00:00:00.000 --> 00:00:03.400 OK, we're going to get started that evening.

00:00:03.400 --> 00:00:04.988 Everyone and welcome to

00:00:04.988 --> 00:00:06.535 the cancer screening 101.

00:00:06.535 --> 00:00:09.020 It is an update on cancer screening.

00:00:09.020 --> 00:00:10.164 My name is Javier.

00:00:10.164 --> 00:00:11.880 You're an associate director for cancer

00:00:11.933 --> 00:00:13.583 screening and prevention at Yale

00:00:13.583 --> 00:00:15.233 Cancer Center and Medical Director

00:00:15.290 --> 00:00:16.818 of colorectal cancer screening.

00:00:16.820 --> 00:00:19.900 And tonight we'll discuss updates on breast,

00:00:19.900 --> 00:00:21.448 cervical, lung and colorectal

00:00:21.448 --> 00:00:23.383 cancer with an extraordinary group

00:00:23.383 --> 00:00:25.702 of panelists that we have with us

00:00:25.702 --> 00:00:27.759 tonight and we're lucky to have them.

NOTE Confidence: 0.81392129925

00:00:27.760 --> 00:00:30.220 We have doctor Golden Menderes,

NOTE Confidence: 0.81392129925

00:00:30.220 --> 00:00:32.004 director of minimally invasive.

NOTE Confidence: 0.81392129925

00:00:32.004 --> 00:00:33.788 Technological surgery program who

NOTE Confidence: 0.81392129925

00:00:33.788 --> 00:00:36.460 is going to give us the update

NOTE Confidence: 0.81392129925

00:00:36.460 --> 00:00:37.828 on cervical cancer screening.

NOTE Confidence: 0.81392129925

00:00:37.830 --> 00:00:39.108 Dr Lin Tenui,

NOTE Confidence: 0.81392129925

00:00:39.108 --> 00:00:41.664 director of the lung Cancer screening

NOTE Confidence: 0.81392129925

00:00:41.664 --> 00:00:43.155 program Doctor Miriam Glasper,

NOTE Confidence: 0.81392129925

00:00:43.155 --> 00:00:45.285 director of the Center for Breast

NOTE Confidence: 0.81392129925

00:00:45.285 --> 00:00:47.221 Cancer and Chief of Breast Medical

NOTE Confidence: 0.81392129925

00:00:47.221 --> 00:00:49.716 Oncology and who will talk to us about

NOTE Confidence: 0.81392129925

00:00:49.716 --> 00:00:51.844 the updates and the rest cancer screening.

NOTE Confidence: 0.81392129925

00:00:51.850 --> 00:00:54.202 You can post your questions anytime

NOTE Confidence: 0.81392129925

00:00:54.202 --> 00:00:57.425 on the Q&amp;A and we will try to address

NOTE Confidence: 0.81392129925

00:00:57.425 --> 00:00:59.618 that them either directly in the chat

NOTE Confidence: 0.81392129925

00:00:59.618 --> 00:01:02.530 or in the Q&amp;A or at the end of the session.

NOTE Confidence: 0.81392129925

00:01:02.530 --> 00:01:04.370 So without further ado,

NOTE Confidence: 0.81392129925

00:01:04.370 --> 00:01:06.210 here is Doctor Goldeman.

NOTE Confidence: 0.81392129925

00:01:06.210 --> 00:01:07.994 There is to talk to us about an

NOTE Confidence: 0.81392129925

00:01:07.994 --> 00:01:09.908 update on cervical cancer screening.

NOTE Confidence: 0.81392129925

00:01:09.910 --> 00:01:10.818 Thank you very much.

NOTE Confidence: 0.961534405

00:01:11.780 --> 00:01:13.128 Hello everyone and thanks

NOTE Confidence: 0.961534405

00:01:13.128 --> 00:01:14.476 for having me tonight.

NOTE Confidence: 0.961534405

00:01:14.480 --> 00:01:16.850 It's my pleasure to present the

NOTE Confidence: 0.961534405

00:01:16.850 --> 00:01:19.200 update on cervical cancer screening.

NOTE Confidence: 0.961534405

00:01:19.200 --> 00:01:21.139 I can everyone see my first slide.

NOTE Confidence: 0.928796583333333

00:01:24.330 --> 00:01:26.178 Not yet. OK.

NOTE Confidence: 0.713034461666667

00:01:39.150 --> 00:01:40.698 It's time to try this again.

NOTE Confidence: 0.57253515

00:01:46.330 --> 00:01:48.884 Yes, can we see it now? Yeah, we are.

NOTE Confidence: 0.57253515

00:01:48.884 --> 00:01:50.696 Yeah, we're a little good, perfect,

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NOTE Confidence: 0.57253515

00:01:50.696 --> 00:01:54.546 OK, so the talk tonight is going

NOTE Confidence: 0.57253515

00:01:54.546 --> 00:01:56.886 to be essentially about the

NOTE Confidence: 0.57253515

00:01:56.886 --> 00:01:58.910 epidemiology of cervical cancer,

NOTE Confidence: 0.57253515

00:01:58.910 --> 00:02:01.832 followed by risk factors and the

NOTE Confidence: 0.57253515

00:02:01.832 --> 00:02:05.562 significant role of HPV or human papilloma

NOTE Confidence: 0.57253515

00:02:05.562 --> 00:02:08.387 virus in causing cervical cancer,

NOTE Confidence: 0.57253515

00:02:08.390 --> 00:02:11.596 as well as the significant impact of.

NOTE Confidence: 0.57253515

00:02:11.600 --> 00:02:14.250 Screening guidelines and the guidelines

NOTE Confidence: 0.57253515

00:02:14.250 --> 00:02:18.210 based on agent risk Group stratification.

NOTE Confidence: 0.57253515

00:02:18.210 --> 00:02:22.261 So in 2020, cervical cancer accounted

NOTE Confidence: 0.57253515

00:02:22.261 --> 00:02:25.870 for an estimated over 600,000 new

NOTE Confidence: 0.57253515

00:02:25.870 --> 00:02:28.948 cases and over 300,000 that's worth

NOTE Confidence: 0.57253515

00:02:28.948 --> 00:02:31.228 worldwide and not not surprisingly,

NOTE Confidence: 0.57253515

00:02:31.230 --> 00:02:35.988 over 85% of cervical cancer cases.

NOTE Confidence: 0.57253515

00:02:35.990 --> 00:02:38.930 They were from resource limited countries.

NOTE Confidence: 0.57253515

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00:02:38.930 --> 00:02:40.615 Cervical cancer was the second

NOTE Confidence: 0.57253515

00:02:40.615 --> 00:02:42.300 most common type of cancer.

NOTE Confidence: 0.57253515

00:02:42.300 --> 00:02:44.688 And the third most common causal

NOTE Confidence: 0.57253515

00:02:44.688 --> 00:02:47.270 cancer mortality when we look at the

NOTE Confidence: 0.57253515

00:02:47.270 --> 00:02:49.670 continents of Africa and Central America.

NOTE Confidence: 0.57253515

00:02:49.670 --> 00:02:51.910 Here we can see the cervical cancer

NOTE Confidence: 0.57253515

00:02:51.910 --> 00:02:54.178 was the leading cause of cancer

NOTE Confidence: 0.57253515

00:02:54.178 --> 00:02:55.830 related mortality among women.

NOTE Confidence: 0.57253515

00:02:55.830 --> 00:02:58.431 Here we can see in the US we have

NOTE Confidence: 0.57253515

00:02:58.431 --> 00:03:00.780 over 13,000 new cases with over

NOTE Confidence: 0.57253515

00:03:00.780 --> 00:03:03.829 4000 deaths that we see every year.

NOTE Confidence: 0.57253515

00:03:03.830 --> 00:03:06.150 And this is what we do not want

NOTE Confidence: 0.57253515

00:03:06.150 --> 00:03:07.809 to see as providers.

NOTE Confidence: 0.57253515

00:03:07.810 --> 00:03:10.603 This is a huge mass air rising

NOTE Confidence: 0.57253515

00:03:10.603 --> 00:03:12.320 from the cervix year.

NOTE Confidence: 0.57253515

00:03:12.320 --> 00:03:15.080 As well as right here,

NOTE Confidence: 0.57253515

00:03:15.080 --> 00:03:17.026 we don't want to see these cases

NOTE Confidence: 0.57253515

00:03:17.026 --> 00:03:19.518 in the in the next couple decades.

NOTE Confidence: 0.57253515

00:03:19.520 --> 00:03:23.104 Hopefully as far as the risk factors that

NOTE Confidence: 0.57253515

00:03:23.104 --> 00:03:26.748 lead to cervical cancer is concerned,

NOTE Confidence: 0.57253515

00:03:26.750 --> 00:03:28.838 we have behavioral and sexual factors,

NOTE Confidence: 0.57253515

00:03:28.840 --> 00:03:31.678 including large number of sexual partners.

NOTE Confidence: 0.57253515

00:03:31.680 --> 00:03:34.224 One might have an early age

NOTE Confidence: 0.57253515

00:03:34.224 --> 00:03:35.496 at first intercourse.

NOTE Confidence: 0.57253515

00:03:35.500 --> 00:03:35.874 Also,

NOTE Confidence: 0.57253515

00:03:35.874 --> 00:03:38.118 smoking has been linked to increase

NOTE Confidence: 0.57253515

00:03:38.118 --> 00:03:40.319 the risk of specifically the

NOTE Confidence: 0.57253515

00:03:40.319 --> 00:03:42.839 squamous kind of cervical cancer.

NOTE Confidence: 0.57253515

00:03:42.840 --> 00:03:45.170 Not necessarily the second most

NOTE Confidence: 0.57253515

00:03:45.170 --> 00:03:46.568 common kind adenocarcinoma.

NOTE Confidence: 0.57253515

00:03:46.570 --> 00:03:49.558 We have history of sexually transmitted

NOTE Confidence: 0.57253515

00:03:49.558 --> 00:03:52.408 diseases and in communities with diet

NOTE Confidence: 0.57253515

00:03:52.408 --> 00:03:55.124 low in folate carotene and vitamin C.

NOTE Confidence: 0.57253515

00:03:55.130 --> 00:03:59.120 We tend to see more numbers.

NOTE Confidence: 0.57253515

00:03:59.120 --> 00:04:00.832 Among other risk factors,

NOTE Confidence: 0.57253515

00:04:00.832 --> 00:04:03.400 again comes multiparity and early age.

NOTE Confidence: 0.57253515

00:04:03.400 --> 00:04:04.642 At first intercourse.

NOTE Confidence: 0.57253515

00:04:04.642 --> 00:04:06.712 These all increase the likelihood

NOTE Confidence: 0.57253515

00:04:06.712 --> 00:04:09.058 of HPV exposure and lack of

NOTE Confidence: 0.57253515

00:04:09.058 --> 00:04:11.224 routine screening is the one that

NOTE Confidence: 0.57253515

00:04:11.293 --> 00:04:13.498 we're going to emphasize tonight.

NOTE Confidence: 0.57253515

00:04:13.500 --> 00:04:16.925 Immunosuppression is another risk factor

NOTE Confidence: 0.57253515

00:04:16.925 --> 00:04:20.350 for developing cervical cancer and.

NOTE Confidence: 0.57253515

00:04:20.350 --> 00:04:27.890 Infection and exposure to HPV is widal HPV.

NOTE Confidence: 0.57253515

00:04:27.890 --> 00:04:29.840 All also known as human papilloma

NOTE Confidence: 0.57253515

00:04:29.840 --> 00:04:32.094 virus is central to the development

NOTE Confidence: 0.57253515

00:04:32.094 --> 00:04:34.324 of cervical neoplasia or precancer,

NOTE Confidence: 0.57253515

00:04:34.330 --> 00:04:36.570 and it can be detected in over

NOTE Confidence: 0.57253515

00:04:36.570 --> 00:04:38.658 99% of cervical cancers.

