Act. None of those scenarios are covered under the recommendations that require coverage in full, so those are outside of what the Affordable Care Act requires. Now lots of insurance companies. I would say OK, those are medically necessary tests and would cover them the way that they would cover lots of other medical care. But at least in terms of the Affordable Care Act, those are outside of the kind of narrow recommendations around preventive services and so are not required to be covered under that statute. The other thing is when we when we’re talking about lung cancer, we really didn’t have screening tests, but now with low dose that is something that is covered for for lung cancer screening, but it’s only covered
For certain populations.

Is that right?

Can you tell us who benefits from a low dose CT?

So low dose CT has been studied in high risk populations and what’s meant by high risk is older adults who have a substantial history of tobacco use.

Tobacco use is, of course, the number one risk factor for developing lung cancer.

Not all people who develop lung cancer have a history of tobacco use, but it is the strongest risk factor serving the general population.

The most common risk factor we recommend lung cancer screening for adults who are between the ages of 50 and 80 who have used tobacco within the past 15 years.

So either our current smokers or who quit within the last 15 years and who have a substantial tobacco use history and by substantial I mean. Have smoked at least a pack a day or an equivalent for 20 years.

So that might mean so by equivalent. An example would be if you smoked half a pack a day for 40 years or one pack a day for 20 years.

If you know smoked a quarter pack a day 40 years ago, you would not have enough of a tobacco use...
history to warrant lung cancer screening, but for people who fit those criteria, we think there’s a substantial benefit to being screened and people you know would enter screening whenever there. Identified as being eligible and the idea is to continue to screen actually annually every year with a chest CT until one of several things happen, either age out or it’s been more than 15 years since you quit smoking, or you know you’re diagnosed at the lung cancer, which hopefully would not happen. But of course does from time to time, so people who meet any of those criteria could be considered for lung cancer. Screening would continue annual screening until one of those stopping points is met. One of the questions that people might be thinking about is how did they come up with these guidelines? Because you can understand that the longer you smoke, the higher your risk. If you quit smoking many many years ago, the lower your risk, the older you are. Perhaps your increased risk, but there’s always some nuances so you know people might be saying. Well, an 80 year old who quit smoking
0:23:53.936 --> 0:23:56.988 14 years ago and and smoked 20
0:23:56.988 --> 0:23:59.564 pack years prior to that is covered
0:23:59.564 --> 0:24:02.611 for a low dose CT even though
0:24:02.611 --> 0:24:05.336 his life expectancy is fairly low
0:24:05.336 --> 0:24:07.85 and his risk might be moderate,
0:24:07.85 --> 0:24:11.315 whereas a 45 year old who might
0:24:11.315 --> 0:24:12.8 have been smoking.
0:24:12.8 --> 0:24:16.24 You know, since he was 10 or 15.
0:24:20.4 --> 0:24:23.336 Is not covered because he’s not old enough,
0:24:23.34 --> 0:24:25.818 even though he’s a current smoker.
0:24:25.82 --> 0:24:29.19 So how do you kind of explain that to people?
0:24:29.99 --> 0:24:31.99 The guidelines are really based
0:24:33.99 --> 0:24:35.706 One is the clinical trials that
0:24:35.706 --> 0:24:37.689 have been done, and then it’s
0:24:37.689 --> 0:24:39.927 probably our kind of gold standard.
0:24:39.93 --> 0:24:41.634 Go to and they have really
0:24:41.634 --> 0:24:42.77 been two clinical trials,
0:24:42.77 --> 0:24:44.066 one done in the United States,
0:24:44.07 --> 0:24:45.75 one in Europe.
0:24:45.75 --> 0:24:48.55 They had slightly different entry
0:24:48.55 --> 0:24:51.038 criteria and use slightly different
0:24:51.038 --> 0:24:53.448 methods for detecting lung cancer,
0:24:53.45 --> 0:24:55.57 but we try to match.
0:24:55.57 --> 0:24:58.552 The population that we recommend lung
0:24:58.552 --> 0:25:01.609 cancer screening for to those trials
0:25:01.61 --> 0:25:04.114 because if we deviate you know much from
0:25:04.114 --> 0:25:06.499 that then we really don’t understand.
0:25:06.5 --> 0:25:08.796 You know if we start recommending lung
0:25:08.796 --> 0:25:11.388 cancer to people in their early 40s or 30s.
How you know how would those populations have fared if we were to actually study them in a trial? They’re sort of too far away from the data.