NOTE Confidence: 0.889724907272727

00:04:40.890 --> 00:04:44.098 80% of the population are exposed to this

NOTE Confidence: 0.889724907272727

00:04:44.098 --> 00:04:47.850 virus by age 50 and among more than 40

NOTE Confidence: 0.889724907272727

00:04:47.850 --> 00:04:50.530 different genital HPV types identified.

NOTE Confidence: 0.889724907272727

00:04:50.530 --> 00:04:53.626 We have about 15 known to be oncogenic.

NOTE Confidence: 0.889724907272727

00:04:53.630 --> 00:04:56.915 It's a double stranded DNA virus and it it

NOTE Confidence: 0.889724907272727

00:04:56.915 --> 00:05:00.224 infects the epithelial cells in the skin and

NOTE Confidence: 0.889724907272727

00:05:00.224 --> 00:05:03.139 mucous membranes of vagina and and cervix.

NOTE Confidence: 0.81286865625

00:05:06.160 --> 00:05:08.448 The oncogenic HPV infection

NOTE Confidence: 0.81286865625

00:05:08.448 --> 00:05:10.736 of this transformation zone.

NOTE Confidence: 0.81286865625

00:05:10.740 --> 00:05:12.654 Here we can see the columnar

NOTE Confidence: 0.81286865625

00:05:12.654 --> 00:05:14.444 epithelium of the cervix bordering

NOTE Confidence: 0.81286865625

00:05:14.444 --> 00:05:16.228 on the squamous epithelium.

NOTE Confidence: 0.81286865625

00:05:16.230 --> 00:05:18.355 This is known as transformation

NOTE Confidence: 0.81286865625

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00:05:18.355 --> 00:05:21.000 zone is where the HPV virus

NOTE Confidence: 0.81286865625

00:05:21.000 --> 00:05:23.165 starts the infection and then

NOTE Confidence: 0.81286865625

00:05:23.165 --> 00:05:25.600 that would lead to precancerous

NOTE Confidence: 0.81286865625

00:05:25.600 --> 00:05:28.675 changes and eventually to cancer.

NOTE Confidence: 0.81286865625

00:05:28.680 --> 00:05:32.784 If there is no screening and no treatments.

NOTE Confidence: 0.81286865625

00:05:32.790 --> 00:05:35.318 Here we can see at a more cellular

NOTE Confidence: 0.81286865625

00:05:35.318 --> 00:05:37.749 level the changes that HPV causes,

NOTE Confidence: 0.81286865625

00:05:37.750 --> 00:05:40.180 including the coil acidic cells.

NOTE Confidence: 0.81286865625

00:05:40.180 --> 00:05:43.404 Here the Halo around the nuclei of the

NOTE Confidence: 0.81286865625

00:05:43.404 --> 00:05:46.540 cells as well as the by nucleation.

NOTE Confidence: 0.81286865625

00:05:46.540 --> 00:05:49.070 Our objectives with screening is,

NOTE Confidence: 0.81286865625

00:05:49.070 --> 00:05:49.976 uh, essentially,

NOTE Confidence: 0.81286865625

00:05:49.976 --> 00:05:52.241 to prevent morbidity and mortality

NOTE Confidence: 0.81286865625

00:05:52.241 --> 00:05:55.008 from cervical cancer as well as

NOTE Confidence: 0.81286865625

00:05:55.008 --> 00:05:56.796 preventing overzealous management of

NOTE Confidence: 0.81286865625

00:05:56.796 --> 00:05:58.955 the precursor precursor lesions that

NOTE Confidence: 0.81286865625

00:05:58.955 --> 00:06:01.594 will likely request or disappear when a

NOTE Confidence: 0.81286865625

00:06:01.594 --> 00:06:06.060 patient has a competent immune system.

NOTE Confidence: 0.81286865625

00:06:06.060 --> 00:06:09.492 The United States adopted Pap smear

NOTE Confidence: 0.81286865625

00:06:09.492 --> 00:06:13.520 screening in about 1950s and by mid 1980s,

NOTE Confidence: 0.81286865625

00:06:13.520 --> 00:06:15.059 cervical cancer incidence

NOTE Confidence: 0.81286865625

00:06:15.059 --> 00:06:17.126 decreased by about 70%.

NOTE Confidence: 0.81286865625

00:06:17.126 --> 00:06:19.230 Multiple observational studies continue

NOTE Confidence: 0.81286865625

00:06:19.230 --> 00:06:22.578 to show the reduction in cervical

NOTE Confidence: 0.81286865625

00:06:22.578 --> 00:06:24.994 cancer mortality after systematic

NOTE Confidence: 0.81286865625

00:06:24.994 --> 00:06:28.426 follow up and and screening guidelines.

NOTE Confidence: 0.81286865625

00:06:28.430 --> 00:06:30.054 What do we screen in day to

NOTE Confidence: 0.81286865625

00:06:30.054 --> 00:06:31.768 day life when we see a patient,

NOTE Confidence: 0.81286865625

00:06:31.770 --> 00:06:34.430 we place a speculum in the vagina

NOTE Confidence: 0.81286865625

00:06:34.430 --> 00:06:37.342 and our goal is to inspect the

NOTE Confidence: 0.81286865625

00:06:37.342 --> 00:06:39.868 entire regional mucosa as well as

NOTE Confidence: 0.81286865625

00:06:39.959 --> 00:06:42.439 the ectocervix and endocervix.

NOTE Confidence: 0.81286865625

00:06:42.440 --> 00:06:46.820 Here we can see a close up image of the

NOTE Confidence: 0.81286865625

00:06:46.820 --> 00:06:49.300 upper vagina Cervicovaginal junction,

NOTE Confidence: 0.81286865625

00:06:49.300 --> 00:06:51.410 which is important for cervical

NOTE Confidence: 0.81286865625

00:06:51.410 --> 00:06:52.676 cancer screening purposes.

NOTE Confidence: 0.81286865625

00:06:52.680 --> 00:06:55.620 The Ectocervix and the Endocervix,

NOTE Confidence: 0.81286865625

00:06:55.620 --> 00:06:57.980 which is the glandular epithelium.

NOTE Confidence: 0.81286865625

00:06:57.980 --> 00:07:00.927 So both the endocervix and the ectocervix

NOTE Confidence: 0.81286865625

00:07:00.927 --> 00:07:03.579 is important for practical reasons.

NOTE Confidence: 0.81286865625

00:07:03.580 --> 00:07:04.780 In terms of screening.

NOTE Confidence: 0.894979026

00:07:07.860 --> 00:07:09.916 In the United States,

NOTE Confidence: 0.894979026

00:07:09.916 --> 00:07:12.382 approximately 5050 million women undergo

NOTE Confidence: 0.894979026

00:07:12.382 --> 00:07:16.330 a pop smear or HPV testing each year,

NOTE Confidence: 0.894979026

00:07:16.330 --> 00:07:18.280 and all these women about 8%

NOTE Confidence: 0.894979026

00:07:18.280 --> 00:07:19.940 will have an abnormal result.

NOTE Confidence: 0.894979026

00:07:19.940 --> 00:07:23.140 And here this pyramid shows us the breakdown

NOTE Confidence: 0.894979026

00:07:23.140 --> 00:07:26.538 of pop test abnormalities by frequency.

NOTE Confidence: 0.894979026

00:07:26.540 --> 00:07:29.375 Screening can detect the precursor as well

NOTE Confidence: 0.894979026

00:07:29.375 --> 00:07:32.577 as the early stage for cervical cancer.

NOTE Confidence: 0.894979026

00:07:32.580 --> 00:07:35.828 That way we can prevent the development

NOTE Confidence: 0.894979026

00:07:35.828 --> 00:07:37.840 of invasive cervical cancer.

NOTE Confidence: 0.894979026

00:07:37.840 --> 00:07:41.018 When a patient is exposed to HPV,

NOTE Confidence: 0.894979026

00:07:41.020 --> 00:07:44.429 the healthy young women would like likely

NOTE Confidence: 0.894979026

00:07:44.429 --> 00:07:48.618 get rid of HPV in about 6 to 12 months.

NOTE Confidence: 0.894979026

00:07:48.620 --> 00:07:51.180 Sometimes when we cannot eliminate

NOTE Confidence: 0.894979026

00:07:51.180 --> 00:07:54.630 the HPV exposure and it persists,

NOTE Confidence: 0.894979026

00:07:54.630 --> 00:07:57.444 we have low grade cervical precancer changes

NOTE Confidence: 0.894979026

00:07:57.444 --> 00:08:00.598 known as Siri and one in about 24 months.

NOTE Confidence: 0.894979026

00:08:00.600 --> 00:08:02.812 Again a healthy immune

NOTE Confidence: 0.894979026

00:08:02.812 --> 00:08:05.577 system will clear the HPV.

NOTE Confidence: 0.894979026

00:08:05.580 --> 00:08:08.282 If the patient has risk factors as

NOTE Confidence: 0.894979026

00:08:08.282 --> 00:08:11.717 well as not a competent immune system,

NOTE Confidence: 0.894979026

00:08:11.720 --> 00:08:13.580 the low grade lesions might

NOTE Confidence: 0.894979026

00:08:13.580 --> 00:08:15.990 turn into CIN two or three,

NOTE Confidence: 0.894979026

00:08:15.990 --> 00:08:18.250 which is known as high

NOTE Confidence: 0.894979026

00:08:18.250 --> 00:08:19.606 grade precancer changes.

NOTE Confidence: 0.894979026

00:08:19.610 --> 00:08:21.422 And if there is no intervention

NOTE Confidence: 0.894979026

00:08:21.422 --> 00:08:23.289 in about 10 to 13 years,

NOTE Confidence: 0.894979026

00:08:23.290 --> 00:08:25.222 the high grade pre cancer cells will

NOTE Confidence: 0.894979026

00:08:25.222 --> 00:08:26.910 turn into invasive cervical cancer,

NOTE Confidence: 0.894979026

00:08:26.910 --> 00:08:29.430 so it is not a change from HPV exposure

NOTE Confidence: 0.894979026

00:08:29.430 --> 00:08:31.709 to cancer that occurs overnight,

NOTE Confidence: 0.894979026

00:08:31.710 --> 00:08:34.325 which gives us the opportunity

NOTE Confidence: 0.894979026

00:08:34.325 --> 00:08:36.940 as providers to intervene and

NOTE Confidence: 0.894979026

00:08:37.027 --> 00:08:39.379 eliminate cervical cancers.

NOTE Confidence: 0.894979026

00:08:39.380 --> 00:08:40.815 What happens when a patient

NOTE Confidence: 0.894979026

00:08:40.815 --> 00:08:42.250 has an abnormal screening test?

NOTE Confidence: 0.894979026

00:08:42.250 --> 00:08:43.768 One of many things can happen.

NOTE Confidence: 0.894979026

00:08:43.770 --> 00:08:45.395 The patient might need further

NOTE Confidence: 0.894979026

00:08:45.395 --> 00:08:46.370 testing with HPV.

NOTE Confidence: 0.894979026

00:08:46.370 --> 00:08:48.939 It the patient might need a repeat

NOTE Confidence: 0.894979026

00:08:48.939 --> 00:08:51.512 cytology called post scopy or even

NOTE Confidence: 0.894979026

00:08:51.512 --> 00:08:53.847 endometrial biopsy if the psychological

NOTE Confidence: 0.894979026

00:08:53.847 --> 00:08:56.203 normality arises from the endocervix

NOTE Confidence: 0.894979026

00:08:56.203 --> 00:08:58.453 which is the glandular epithelium,

NOTE Confidence: 0.894979026

00:08:58.460 --> 00:09:00.833 which is very much like the endometrium

NOTE Confidence: 0.894979026

00:09:00.833 --> 00:09:03.610 and that would require evaluation as well.

NOTE Confidence: 0.894979026

00:09:03.610 --> 00:09:05.410 Or some patients would be referred

NOTE Confidence: 0.894979026

00:09:05.410 --> 00:09:07.231 to Java and oncologists when there

NOTE Confidence: 0.894979026

00:09:07.231 --> 00:09:08.651 is high grade precancer changes

NOTE Confidence: 0.894979026

00:09:08.651 --> 00:09:10.129 the way that we perform.

NOTE Confidence: 0.894979026

00:09:10.130 --> 00:09:11.500 Oscopy is in the clinic.

NOTE Confidence: 0.894979026

00:09:11.500 --> 00:09:15.938 There is a microscope that is essentially

NOTE Confidence: 0.894979026

00:09:15.940 --> 00:09:18.196 helping the provider to magnify the

NOTE Confidence: 0.894979026

00:09:18.196 --> 00:09:21.480 image in the vagina and the upper cervix and,

NOTE Confidence: 0.894979026

00:09:21.480 --> 00:09:23.106 if need be,

NOTE Confidence: 0.894979026

00:09:23.106 --> 00:09:25.274 colposcopy directed biopsies can

NOTE Confidence: 0.894979026

00:09:25.274 --> 00:09:30.509 be taken for for biopsy purposes.

NOTE Confidence: 0.894979026

00:09:30.510 --> 00:09:32.760 If the patient has any high

NOTE Confidence: 0.894979026

00:09:32.760 --> 00:09:33.885 grade precancer changes,

NOTE Confidence: 0.894979026

00:09:33.890 --> 00:09:36.082 oftentimes we recommend patient

NOTE Confidence: 0.894979026

00:09:36.082 --> 00:09:37.726 to undergo colonization,

NOTE Confidence: 0.894979026

00:09:37.730 --> 00:09:40.214 which is simply a cone shaped

NOTE Confidence: 0.894979026

00:09:40.214 --> 00:09:43.312 biopsy of the cervix to eliminate

NOTE Confidence: 0.894979026

00:09:43.312 --> 00:09:45.349 underlying invasive cancers.

NOTE Confidence: 0.894979026

00:09:45.350 --> 00:09:46.862 The way that we performed conversation

NOTE Confidence: 0.894979026

00:09:46.862 --> 00:09:48.409 is usually with a cold knife.

NOTE Confidence: 0.894979026

00:09:48.410 --> 00:09:50.470 This kind of illustrates how

NOTE Confidence: 0.894979026

00:09:50.470 --> 00:09:52.118 those procedures are done.

NOTE Confidence: 0.894979026

00:09:52.120 --> 00:09:54.448 Another way of getting a larger

NOTE Confidence: 0.894979026

00:09:54.448 --> 00:09:57.247 biopsy than just a small cervical

NOTE Confidence: 0.894979026

00:09:57.247 --> 00:09:59.575 biopsy to eliminate underlying

NOTE Confidence: 0.894979026

00:09:59.580 --> 00:10:01.412 cervical cancer is leap,

NOTE Confidence: 0.894979026

00:10:01.412 --> 00:10:03.702 which stands for loop electrosurgical

NOTE Confidence: 0.894979026

00:10:03.702 --> 00:10:04.880 excision procedure.

NOTE Confidence: 0.894979026

00:10:04.880 --> 00:10:08.646 This is mostly used by primary obgyns,

NOTE Confidence: 0.894979026

00:10:08.650 --> 00:10:10.300 and it can easily be performed

NOTE Confidence: 0.894979026

00:10:10.300 --> 00:10:11.400 in the office setting.

NOTE Confidence: 0.912304155555555

00:10:15.550 --> 00:10:18.016 So how do we get patients

NOTE Confidence: 0.912304155555555

00:10:18.016 --> 00:10:19.249 have cervical cancer?

NOTE Confidence: 0.912304155555555

00:10:19.250 --> 00:10:22.258 In 2022 it has to be one of

NOTE Confidence: 0.912304155555555

00:10:22.258 --> 00:10:24.570 many failures that lead to it.

NOTE Confidence: 0.912304155555555

00:10:24.570 --> 00:10:25.694 Either the patient does

NOTE Confidence: 0.912304155555555

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00:10:25.694 --> 00:10:27.099 not show up for screening,

NOTE Confidence: 0.912304155555555

00:10:27.100 --> 00:10:28.700 or as healthcare providers.

NOTE Confidence: 0.912304155555555

00:10:28.700 --> 00:10:31.596 We do not offer screening to women

NOTE Confidence: 0.912304155555555

00:10:31.596 --> 00:10:34.110 when they present for annual exams.

NOTE Confidence: 0.912304155555555

00:10:34.110 --> 00:10:36.408 The patient might not follow up

NOTE Confidence: 0.912304155555555

00:10:36.408 --> 00:10:38.349 on abnormal results when there

NOTE Confidence: 0.912304155555555

00:10:38.349 --> 00:10:40.359 is a colposcopy and a biopsy

NOTE Confidence: 0.912304155555555

00:10:40.359 --> 00:10:42.329 that shows pre cancer cells.

NOTE Confidence: 0.912304155555555

00:10:42.330 --> 00:10:44.496 Or the patient might not get

NOTE Confidence: 0.912304155555555

00:10:44.496 --> 00:10:45.940 appropriate treatment to eliminate

NOTE Confidence: 0.912304155555555

00:10:46.002 --> 00:10:48.007 the precancer cells and eventually,

NOTE Confidence: 0.912304155555555

00:10:48.010 --> 00:10:48.433 unfortunately,

NOTE Confidence: 0.912304155555555

00:10:48.433 --> 00:10:50.548 the patients get cervical cancer,

NOTE Confidence: 0.912304155555555

00:10:50.550 --> 00:10:52.310 which is our ultimate goal

NOTE Confidence: 0.912304155555555

00:10:52.310 --> 00:10:54.070 with screening to prevent this.

NOTE Confidence: 0.887506677

00:10:56.490 --> 00:10:58.280 So tonight we're gonna mainly

NOTE Confidence: 0.887506677

00:10:58.280 --> 00:11:00.070 focus on these updated guidelines,

NOTE Confidence: 0.887506677

00:11:00.070 --> 00:11:03.310 which originate from American Cancer Society

NOTE Confidence: 0.887506677

00:11:03.310 --> 00:11:07.176 2020 update and USPSTF which stands for

NOTE Confidence: 0.887506677

00:11:07.176 --> 00:11:09.876 United States Preventive Services Task

NOTE Confidence: 0.887506677

00:11:09.876 --> 00:11:12.845 Force which was most recently updated

NOTE Confidence: 0.887506677

00:11:12.845 --> 00:11:16.710 in 2018 for purposes of screening,

NOTE Confidence: 0.887506677

00:11:16.710 --> 00:11:19.202 we should define what an average versus

NOTE Confidence: 0.887506677

00:11:19.202 --> 00:11:22.051 a high risk patient is for developing

NOTE Confidence: 0.887506677

00:11:22.051 --> 00:11:24.607 cervical cancer and our age patient

NOTE Confidence: 0.887506677

00:11:24.682 --> 00:11:27.195 for us would be who is asymptomatic.

NOTE Confidence: 0.887506677

00:11:27.200 --> 00:11:29.643 With a competent immune system and who

NOTE Confidence: 0.887506677

00:11:29.643 --> 00:11:31.952 has always had normal screening results

NOTE Confidence: 0.887506677

00:11:31.952 --> 00:11:34.925 in the past and most of the guidelines

NOTE Confidence: 0.887506677

00:11:34.925 --> 00:11:36.710 focus on average risk patients.

NOTE Confidence: 0.887506677

00:11:36.710 --> 00:11:39.391 Since this is what we most commonly

NOTE Confidence: 0.887506677

18

00:11:39.391 --> 00:11:41.972 handle high risk patients would be

NOTE Confidence: 0.887506677

00:11:41.972 --> 00:11:44.222 the ones who have immunosuppression

NOTE Confidence: 0.887506677

00:11:44.222 --> 00:11:47.522 for any reason who has HIV or who has

NOTE Confidence: 0.887506677

00:11:47.522 --> 00:11:49.825 been exposed to deaths in eurodesk

NOTE Confidence: 0.887506677

00:11:49.825 --> 00:11:53.474 used to be a anti emetic that that

NOTE Confidence: 0.887506677

00:11:53.474 --> 00:11:56.504 was used in pregnancy until 1970s.

NOTE Confidence: 0.887506677

00:11:56.510 --> 00:11:57.574 So most of these.

NOTE Confidence: 0.887506677

00:11:57.574 --> 00:11:59.959 Women are now in their 50s sixties and

NOTE Confidence: 0.887506677

00:11:59.959 --> 00:12:02.500 it's not it's not used anymore thankfully.

NOTE Confidence: 0.887506677

00:12:02.500 --> 00:12:05.704 So there is one less risk factor these days.

NOTE Confidence: 0.887506677

00:12:05.710 --> 00:12:08.122 As far as cervical cancer screening

NOTE Confidence: 0.887506677

00:12:08.122 --> 00:12:10.440 risk risk stratification is concerned.

NOTE Confidence: 0.887506677

00:12:10.440 --> 00:12:14.563 So the 2018 USPS TF essentially recommends

NOTE Confidence: 0.887506677

00:12:14.563 --> 00:12:17.396 that cervical cancer screening should

NOTE Confidence: 0.887506677

00:12:17.396 --> 00:12:21.284 begin at age 21 and no earlier than

NOTE Confidence: 0.887506677

00:12:21.380 --> 00:12:24.654 21 regardless of the age of sexual

NOTE Confidence: 0.887506677

00:12:24.654 --> 00:12:28.320 onset and the main reason for this is.

NOTE Confidence: 0.887506677

00:12:28.320 --> 00:12:31.547 The main concern that will be associated

NOTE Confidence: 0.887506677

00:12:31.547 --> 00:12:34.372 with adverse outcomes with follow-up of

NOTE Confidence: 0.887506677

00:12:34.372 --> 00:12:37.096 young reproductive age women when they

NOTE Confidence: 0.887506677

00:12:37.096 --> 00:12:39.858 have minor cytologic abnormalities.

NOTE Confidence: 0.887506677

00:12:39.860 --> 00:12:42.191 The risk in less than 21 years

NOTE Confidence: 0.887506677

00:12:42.191 --> 00:12:44.690 of age is about zero point,

NOTE Confidence: 0.887506677

00:12:44.690 --> 00:12:46.318 1% for cervical cancer.

NOTE Confidence: 0.887506677

00:12:46.318 --> 00:12:48.804 For that reason, most guidelines,

NOTE Confidence: 0.887506677

00:12:48.804 --> 00:12:50.068 including USPSTF,

NOTE Confidence: 0.887506677

00:12:50.068 --> 00:12:53.228 do not recommend starting cervical

NOTE Confidence: 0.887506677

00:12:53.228 --> 00:12:56.107 cancer screening prior to age 21.

NOTE Confidence: 0.834902441666667

00:12:58.240 --> 00:13:02.496 As far as ages 21 to 29 group is concerned.

NOTE Confidence: 0.834902441666667

00:13:02.496 --> 00:13:06.118 We have one of two ways of screening these,

NOTE Confidence: 0.834902441666667

00:13:06.120 --> 00:13:08.224 uh, these young women.

NOTE Confidence: 0.834902441666667

00:13:08.224 --> 00:13:10.328 USPSTF recommends are cytology

NOTE Confidence: 0.834902441666667

00:13:10.328 --> 00:13:12.440 alone every three years.

NOTE Confidence: 0.834902441666667

00:13:12.440 --> 00:13:14.376 On the other hand,

NOTE Confidence: 0.834902441666667

00:13:14.376 --> 00:13:17.280 the most recent 2020 guidelines from

NOTE Confidence: 0.834902441666667

00:13:17.376 --> 00:13:21.018 American Cancer Society prefers HPV testing

NOTE Confidence: 0.834902441666667

00:13:21.018 --> 00:13:24.880 alone starting age 2125 as opposed to 21,

NOTE Confidence: 0.834902441666667

00:13:24.880 --> 00:13:28.170 and doing this screening every five years.