We have the 2nd way that recommendations are made is through modeling, and modeling is a approach where we can actually simulate. Using computer models, the progression of cancer in kind of a hypothetical or theoretical population of patients and ask OK if we screen people at these intervals or these age ranges, what happens? And so that’s in part how some of these decisions were made, particularly around the upper end of the age limit.

The child didn’t actually enroll people, or at least the US trial didn’t actually enroll people in their 80s. But modeling studies showed that.

Because lung cancer tends to be an aggressive disease even among older adults who naturally have a shorter life expectancy due to their age, there’s still potential benefit even you know, screen in the late 70s. So that’s how some of those age ranges are established.

There’s always some trade off,
so you could screen a broader and broader population and derive some incremental benefit from expanding the screening criteria. But as screening moves to lower and lower risk populations, you start to accrue, you know on the population level more harm than benefit. So at some point we have to draw a line and say this is the general group that we think will benefit from screening or the benefits outweigh the harms. And so I think you know to that point. People kind of going full circle back to where we started the conversation. People really need to think about the fact that these guidelines are based on evidence of populations and we know that in general provide more good than harm, which is why they’re recommended. But that sometimes these things need to be individualized. There may be different guidelines based on different societies and things that you should talk to your doctor about. But I want to end kind of where the whole situation started when you were talking about one of the reasons you got into primary care was really to keep people healthy,
0:27:25.944 –> 0:27:28.584 What percentage of people actually
0:27:28.584 –> 0:27:31.544 follow these guidelines and do you
0:27:31.544 –> 0:27:34.268 have any advice for clinicians or
0:27:34.353 –> 0:27:37.47 patients or family members in terms
0:27:37.47 –> 0:27:39.895 of encouraging people to follow
0:27:39.895 –> 0:27:40.865 these guidelines?
0:27:41.66 –> 0:27:43.392 It’s actually really desperate.
0:27:43.392 –> 0:27:45.124 Depending on the screen
0:27:45.124 –> 0:27:46.959 tests we’re talking about.
0:27:46.96 –> 0:27:49.012 So among women who are eligible
0:27:49.012 –> 0:27:50.38 for breast cancer screening,
0:27:50.38 –> 0:27:52.498 the United States, about 2/3 of
0:27:52.498 –> 0:27:54.54 eligible women have been screened.
0:27:54.54 –> 0:27:55.388 Which is quite high.
0:27:55.388 –> 0:27:56.951 I mean it means that there are
0:27:56.951 –> 0:27:58.409 some women who are eligible have
0:27:58.409 –> 0:28:00.056 not been screened and there may be
0:28:00.056 –> 0:28:01.352 good reasons for some of those,
0:28:01.36 –> 0:28:03.835 and there may be not good reasons for others.
0:28:03.84 –> 0:28:05.406 There may be still women who we ought to
0:28:05.406 –> 0:28:07.08 be reaching and trying harder to reach.
0:28:07.08 –> 0:28:08.936 But in general I think we’ve done a
0:28:08.936 –> 0:28:10.757 pretty good job and I’d see it said
0:28:10.757 –> 0:28:12.653 getting the word out about breast cancer
0:28:14.6 –> 0:28:16.924 Lung cancer screening is a bit of
0:28:16.924 –> 0:28:18.604 a different scenario where only
0:28:18.604 –> 0:28:21.192 about 10% of eligible folks have
0:28:21.192 –> 0:28:23.175 been screened and part of it is
0:28:23.175 –> 0:28:24.715 that I think again we need
To be better about messaging and also about developing systems. 

To make it easy for primary care doctors to think of it and propose it to patients.

Doctor Ilana Richman is an assistant professor in internal medicine at the Yale School of Medicine.

If you have questions, the address is canceranswers@yale.edu and past editions of the program are available in audio and written form at yalecancercenter.org.

We hope you'll join us next week to learn more about the fight against cancer here on Connecticut Public radio.

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