NOTE Confidence: 0.834902441666667

00:13:28.170 --> 00:13:29.590 But the important thing

NOTE Confidence: 0.834902441666667

00:13:29.590 --> 00:13:31.365 about HPV testing is 1.

NOTE Confidence: 0.834902441666667

00:13:31.370 --> 00:13:33.224 It's not available in all institutions

NOTE Confidence: 0.834902441666667

00:13:33.224 --> 00:13:36.167 in the US or in many parts of the world,

NOTE Confidence: 0.834902441666667

00:13:36.170 --> 00:13:39.201 and it only it can only be

NOTE Confidence: 0.834902441666667

00:13:39.201 --> 00:13:42.327 performed with the two FDA approved

NOTE Confidence: 0.834902441666667

00:13:42.327 --> 00:13:44.365 primary HPV testing methods,

NOTE Confidence: 0.834902441666667

00:13:44.365 --> 00:13:46.805 including the one from COBAS and on clarity.

NOTE Confidence: 0.834902441666667

00:13:46.810 --> 00:13:48.665 So it uses a bit limited at

NOTE Confidence: 0.834902441666667

00:13:48.665 --> 00:13:50.140 the time at the time.

NOTE Confidence: 0.834902441666667

00:13:50.140 --> 00:13:53.148 Being in the US there are countries like

NOTE Confidence: 0.834902441666667

00:13:53.148 --> 00:13:55.788 Australia and Netherlands and UK which

NOTE Confidence: 0.834902441666667

00:13:55.788 --> 00:13:58.506 which has these tests readily available.

NOTE Confidence: 0.834902441666667

00:13:58.510 --> 00:14:00.724 And they have been employing HPV

NOTE Confidence: 0.834902441666667

00:14:00.724 --> 00:14:02.830 testing as their preferred strategy.

NOTE Confidence: 0.808442895

00:14:05.290 --> 00:14:07.494 The rationale for uh,

NOTE Confidence: 0.808442895

00:14:07.494 --> 00:14:11.358 USPSTF recommending age 21 to initiate

NOTE Confidence: 0.808442895

00:14:11.358 --> 00:14:14.760 cervical screening is again the very

NOTE Confidence: 0.808442895

00:14:14.760 --> 00:14:17.700 low incidence of cervical cancer being

NOTE Confidence: 0.808442895

00:14:17.700 --> 00:14:20.770 zero point 1% and they favor cytology

NOTE Confidence: 0.808442895

00:14:20.770 --> 00:14:24.635 or Pap smear over HPV testing because of

NOTE Confidence: 0.808442895

00:14:24.635 --> 00:14:28.303 the higher rates of transient HPV infection,

NOTE Confidence: 0.808442895

00:14:28.310 --> 00:14:30.938 this thought process is that if

NOTE Confidence: 0.808442895

00:14:30.938 --> 00:14:34.128 we do HPV testing in young women,

NOTE Confidence: 0.808442895

00:14:34.130 --> 00:14:35.480 they are more likely to test.

NOTE Confidence: 0.808442895

00:14:35.480 --> 00:14:37.307 Positive when we are going to put

NOTE Confidence: 0.808442895

00:14:37.307 --> 00:14:38.720 them through unnecessary colposcopies.

NOTE Confidence: 0.808442895

00:14:38.720 --> 00:14:40.500 Cervical biopsies and colonization

NOTE Confidence: 0.808442895

00:14:40.500 --> 00:14:42.725 biopsies that would then impair

NOTE Confidence: 0.808442895

00:14:42.725 --> 00:14:44.409 their obstetric outcomes.

NOTE Confidence: 0.808442895

00:14:44.410 --> 00:14:47.170 And these guidelines from USPSTF.

NOTE Confidence: 0.808442895

00:14:47.170 --> 00:14:49.600 They don't account for HPV

NOTE Confidence: 0.808442895

00:14:49.600 --> 00:14:51.058 vaccination rate rate,

NOTE Confidence: 0.808442895

00:14:51.060 --> 00:14:53.736 so that's one of the shortcomings

NOTE Confidence: 0.808442895

00:14:53.736 --> 00:14:55.074 of these guidelines.

NOTE Confidence: 0.808442895

00:14:55.080 --> 00:14:58.559 When we look at American Cancer Society

NOTE Confidence: 0.808442895

00:14:58.559 --> 00:15:01.818 recommending age of onset for screening,

NOTE Confidence: 0.808442895

00:15:01.820 --> 00:15:04.360 25 is.

NOTE Confidence: 0.808442895

00:15:04.360 --> 00:15:07.980 They cite 0.8% cervical cancer

NOTE Confidence: 0.808442895

00:15:07.980 --> 00:15:12.310 rate prior to age 25 and.

NOTE Confidence: 0.808442895

00:15:12.310 --> 00:15:15.160 It it was deemed not to be cost effective to

NOTE Confidence: 0.808442895

00:15:15.230 --> 00:15:18.146 screen women prior to age 25 for that reason.

NOTE Confidence: 0.808442895

00:15:18.150 --> 00:15:18.597 However,

NOTE Confidence: 0.808442895

00:15:18.597 --> 00:15:21.279 they do prefer primary HPV testing

NOTE Confidence: 0.808442895

00:15:21.279 --> 00:15:24.158 due to higher specificity and the

NOTE Confidence: 0.808442895

00:15:24.158 --> 00:15:26.588 one plus from these guidelines

NOTE Confidence: 0.808442895

00:15:26.588 --> 00:15:29.483 over USPSTF is that they account

NOTE Confidence: 0.808442895

00:15:29.483 --> 00:15:31.323 for HPV vaccination rates.

NOTE Confidence: 0.808442895

00:15:31.330 --> 00:15:36.085 When we look at the age group 30 to 6465,

NOTE Confidence: 0.808442895

00:15:36.085 --> 00:15:38.110 this is going to be a big pool of

NOTE Confidence: 0.808442895

00:15:38.175 --> 00:15:40.485 patients and we have three options here.

NOTE Confidence: 0.808442895

00:15:40.490 --> 00:15:42.723 We can either do Co testing which

NOTE Confidence: 0.808442895

00:15:42.723 --> 00:15:44.903 is known as combination of cytology

NOTE Confidence: 0.808442895

00:15:44.903 --> 00:15:47.976 or pap smear plus HPV test and this

NOTE Confidence: 0.808442895

00:15:47.976 --> 00:15:50.209 can be done every five years and

NOTE Confidence: 0.808442895

00:15:50.209 --> 00:15:52.606 not any more frequent than that.

NOTE Confidence: 0.808442895

00:15:52.606 --> 00:15:55.240 The second option would be primary

NOTE Confidence: 0.808442895

00:15:55.315 --> 00:15:57.420 HPV testing every five years

NOTE Confidence: 0.808442895

00:15:57.420 --> 00:15:59.104 or cytology alone pop,

NOTE Confidence: 0.808442895

00:15:59.110 --> 00:16:00.870 smear alone every three years.

NOTE Confidence: 0.808442895

00:16:00.870 --> 00:16:03.320 So one of these three would be.

NOTE Confidence: 0.808442895

00:16:03.320 --> 00:16:06.212 Reasonable as far as both of

NOTE Confidence: 0.808442895

00:16:06.212 --> 00:16:08.140 these guidelines are concerned.

NOTE Confidence: 0.808442895

00:16:08.140 --> 00:16:10.192 The USPSTF does not prefer one

NOTE Confidence: 0.808442895

00:16:10.192 --> 00:16:12.380 or the one over the other.

NOTE Confidence: 0.808442895

00:16:12.380 --> 00:16:12.947 However,

NOTE Confidence: 0.808442895

00:16:12.947 --> 00:16:15.215 American Cancer Society favors

NOTE Confidence: 0.808442895

00:16:15.215 --> 00:16:18.050 primary HPV testing every five

NOTE Confidence: 0.808442895

00:16:18.133 --> 00:16:22.250 years for women aged 30 to 64.

NOTE Confidence: 0.808442895

00:16:22.250 --> 00:16:26.970 How about, uh, women over age 65?

NOTE Confidence: 0.808442895

00:16:26.970 --> 00:16:29.784 Eventually this age group we will decide

NOTE Confidence: 0.808442895

00:16:29.784 --> 00:16:32.029 to discontinue or continue screening

NOTE Confidence: 0.808442895

00:16:32.029 --> 00:16:34.939 based on the patient's prior results,

NOTE Confidence: 0.808442895

00:16:34.940 --> 00:16:36.326 life expectancy,

NOTE Confidence: 0.808442895

00:16:36.326 --> 00:16:39.098 and shared decision making.

NOTE Confidence: 0.808442895

00:16:39.100 --> 00:16:41.550 If the patients never have had any

NOTE Confidence: 0.808442895

00:16:41.550 --> 00:16:44.640 CI and two or high grade cervical

NOTE Confidence: 0.808442895

00:16:44.640 --> 00:16:47.090 precancer lesions and they have

NOTE Confidence: 0.808442895

00:16:47.090 --> 00:16:49.139 adequate negative screening,

NOTE Confidence: 0.808442895

00:16:49.140 --> 00:16:52.122 which is defined as three consecutive

NOTE Confidence: 0.808442895

00:16:52.122 --> 00:16:54.551 negative pups or two consecutive

NOTE Confidence: 0.808442895

00:16:54.551 --> 00:16:56.936 negative primary HPV testing or

NOTE Confidence: 0.808442895

00:16:56.936 --> 00:16:58.778 two consecutive negative call

NOTE Confidence: 0.808442895

00:16:58.778 --> 00:17:01.214 tests within the last 10 years.

NOTE Confidence: 0.808442895

00:17:01.220 --> 00:17:03.420 This is defined as adequate

NOTE Confidence: 0.808442895

00:17:03.420 --> 00:17:04.740 negative prior screening.

NOTE Confidence: 0.808442895

00:17:04.740 --> 00:17:07.276 These women can preferably

NOTE Confidence: 0.808442895

00:17:07.276 --> 00:17:09.178 discontinue cervical cancer.

NOTE Confidence: 0.808442895

00:17:09.180 --> 00:17:11.650 Screening in many European countries.

NOTE Confidence: 0.808442895

00:17:11.650 --> 00:17:14.959 UM, they do continue until late 75.

NOTE Confidence: 0.808442895

00:17:14.959 --> 00:17:16.995 Considering the improved life

NOTE Confidence: 0.808442895

00:17:16.995 --> 00:17:20.270 expectancy in the last couple decades.

NOTE Confidence: 0.808442895

00:17:20.270 --> 00:17:22.995 And most guidelines do not

NOTE Confidence: 0.808442895

00:17:22.995 --> 00:17:25.175 study this particular question,

NOTE Confidence: 0.808442895

00:17:25.180 --> 00:17:27.564 so I I do a shared decision making

NOTE Confidence: 0.808442895

00:17:27.564 --> 00:17:30.576 with the patients when it comes to

NOTE Confidence: 0.808442895

00:17:30.576 --> 00:17:32.452 stopping cervical cancer screening.

NOTE Confidence: 0.808442895

00:17:32.460 --> 00:17:34.050 65 is not a hard stop.

NOTE Confidence: 0.907846815714286

00:17:36.320 --> 00:17:39.176 If the patients had a total hysterectomy,

NOTE Confidence: 0.907846815714286

00:17:39.180 --> 00:17:41.329 meaning they are cervix and uterus had

NOTE Confidence: 0.907846815714286

00:17:41.329 --> 00:17:43.648 been removed and they never have had

NOTE Confidence: 0.907846815714286

00:17:43.648 --> 00:17:45.658 any high grade cervical precancer cells,

NOTE Confidence: 0.907846815714286

00:17:45.660 --> 00:17:47.562 we can stop screening even though

NOTE Confidence: 0.907846815714286

00:17:47.562 --> 00:17:49.840 the patient might be younger than 65.

NOTE Confidence: 0.907846815714286

00:17:49.840 --> 00:17:51.660 Most women who needs hysterectomies,

NOTE Confidence: 0.907846815714286

00:17:51.660 --> 00:17:53.640 they do need it for abnormal

NOTE Confidence: 0.907846815714286

00:17:53.640 --> 00:17:55.330 uterine bleeding, which is.

NOTE Confidence: 0.907846815714286

00:17:55.330 --> 00:17:59.450 Something they struggle with prior to age 50.

NOTE Confidence: 0.907846815714286

00:17:59.450 --> 00:18:01.970 So if we have a patient age 45 who is

NOTE Confidence: 0.907846815714286

00:18:02.045 --> 00:18:04.787 done with childbearing and underwent a

NOTE Confidence: 0.907846815714286

00:18:04.787 --> 00:18:07.384 hysterectomy with removal of their cervix

NOTE Confidence: 0.907846815714286

00:18:07.384 --> 00:18:10.168 and uterus and they never have had any

NOTE Confidence: 0.907846815714286

00:18:10.170 --> 00:18:15.156 CIN 2 or high grade pre cancers in the past,

NOTE Confidence: 0.907846815714286

00:18:15.156 --> 00:18:17.004 that patient can be.

NOTE Confidence: 0.907846815714286

00:18:17.010 --> 00:18:21.006 Can stop screening for cervical cancer

NOTE Confidence: 0.907846815714286

00:18:21.010 --> 00:18:25.289 when is not appropriate to stop at age 65.

NOTE Confidence: 0.907846815714286

00:18:25.289 --> 00:18:27.083 If a patient has had these

NOTE Confidence: 0.907846815714286

00:18:27.083 --> 00:18:28.390 high grade precancer cells,

NOTE Confidence: 0.907846815714286

00:18:28.390 --> 00:18:31.414 namely CIN 2-3 or adenocarcinoma in situ,

NOTE Confidence: 0.907846815714286

00:18:31.420 --> 00:18:33.682 2 then routine screening should continue

NOTE Confidence: 0.907846815714286

00:18:33.682 --> 00:18:36.296 for an additional 20 years from the

NOTE Confidence: 0.907846815714286

00:18:36.296 --> 00:18:38.372 last high grade precancer lesion and

NOTE Confidence: 0.907846815714286

00:18:38.372 --> 00:18:40.995 that might well extend beyond age 65.

NOTE Confidence: 0.907846815714286

00:18:40.995 --> 00:18:44.320 These all everything we talked so far

NOTE Confidence: 0.907846815714286

00:18:44.320 --> 00:18:46.545 essentially relates to average risk

NOTE Confidence: 0.907846815714286

00:18:46.545 --> 00:18:50.110 patients when it comes to high risk patients,

NOTE Confidence: 0.907846815714286

00:18:50.110 --> 00:18:52.686 we talk about patients with HIV patients

NOTE Confidence: 0.907846815714286

00:18:52.686 --> 00:18:55.640 who have been exposed to death in utero,

NOTE Confidence: 0.907846815714286

00:18:55.640 --> 00:18:59.120 or have immunosuppression for any reason.

NOTE Confidence: 0.907846815714286

00:18:59.120 --> 00:19:00.392 For those patients,

NOTE Confidence: 0.907846815714286

00:19:00.392 --> 00:19:03.360 the guidelines are a little bit more

NOTE Confidence: 0.907846815714286

00:19:03.441 --> 00:19:05.561 strict and the recommendations are

NOTE Confidence: 0.907846815714286

00:19:05.561 --> 00:19:08.433 to do cytology or pop smear every

NOTE Confidence: 0.907846815714286

00:19:08.433 --> 00:19:09.312 three years annually.

NOTE Confidence: 0.907846815714286

00:19:09.312 --> 00:19:11.425 Three years in a row and if

NOTE Confidence: 0.907846815714286

00:19:11.425 --> 00:19:12.597 the results are normal.

NOTE Confidence: 0.907846815714286

00:19:12.600 --> 00:19:15.858 And we can space the screening out to every

NOTE Confidence: 0.907846815714286

00:19:15.858 --> 00:19:18.967 three years if we decide to do Co testing.

NOTE Confidence: 0.907846815714286

00:19:18.970 --> 00:19:22.386 Meaning we do a pop smear along with.

NOTE Confidence: 0.907846815714286

00:19:22.390 --> 00:19:24.646 HPV testing at as the baseline

NOTE Confidence: 0.907846815714286

00:19:24.646 --> 00:19:26.979 and both side topology and HPV

NOTE Confidence: 0.907846815714286

00:19:26.979 --> 00:19:28.854 result came back as negative.

NOTE Confidence: 0.907846815714286

00:19:28.860 --> 00:19:30.281 Then we can go ahead and screen

NOTE Confidence: 0.907846815714286

00:19:30.281 --> 00:19:31.429 these women every three years.

NOTE Confidence: 0.907846815714286

00:19:31.430 --> 00:19:33.474 Moving forward we do not stop at

NOTE Confidence: 0.907846815714286

00:19:33.474 --> 00:19:36.101 age 65 given the higher risk of HPV

NOTE Confidence: 0.907846815714286

00:19:36.101 --> 00:19:38.284 persistent and higher risk of high

NOTE Confidence: 0.907846815714286

00:19:38.284 --> 00:19:40.424 grade precancer lesions in these

NOTE Confidence: 0.907846815714286

00:19:40.424 --> 00:19:42.517 women we continue throughout lifetime

NOTE Confidence: 0.907846815714286

00:19:42.517 --> 00:19:45.156 and we do have a lower threshold

NOTE Confidence: 0.907846815714286

00:19:45.156 --> 00:19:48.000 to do colposcopies and biopsies

NOTE Confidence: 0.907846815714286

00:19:48.000 --> 00:19:51.798 when we look at future directions.

NOTE Confidence: 0.907846815714286

00:19:51.800 --> 00:19:54.059 One thing to consider is going to be the.

NOTE Confidence: 0.907846815714286

00:19:54.060 --> 00:19:57.510 Impact of HPV vaccination is the

NOTE Confidence: 0.907846815714286

00:19:57.510 --> 00:19:59.235 proportional vaccinated individuals

NOTE Confidence: 0.907846815714286

00:19:59.235 --> 00:20:01.798 increases the prevalence of high risk

NOTE Confidence: 0.907846815714286

00:20:01.798 --> 00:20:04.822 HPV types is expected to decrease and

NOTE Confidence: 0.907846815714286

00:20:04.822 --> 00:20:07.918 that will eventually reduce the positive

NOTE Confidence: 0.907846815714286

00:20:07.918 --> 00:20:10.273 predictive value for both cytology,

NOTE Confidence: 0.907846815714286

00:20:10.273 --> 00:20:10.714 pop,

NOTE Confidence: 0.907846815714286

00:20:10.714 --> 00:20:12.919 smear and primary HPV testing.

NOTE Confidence: 0.907846815714286

00:20:12.920 --> 00:20:15.482 So we have some ongoing randomized

NOTE Confidence: 0.907846815714286

00:20:15.482 --> 00:20:17.680 control trials to evaluate the

NOTE Confidence: 0.907846815714286

00:20:17.680 --> 00:20:21.352 performance of primary HPV testing versus

NOTE Confidence: 0.907846815714286

00:20:21.352 --> 00:20:24.020 cytology in vaccinated HPV vaccine.

NOTE Confidence: 0.907846815714286

00:20:24.020 --> 00:20:25.490 Get the month.

NOTE Confidence: 0.907846815714286

00:20:25.490 --> 00:20:27.115 The second thing to consider

NOTE Confidence: 0.907846815714286

00:20:27.115 --> 00:20:29.091 moving forward in the next decade

NOTE Confidence: 0.907846815714286

00:20:29.091 --> 00:20:31.107 is going to be probably we will.

NOTE Confidence: 0.907846815714286

00:20:31.110 --> 00:20:33.468 We will see a diminishing role

NOTE Confidence: 0.907846815714286

00:20:33.468 --> 00:20:35.933 of cytology and uptake in primary

NOTE Confidence: 0.907846815714286

00:20:35.933 --> 00:20:38.818 HPV testing is the countries such

NOTE Confidence: 0.907846815714286

00:20:38.818 --> 00:20:40.886 as Australia and Netherlands.

NOTE Confidence: 0.907846815714286

00:20:40.890 --> 00:20:43.602 They that has the lowest rate of cervical

NOTE Confidence: 0.907846815714286

00:20:43.602 --> 00:20:46.465 cancer have been employing for over 10 years.

NOTE Confidence: 0.907846815714286

00:20:46.470 --> 00:20:48.674 The other possible practical

NOTE Confidence: 0.907846815714286

00:20:48.674 --> 00:20:51.429 solution to improving the uptake

NOTE Confidence: 0.907846815714286

00:20:51.429 --> 00:20:54.397 in screening is self sampling.

NOTE Confidence: 0.907846815714286

00:20:54.400 --> 00:20:57.250 Then Shirley patients will start sampling

NOTE Confidence: 0.907846815714286

00:20:57.250 --> 00:21:00.397 themselves in in in in any setting

NOTE Confidence: 0.907846815714286

00:21:00.397 --> 00:21:03.120 and mail these to the providers for

NOTE Confidence: 0.773971293809524

00:21:03.203 --> 00:21:05.380 evaluation. However, at the time being

NOTE Confidence: 0.773971293809524

00:21:05.380 --> 00:21:07.820 this is not an FDA approved strategy,

NOTE Confidence: 0.773971293809524

00:21:07.820 --> 00:21:11.318 so I'm hoping that it will be enabling

NOTE Confidence: 0.773971293809524

00:21:11.318 --> 00:21:14.906 providers to improve the uptake in

NOTE Confidence: 0.773971293809524

00:21:14.906 --> 00:21:19.020 screening once FDA approves self sampling.

NOTE Confidence: 0.773971293809524

00:21:19.020 --> 00:21:21.249 Summary of guidelines.

NOTE Confidence: 0.773971293809524

00:21:21.249 --> 00:21:24.964 Essentially, 2012 was the previous.

NOTE Confidence: 0.773971293809524

00:21:24.970 --> 00:21:26.526 American Cancer Society guidelines.

NOTE Confidence: 0.773971293809524

00:21:26.526 --> 00:21:28.471 Before the 2020 and the

NOTE Confidence: 0.773971293809524

00:21:28.471 --> 00:21:30.348 age of onset for screening,

NOTE Confidence: 0.773971293809524

00:21:30.350 --> 00:21:32.870 then was 21 and age two stop,

NOTE Confidence: 0.773971293809524

00:21:32.870 --> 00:21:35.245 screening was 65 with pop

NOTE Confidence: 0.773971293809524

00:21:35.245 --> 00:21:37.145 tests every three years.

NOTE Confidence: 0.773971293809524

00:21:37.150 --> 00:21:39.670 As we look at the most recent

NOTE Confidence: 0.773971293809524

00:21:39.670 --> 00:21:41.619 guidelines we talked about 2018,

NOTE Confidence: 0.773971293809524

00:21:41.620 --> 00:21:45.730 USPSTF and 2020 American Cancer Society.

NOTE Confidence: 0.773971293809524

00:21:45.730 --> 00:21:48.824 There is not much changes to USPSTF

NOTE Confidence: 0.773971293809524

00:21:48.824 --> 00:21:50.975 guidelines which says we should

NOTE Confidence: 0.773971293809524

00:21:50.975 --> 00:21:53.579 start at age 21 and stop screening

NOTE Confidence: 0.773971293809524

00:21:53.579 --> 00:21:56.438 for cervical cancer at age 65 and

NOTE Confidence: 0.773971293809524

00:21:56.438 --> 00:21:59.230 for women less than 30 years of age,

NOTE Confidence: 0.773971293809524

00:21:59.230 --> 00:22:02.163 pop smear is preferred over HPV testing

NOTE Confidence: 0.773971293809524

00:22:02.163 --> 00:22:04.854 since there is such high prevalence

NOTE Confidence: 0.773971293809524

00:22:04.854 --> 00:22:07.548 of HPV exposure in the younger.

NOTE Confidence: 0.773971293809524

00:22:07.550 --> 00:22:09.494 Nations and that is most likely

NOTE Confidence: 0.773971293809524

00:22:09.494 --> 00:22:10.466 to resolve them,

NOTE Confidence: 0.773971293809524

00:22:10.470 --> 00:22:12.294 persist and over age 30 we

NOTE Confidence: 0.773971293809524

00:22:12.294 --> 00:22:14.630 can use one of three methods,

NOTE Confidence: 0.773971293809524

00:22:14.630 --> 00:22:16.868 namely pop test every three years,

NOTE Confidence: 0.773971293809524

00:22:16.870 --> 00:22:19.570 primary HPV testing every five years

NOTE Confidence: 0.773971293809524

00:22:19.570 --> 00:22:22.313 or Co testing that combines the

NOTE Confidence: 0.773971293809524

00:22:22.313 --> 00:22:25.302 pop with the HPV every five years.

NOTE Confidence: 0.773971293809524

00:22:25.310 --> 00:22:28.530 When we look at American Cancer Society,

NOTE Confidence: 0.773971293809524

00:22:28.530 --> 00:22:29.790 it's a little easier to remember,

NOTE Confidence: 0.773971293809524

00:22:29.790 --> 00:22:31.854 and I think this is going to be.

NOTE Confidence: 0.773971293809524

00:22:31.860 --> 00:22:34.380 Kind of more prevalent moving forward.

NOTE Confidence: 0.773971293809524

00:22:34.380 --> 00:22:36.630 Once we continue to understand the

NOTE Confidence: 0.773971293809524

00:22:36.630 --> 00:22:39.077 importance of HPV in causing all

NOTE Confidence: 0.773971293809524

00:22:39.077 --> 00:22:40.825 these precancerous and cancerous

NOTE Confidence: 0.773971293809524

00:22:40.825 --> 00:22:43.847 changes and the age to start screening

NOTE Confidence: 0.773971293809524

00:22:43.847 --> 00:22:46.259 for American Cancer Society is 25.

NOTE Confidence: 0.773971293809524

00:22:46.260 --> 00:22:48.540 They recommend stopping at age

NOTE Confidence: 0.773971293809524

00:22:48.540 --> 00:22:51.228 65 and primary HPV testing every

NOTE Confidence: 0.773971293809524

00:22:51.228 --> 00:22:54.250 five years is what is preferred.

NOTE Confidence: 0.773971293809524

00:22:54.250 --> 00:22:57.146 So cervical cancer is one kind of women

NOTE Confidence: 0.773971293809524

00:22:57.146 --> 00:22:59.430 cancer that we can definitely prevent

NOTE Confidence: 0.773971293809524

00:22:59.430 --> 00:23:02.438 now that we know that over 99.7% of

NOTE Confidence: 0.773971293809524

00:23:02.438 --> 00:23:05.590 these cases are caused by the HPV virus.

NOTE Confidence: 0.773971293809524

00:23:05.590 --> 00:23:08.481 So as we increase the awareness and

NOTE Confidence: 0.773971293809524

00:23:08.481 --> 00:23:11.246 increase the uptake of screening and

NOTE Confidence: 0.773971293809524

00:23:11.246 --> 00:23:13.182 HPV vaccination S GYN oncologists,

NOTE Confidence: 0.773971293809524

00:23:13.182 --> 00:23:15.126 we hope to eliminate this cancer

NOTE Confidence: 0.773971293809524

00:23:15.126 --> 00:23:16.890 in the next decade or two.

NOTE Confidence: 0.773971293809524

00:23:16.890 --> 00:23:18.888 And this is all I have.

NOTE Confidence: 0.773971293809524

00:23:18.890 --> 00:23:21.185 I'll see if I have any time for questions.

NOTE Confidence: 0.6468805834

00:23:23.000 --> 00:23:24.428 Thank you very much.

NOTE Confidence: 0.6468805834

00:23:24.428 --> 00:23:26.570 Document there is please the audience.

NOTE Confidence: 0.6468805834

00:23:26.570 --> 00:23:28.908 If you can post any questions at

NOTE Confidence: 0.6468805834

00:23:28.908 --> 00:23:30.972 the Q&amp;A tab for documentaries that

NOTE Confidence: 0.6468805834

00:23:30.972 --> 00:23:33.450 be great and now we're going to

NOTE Confidence: 0.6468805834

00:23:33.522 --> 00:23:35.766 move on to breast cancer screening

NOTE Confidence: 0.6468805834

00:23:35.766 --> 00:23:37.790 with Doctor Lasberg Dr Jasper.

NOTE Confidence: 0.6468805834

00:23:37.790 --> 00:23:39.038 Thank you very much for coming

NOTE Confidence: 0.6468805834

00:23:39.038 --> 00:23:40.820 to talk to us about this tonight.

NOTE Confidence: 0.948669615

00:23:42.640 --> 00:23:45.624 Thank you so much. Can you hear me?

NOTE Confidence: 0.948669615

00:23:45.630 --> 00:23:48.312 Great thank you everyone for joining

NOTE Confidence: 0.948669615

00:23:48.312 --> 00:23:51.970 the I will talk today about practical

NOTE Confidence: 0.948669615

00:23:51.970 --> 00:23:55.528 applications of breast cancer screening with

NOTE Confidence: 0.948669615

00:23:55.528 --> 00:23:59.568 an overview of breast cancer risk factors,

NOTE Confidence: 0.948669615

00:23:59.570 --> 00:24:02.041 how to screen your average risk patients

NOTE Confidence: 0.948669615

00:24:02.041 --> 00:24:04.452 patients which will be the majority of

NOTE Confidence: 0.948669615

00:24:04.452 --> 00:24:06.390 your population as well as screening

NOTE Confidence: 0.948669615

00:24:06.456 --> 00:24:08.466 high risk patients and then wrapping

NOTE Confidence: 0.948669615

00:24:08.466 --> 00:24:10.906 up quickly with some discussion of

NOTE Confidence: 0.948669615

00:24:10.906 --> 00:24:13.098 modifiable lifestyle risk factors

NOTE Confidence: 0.948669615

00:24:13.098 --> 00:24:16.520 that applies to all risk patients.

NOTE Confidence: 0.948669615

00:24:16.520 --> 00:24:21.528 So female stocks remains the most the

NOTE Confidence: 0.948669615

00:24:21.528 --> 00:24:23.556 highest risk factor for breast cancer,

NOTE Confidence: 0.948669615

00:24:23.560 --> 00:24:27.200 as all of you know as well as advancing age,

NOTE Confidence: 0.948669615

00:24:27.200 --> 00:24:30.405 family history and prolonged estrogen

NOTE Confidence: 0.948669615

00:24:30.405 --> 00:24:32.534 exposure, which can be further

NOTE Confidence: 0.948669615

00:24:32.534 --> 00:24:34.760 subdivided into early age of manner.

NOTE Confidence: 0.948669615

00:24:34.760 --> 00:24:36.680 Arch, late age of menopause,

NOTE Confidence: 0.948669615

00:24:36.680 --> 00:24:39.200 late pregnancy and hormone

NOTE Confidence: 0.948669615

00:24:39.200 --> 00:24:40.460 replacement therapy.

NOTE Confidence: 0.948669615

00:24:40.460 --> 00:24:42.260 There are additional risk factors,

NOTE Confidence: 0.948669615

00:24:42.260 --> 00:24:44.572 including exposure to radiation.

NOTE Confidence: 0.948669615

00:24:44.572 --> 00:24:45.728 Abnormal breast.

NOTE Confidence: 0.948669615

00:24:45.730 --> 00:24:48.085 Biopsy, postmenopausal obesity,

NOTE Confidence: 0.948669615

00:24:48.085 --> 00:24:51.225 and excess alcohol use.

NOTE Confidence: 0.948669615

00:24:51.230 --> 00:24:53.288 We will also talk about breast

NOTE Confidence: 0.948669615

00:24:53.288 --> 00:24:56.021 density as a risk factor for breast

NOTE Confidence: 0.948669615

00:24:56.021 --> 00:25:00.070 cancer in in the subsequent slide.

NOTE Confidence: 0.948669615

00:25:00.070 --> 00:25:02.626 So that there are multiple models

NOTE Confidence: 0.948669615

00:25:02.626 --> 00:25:04.330 for assessing your patients

NOTE Confidence: 0.948669615

00:25:04.403 --> 00:25:05.939 risk of breast cancer,

NOTE Confidence: 0.948669615

00:25:05.940 --> 00:25:07.680 and it can sometimes be

NOTE Confidence: 0.948669615

00:25:07.680 --> 00:25:09.850 confusing which one to go with.

NOTE Confidence: 0.948669615

00:25:09.850 --> 00:25:12.914 The Gale model is the most common one

NOTE Confidence: 0.948669615

00:25:12.914 --> 00:25:15.768 and it's easily searchable and it's

NOTE Confidence: 0.948669615

00:25:15.768 --> 00:25:19.000 relatively easy to do where the risk

NOTE Confidence: 0.948669615

00:25:19.000 --> 00:25:21.190 factors that are included include age,

NOTE Confidence: 0.948669615

00:25:21.190 --> 00:25:22.710 age of first period,

NOTE Confidence: 0.948669615

00:25:22.710 --> 00:25:24.610 age of first live birth,

NOTE Confidence: 0.948669615

00:25:24.610 --> 00:25:26.942 number of first degree,

NOTE Confidence: 0.948669615

00:25:26.942 --> 00:25:29.274 relatives with breast cancer.

NOTE Confidence: 0.948669615

00:25:29.280 --> 00:25:31.480 And history of breast biopsy,

NOTE Confidence: 0.948669615

00:25:31.480 --> 00:25:34.120 as well as history of pre malignant changes

NOTE Confidence: 0.948669615

00:25:34.120 --> 00:25:36.669 such as atypical ductal hyperplasia,

NOTE Confidence: 0.948669615

00:25:36.670 --> 00:25:38.935 does not consider family history

NOTE Confidence: 0.948669615

00:25:38.935 --> 00:25:41.200 beyond first degree of relatives,

NOTE Confidence: 0.948669615

00:25:41.200 --> 00:25:43.072 and this is one of the

NOTE Confidence: 0.948669615

00:25:43.072 --> 00:25:44.320 limitations of this tool,

NOTE Confidence: 0.948669615

00:25:44.320 --> 00:25:47.496 and it does not take into account other

NOTE Confidence: 0.948669615

00:25:47.496 --> 00:25:49.908 cancers or any paternal relatives

NOTE Confidence: 0.948669615

00:25:49.908 --> 00:25:52.980 with cancer in the risk assessment.

NOTE Confidence: 0.948669615

00:25:52.980 --> 00:25:53.883 For this reason,

NOTE Confidence: 0.948669615

00:25:53.883 --> 00:25:57.035 it may not be the most useful in making

NOTE Confidence: 0.948669615

00:25:57.035 --> 00:25:58.995 recommendations for risk reduction.

NOTE Confidence: 0.948669615

00:25:59.000 --> 00:26:01.440 Particularly in individuals with

NOTE Confidence: 0.948669615

00:26:01.440 --> 00:26:03.270 hereditary genetic syndromes,

NOTE Confidence: 0.948669615

00:26:03.270 --> 00:26:04.918 but as I said,

NOTE Confidence: 0.948669615

00:26:04.918 --> 00:26:06.566 it's relatively easy to

NOTE Confidence: 0.948669615

00:26:06.566 --> 00:26:08.919 use and very accessible.

NOTE Confidence: 0.948669615

00:26:08.920 --> 00:26:11.260 And more comprehensive tool is

NOTE Confidence: 0.948669615

00:26:11.260 --> 00:26:14.674 the Tyra Kuzyk or the Ibis model

NOTE Confidence: 0.948669615

00:26:14.674 --> 00:26:17.119 and this is more extensive,

NOTE Confidence: 0.948669615

00:26:17.120 --> 00:26:19.680 still very easily accessible by

NOTE Confidence: 0.948669615

00:26:19.680 --> 00:26:22.949 quick search online and it includes

NOTE Confidence: 0.948669615

00:26:22.949 --> 00:26:26.039 some additional non genetic risk

NOTE Confidence: 0.948669615

00:26:26.039 --> 00:26:29.220 factors including height and weight.

NOTE Confidence: 0.948669615

00:26:29.220 --> 00:26:33.250 For BMI it includes amounts

NOTE Confidence: 0.948669615

00:26:33.250 --> 00:26:35.668 of family history.

NOTE Confidence: 0.948669615

00:26:35.670 --> 00:26:39.854 Cast of the RC one and two mutation has the

NOTE Confidence: 0.948669615

00:26:39.854 --> 00:26:43.718 risk of invasive breast cancer DCIS overtime.

NOTE Confidence: 0.948669615

00:26:43.720 --> 00:26:44.390 I'm here,

NOTE Confidence: 0.948669615

00:26:44.390 --> 00:26:47.518 rest and a lifetime rest and it tends to

NOTE Confidence: 0.948669615

00:26:47.518 --> 00:26:50.136 perform best in a high risk population,

NOTE Confidence: 0.948669615

00:26:50.140 --> 00:26:52.420 but tends to overestimate risks,

NOTE Confidence: 0.948669615

00:26:52.420 --> 00:26:54.650 particularly in those with HPR.

NOTE Confidence: 0.948669615

00:26:54.650 --> 00:26:56.830 The newer the newest version,

NOTE Confidence: 0.948669615

00:26:56.830 --> 00:26:57.870 version eight,

NOTE Confidence: 0.948669615

00:26:57.870 --> 00:27:00.990 also takes into account breast density,

NOTE Confidence: 0.948669615

00:27:00.990 --> 00:27:03.710 which I will highlight again why that is

NOTE Confidence: 0.948669615

00:27:03.710 --> 00:27:06.380 important in the in a few slides coming up.

NOTE Confidence: 0.948669615

00:27:06.380 --> 00:27:10.240 Another older model class.

NOTE Confidence: 0.948669615

00:27:10.240 --> 00:27:13.368 Include as many factors as the Tier 2

NOTE Confidence: 0.948669615

00:27:13.368 --> 00:27:16.586 SEC and it tends to underestimate risk

NOTE Confidence: 0.948669615

00:27:16.586 --> 00:27:20.329 and for this reason not as recommended,

NOTE Confidence: 0.948669615

00:27:20.330 --> 00:27:22.282 and it tends to be an older data

NOTE Confidence: 0.948669615

00:27:22.282 --> 00:27:24.241 set and whether it's applicable

NOTE Confidence: 0.948669615

00:27:24.241 --> 00:27:25.645 to current population.

NOTE Confidence: 0.948669615

00:27:25.650 --> 00:27:27.960 This is this is one of the

NOTE Confidence: 0.948669615

00:27:27.960 --> 00:27:29.390 concerns about this tool.

NOTE Confidence: 0.948669615

00:27:29.390 --> 00:27:31.472 So if you compare the three

NOTE Confidence: 0.948669615

00:27:31.472 --> 00:27:32.860 models that I've listed

NOTE Confidence: 0.918982198181818

00:27:32.930 --> 00:27:35.223 here, you can see that the the Klaus

NOTE Confidence: 0.918982198181818

00:27:35.223 --> 00:27:37.476 model is the most limited and the

NOTE Confidence: 0.918982198181818

00:27:37.476 --> 00:27:39.498 tire acoustic or the Ibis model

NOTE Confidence: 0.918982198181818

00:27:39.571 --> 00:27:41.905 takes into account the most factors.

NOTE Confidence: 0.918982198181818

00:27:41.910 --> 00:27:43.950 So if you're particularly worried

NOTE Confidence: 0.918982198181818

00:27:43.950 --> 00:27:45.582 about your patients risk,

NOTE Confidence: 0.918982198181818

00:27:45.590 --> 00:27:48.534 that is the model that we would recommend.

NOTE Confidence: 0.918982198181818

00:27:48.540 --> 00:27:51.081 So quick take home points on risk

NOTE Confidence: 0.918982198181818

00:27:51.081 --> 00:27:53.220 assessment in your busy practice.

NOTE Confidence: 0.918982198181818

00:27:53.220 --> 00:27:55.220 Pick one calculator that

NOTE Confidence: 0.918982198181818

00:27:55.220 --> 00:27:57.220 you feel comfortable using.

NOTE Confidence: 0.918982198181818

00:27:57.220 --> 00:27:59.350 Know which patients are average risk

NOTE Confidence: 0.918982198181818

00:27:59.350 --> 00:28:01.975 versus those who are high risk and those

NOTE Confidence: 0.918982198181818

00:28:01.975 --> 00:28:04.440 are over 20% lifetime risk of breast cancer.

NOTE Confidence: 0.918982198181818

00:28:04.440 --> 00:28:06.813 I will talk more about the high

NOTE Confidence: 0.918982198181818

00:28:06.813 --> 00:28:08.280 risk population coming up and

NOTE Confidence: 0.918982198181818

00:28:08.280 --> 00:28:09.840 if there's a question on risk.

NOTE Confidence: 0.918982198181818

00:28:09.840 --> 00:28:10.832 Whether you're worried that

NOTE Confidence: 0.918982198181818

00:28:10.832 --> 00:28:12.072 your patient is higher risk,

NOTE Confidence: 0.918982198181818

00:28:12.080 --> 00:28:13.785 you can absolutely refer them

NOTE Confidence: 0.918982198181818

00:28:13.785 --> 00:28:16.080 to a high risk genetics program,

NOTE Confidence: 0.918982198181818

00:28:16.080 --> 00:28:18.536 and for any patient with any type of.

NOTE Confidence: 0.918982198181818

00:28:18.540 --> 00:28:21.850 These factors it's also important to

NOTE Confidence: 0.918982198181818

00:28:21.850 --> 00:28:24.000 address modifiable risk factors such

NOTE Confidence: 0.918982198181818

00:28:24.000 --> 00:28:27.140 as obesity, exercise and alcohol.

NOTE Confidence: 0.918982198181818

00:28:27.140 --> 00:28:29.636 So moving on to screening average

NOTE Confidence: 0.918982198181818

00:28:29.636 --> 00:28:30.884 risk breast patients.

NOTE Confidence: 0.918982198181818

00:28:30.890 --> 00:28:33.070 Obviously the point of screening

NOTE Confidence: 0.918982198181818

00:28:33.070 --> 00:28:35.977 is to identify breast cancers at a

NOTE Confidence: 0.918982198181818

00:28:35.977 --> 00:28:38.498 much earlier stage so that there

NOTE Confidence: 0.918982198181818

00:28:38.498 --> 00:28:41.594 is a lower chance of metastasis.

NOTE Confidence: 0.918982198181818

00:28:41.600 --> 00:28:44.120 And to have a curable disease.

NOTE Confidence: 0.918982198181818

00:28:44.120 --> 00:28:46.135 So the guidelines don't always

NOTE Confidence: 0.918982198181818

00:28:46.135 --> 00:28:47.747 agree on the age.

NOTE Confidence: 0.918982198181818

00:28:47.750 --> 00:28:48.785 To start screening,

NOTE Confidence: 0.918982198181818

00:28:48.785 --> 00:28:50.855 you can see all the different

NOTE Confidence: 0.918982198181818

00:28:50.855 --> 00:28:52.607 ages that are listed here,

NOTE Confidence: 0.918982198181818

00:28:52.610 --> 00:28:55.064 with the USPSTF being the most

NOTE Confidence: 0.918982198181818

00:28:55.064 --> 00:28:57.508 conservative with a start age of 50.

NOTE Confidence: 0.918982198181818

00:28:57.510 --> 00:29:00.012 Although most recently they have added

NOTE Confidence: 0.918982198181818

00:29:00.012 --> 00:29:02.553 the clause that patients in their

NOTE Confidence: 0.918982198181818

00:29:02.553 --> 00:29:04.971 40s could be screened after informed

NOTE Confidence: 0.918982198181818

00:29:04.971 --> 00:29:06.909 discussion with their providers.

NOTE Confidence: 0.918982198181818

00:29:06.910 --> 00:29:08.478 American Cancer Society were

NOTE Confidence: 0.918982198181818

00:29:08.478 --> 00:29:10.830 recommend starting at 45 and the

NOTE Confidence: 0.918982198181818

00:29:10.900 --> 00:29:12.828 American College of Radiology.

NOTE Confidence: 0.918982198181818

00:29:12.830 --> 00:29:14.699 As one of the few other societies,

NOTE Confidence: 0.918982198181818

00:29:14.700 --> 00:29:15.874 including NCCN,

NOTE Confidence: 0.918982198181818

00:29:15.874 --> 00:29:19.396 recommends starting annually at age 40.

NOTE Confidence: 0.918982198181818

00:29:19.400 --> 00:29:22.496 I have the NCCN guidelines here for you.

NOTE Confidence: 0.918982198181818

00:29:22.500 --> 00:29:24.060 As you can see again,

NOTE Confidence: 0.918982198181818

00:29:24.060 --> 00:29:26.508 if your patient is under the

NOTE Confidence: 0.918982198181818

00:29:26.508 --> 00:29:28.660 age 40 with average risk.

NOTE Confidence: 0.918982198181818

00:29:28.660 --> 00:29:31.756 The recommendation is for breast awareness,

NOTE Confidence: 0.918982198181818

00:29:31.760 --> 00:29:34.688 not necessarily breast self exams and

NOTE Confidence: 0.918982198181818

00:29:34.688 --> 00:29:37.140 clinical encounters or clinical exams.

NOTE Confidence: 0.918982198181818

00:29:37.140 --> 00:29:39.450 Every one to three years.

NOTE Confidence: 0.918982198181818

00:29:39.450 --> 00:29:41.182 And an annual screening

NOTE Confidence: 0.918982198181818

00:29:41.182 --> 00:29:43.347 mammogram starting at age 40,

NOTE Confidence: 0.918982198181818

00:29:43.350 --> 00:29:45.735 with a preference for tomosynthesis

NOTE Confidence: 0.918982198181818

00:29:45.735 --> 00:29:47.643 or or 3D mammography,

NOTE Confidence: 0.918982198181818

00:29:47.650 --> 00:29:49.450 is available to the patient

NOTE Confidence: 0.918982198181818

00:29:49.450 --> 00:29:50.890 and in your practice.

NOTE Confidence: 0.918982198181818

00:29:50.890 --> 00:29:53.690 Patients with increased risk are listed here,

NOTE Confidence: 0.918982198181818

00:29:53.690 --> 00:29:54.468 and these.

NOTE Confidence: 0.918982198181818

00:29:54.468 --> 00:29:56.802 These include those who have a

NOTE Confidence: 0.918982198181818

00:29:56.802 --> 00:29:58.907 lifetime risk of greater than or

NOTE Confidence: 0.918982198181818

00:29:58.907 --> 00:30:01.564 equal to 20% thoracic radiation.

NOTE Confidence: 0.918982198181818

00:30:01.564 --> 00:30:05.849 Those with pre invasive lesions

NOTE Confidence: 0.918982198181818

00:30:05.849 --> 00:30:09.762 such as LCIADAH and a strong

NOTE Confidence: 0.918982198181818

00:30:09.762 --> 00:30:12.502 family history of genetic factors.

NOTE Confidence: 0.918982198181818

00:30:12.510 --> 00:30:15.638 Even though you may not be able to

NOTE Confidence: 0.918982198181818

00:30:15.638 --> 00:30:17.960 clearly identify their genetic risk.

NOTE Confidence: 0.918982198181818

00:30:17.960 --> 00:30:20.558 So for these average risk patients,

NOTE Confidence: 0.918982198181818

00:30:20.560 --> 00:30:21.832 it's important to.

00:30:21.832 --> 00:30:23.952 Our recommendation is to begin

00:30:23.952 --> 00:30:25.635 mammography at 8 between the

00:30:25.635 --> 00:30:27.740 ages of 40 to 45 annually.

00:30:27.740 --> 00:30:30.440 Which mammograms should you choose?

00:30:30.440 --> 00:30:33.164 I think the trend is moving

00:30:33.164 --> 00:30:34.980 towards offering tomosynthesis or

00:30:35.057 --> 00:30:37.437 3D mammography to most patients.

00:30:37.440 --> 00:30:39.960 It has improved resolution,

00:30:39.960 --> 00:30:41.850 reduced recall rate,

00:30:41.850 --> 00:30:44.738 and it takes a little longer to interpret.

00:30:44.740 --> 00:30:46.654 But the radiologist really has a

00:30:46.654 --> 00:30:48.660 much clearer view of what it is.

00:30:48.660 --> 00:30:50.928 Going on in the breast issue a

00:30:50.928 --> 00:30:53.286 question that often comes up is is

00:30:53.286 --> 00:30:55.266 this much higher radiation dose when

00:30:55.337 --> 00:30:57.929 we use 3D mammography and the answer is,

NOTE Confidence: 0.935314575555556

00:30:57.930 --> 00:31:00.396 it's only a very slight increase

NOTE Confidence: 0.935314575555556

00:31:00.396 --> 00:31:03.565 in whole body radiation with 13D

NOTE Confidence: 0.935314575555556

00:31:03.565 --> 00:31:06.790 mammogram rate increased radiation dose

NOTE Confidence: 0.935314575555556

00:31:06.790 --> 00:31:10.579 corresponding to about two months of

NOTE Confidence: 0.935314575555556

00:31:10.579 --> 00:31:12.987 natural annual background radiation.

NOTE Confidence: 0.935314575555556

00:31:12.990 --> 00:31:15.250 What about increased breast density?

NOTE Confidence: 0.935314575555556

00:31:15.250 --> 00:31:17.882 So, so if your patient is noted in

NOTE Confidence: 0.935314575555556

00:31:17.882 --> 00:31:20.702 the report to have kids or geniously

NOTE Confidence: 0.935314575555556

00:31:20.702 --> 00:31:22.787 dense or extremely dense grass,

NOTE Confidence: 0.935314575555556

00:31:22.790 --> 00:31:25.290 then in this particular case

NOTE Confidence: 0.935314575555556

00:31:25.290 --> 00:31:27.362 absolutely using 3D mammography

NOTE Confidence: 0.935314575555556

00:31:27.362 --> 00:31:29.506 or tomosynthesis is important.

NOTE Confidence: 0.935314575555556

00:31:29.510 --> 00:31:32.520 It both increases cancer detection

NOTE Confidence: 0.935314575555556

00:31:32.520 --> 00:31:34.928 rate and reduces recall.

NOTE Confidence: 0.935314575555556

00:31:34.930 --> 00:31:36.928 As as many of you know,

NOTE Confidence: 0.935314575555556

00:31:36.930 --> 00:31:39.765 dense breast tissue can can be very

NOTE Confidence: 0.935314575555556

00:31:39.765 --> 00:31:42.210 hard to interpret on mammography,

NOTE Confidence: 0.935314575555556

00:31:42.210 --> 00:31:44.802 and it's also an independent risk

NOTE Confidence: 0.935314575555556

00:31:44.802 --> 00:31:47.530 factor for breast cancer with with

NOTE Confidence: 0.935314575555556

00:31:47.530 --> 00:31:49.530 extremely dense breast tissue.

NOTE Confidence: 0.935314575555556

00:31:49.530 --> 00:31:52.296 Increasing the the the the future

NOTE Confidence: 0.935314575555556

00:31:52.296 --> 00:31:54.809 risk of breast cancer 5 fold.

NOTE Confidence: 0.935314575555556

00:31:54.810 --> 00:31:58.360 There is a law in place that in 27 states,

NOTE Confidence: 0.935314575555556

00:31:58.360 --> 00:31:59.080 including Connecticut,

NOTE Confidence: 0.935314575555556

00:31:59.080 --> 00:32:01.600 that patients need to be notified of

NOTE Confidence: 0.935314575555556

00:32:01.600 --> 00:32:04.006 their breast density on their mammography,

NOTE Confidence: 0.935314575555556

00:32:04.010 --> 00:32:05.834 and as you can see in the pie

NOTE Confidence: 0.935314575555556

00:32:05.834 --> 00:32:07.010 graph on the bottom,

NOTE Confidence: 0.935314575555556

00:32:07.010 --> 00:32:09.395 approximately half of your patients

NOTE Confidence: 0.935314575555556

00:32:09.395 --> 00:32:11.780 will have either heterogeneously dense

NOTE Confidence: 0.935314575555556

00:32:11.850 --> 00:32:13.980 breast or extremely dense breast.

NOTE Confidence: 0.935314575555556

00:32:13.980 --> 00:32:15.600 And these are the categories

NOTE Confidence: 0.935314575555556

00:32:15.600 --> 00:32:17.520 and more clear detail for you.

NOTE Confidence: 0.935314575555556

00:32:17.520 --> 00:32:20.194 The two categories you need to be

NOTE Confidence: 0.935314575555556

00:32:20.194 --> 00:32:22.477 most concerned about is Level 3 M 4.

NOTE Confidence: 0.935314575555556

00:32:22.480 --> 00:32:23.914 Which will be written in the

NOTE Confidence: 0.935314575555556

00:32:23.914 --> 00:32:25.560 in the report as hydrogenous.

NOTE Confidence: 0.935314575555556

00:32:25.560 --> 00:32:28.000 They danced or extremely dance.

NOTE Confidence: 0.935314575555556

00:32:28.000 --> 00:32:30.136 And So what is the action plan for

NOTE Confidence: 0.935314575555556

00:32:30.136 --> 00:32:32.120 your patients with high breast density?

NOTE Confidence: 0.935314575555556

00:32:32.120 --> 00:32:34.128 I think absolutely incorporating

NOTE Confidence: 0.935314575555556

00:32:34.128 --> 00:32:36.638 tomosynthesis or 3D mammogram in

NOTE Confidence: 0.935314575555556

00:32:36.638 --> 00:32:38.920 their annual imaging for sure,

NOTE Confidence: 0.935314575555556

00:32:38.920 --> 00:32:41.512 and then discussing the pros and

NOTE Confidence: 0.935314575555556

00:32:41.512 --> 00:32:44.306 cons of supplemental imaging with an

NOTE Confidence: 0.935314575555556

00:32:44.306 --> 00:32:46.290 automated whole breast ultrasound.

NOTE Confidence: 0.935314575555556

00:32:46.290 --> 00:32:48.666 This supplemental imaging increases

NOTE Confidence: 0.935314575555556

00:32:48.666 --> 00:32:52.796 cancer detection rate to about three to

NOTE Confidence: 0.935314575555556

00:32:52.796 --> 00:32:56.184 four additional cases per 1000 cases screen,

NOTE Confidence: 0.935314575555556

00:32:56.190 --> 00:32:57.680 so it's a modest increase,

NOTE Confidence: 0.935314575555556

00:32:57.680 --> 00:33:00.109 and it's important for patients to to

NOTE Confidence: 0.935314575555556

00:33:00.109 --> 00:33:02.930 be aware that it's not a huge increase.

NOTE Confidence: 0.935314575555556

00:33:02.930 --> 00:33:03.305 However,

NOTE Confidence: 0.935314575555556

00:33:03.305 --> 00:33:05.555 it has some additional drawbacks in

NOTE Confidence: 0.935314575555556

00:33:05.555 --> 00:33:07.790 addition to some additional costs.

NOTE Confidence: 0.935314575555556

00:33:07.790 --> 00:33:09.131 Depending on insurance,

NOTE Confidence: 0.935314575555556

00:33:09.131 --> 00:33:11.366 it can be associated with

NOTE Confidence: 0.935314575555556

00:33:11.366 --> 00:33:13.752 increased recall rates and false

NOTE Confidence: 0.935314575555556

00:33:13.752 --> 00:33:15.648 positives and increased biopsies,

NOTE Confidence: 0.935314575555556

00:33:15.650 --> 00:33:16.769 particularly in less.

NOTE Confidence: 0.935314575555556

00:33:16.769 --> 00:33:18.261 Experience centers therefore what

NOTE Confidence: 0.935314575555556

00:33:18.261 --> 00:33:20.369 what we're not recommending is that

NOTE Confidence: 0.935314575555556

00:33:20.369 --> 00:33:22.532 every one of your dance breast tissue

NOTE Confidence: 0.935314575555556

00:33:22.594 --> 00:33:24.730 patients have a whole breast ultrasound,

NOTE Confidence: 0.935314575555556

00:33:24.730 --> 00:33:27.262 but it should be a dialogue

NOTE Confidence: 0.935314575555556

00:33:27.262 --> 00:33:28.950 and shared decision making.

NOTE Confidence: 0.935314575555556

00:33:28.950 --> 00:33:31.547 So take home points for average risk,

NOTE Confidence: 0.935314575555556

00:33:31.550 --> 00:33:33.042 offer breast imaging starting

NOTE Confidence: 0.935314575555556

00:33:33.042 --> 00:33:34.907 at age 40 to 45.

NOTE Confidence: 0.935314575555556

00:33:34.910 --> 00:33:37.907 It has you have less recall rates with 3D

NOTE Confidence: 0.935314575555556

00:33:37.907 --> 00:33:40.489 mammograms regardless of your breast density,

NOTE Confidence: 0.935314575555556

00:33:40.490 --> 00:33:42.290 but surely for those with

NOTE Confidence: 0.935314575555556

00:33:42.290 --> 00:33:43.370 high breast density,

NOTE Confidence: 0.935314575555556

00:33:43.370 --> 00:33:45.015 definitely do tomosynthesis and then

NOTE Confidence: 0.935314575555556

00:33:45.015 --> 00:33:47.455 discuss the pros and cons of supplemental

NOTE Confidence: 0.935314575555556

00:33:47.455 --> 00:33:49.310 imaging with automated full breast

NOTE Confidence: 0.935314575555556

00:33:49.310 --> 00:33:51.698 ultrasound to those with impressed breasts.

NOTE Confidence: 0.935314575555556

00:33:51.700 --> 00:33:53.752 Density moving on to

NOTE Confidence: 0.935314575555556

00:33:53.752 --> 00:33:55.804 screening high risk patients.

NOTE Confidence: 0.935314575555556

00:33:55.810 --> 00:33:57.110 These are patients with

NOTE Confidence: 0.935314575555556

00:33:57.110 --> 00:33:58.410 a strong family history,

NOTE Confidence: 0.935314575555556

00:33:58.410 --> 00:34:00.420 greater than or equal to 20%.

NOTE Confidence: 0.935314575555556

00:34:00.420 --> 00:34:03.516 Lifetime risk of breast cancer and

NOTE Confidence: 0.935314575555556

00:34:03.516 --> 00:34:06.182 the strongest recommendation is to

NOTE Confidence: 0.935314575555556

00:34:06.182 --> 00:34:08.787 incorporate breast MRI with contrast.

NOTE Confidence: 0.935314575555556

00:34:08.790 --> 00:34:11.622 It's not as useful without contrast

NOTE Confidence: 0.935314575555556

00:34:11.622 --> 00:34:15.390 as an adjunct to 3D mammography.

NOTE Confidence: 0.935314575555556

00:34:15.390 --> 00:34:18.858 So typically what we recommend is

NOTE Confidence: 0.935314575555556

00:34:18.858 --> 00:34:22.030 alternating the breast mammography with MRI.

NOTE Confidence: 0.935314575555556

00:34:22.030 --> 00:34:23.956 So some type of breast imaging

NOTE Confidence: 0.935314575555556

00:34:23.956 --> 00:34:25.780 is done every six months.

NOTE Confidence: 0.935314575555556

00:34:25.780 --> 00:34:27.670 And obviously the purpose is

NOTE Confidence: 0.935314575555556

00:34:27.670 --> 00:34:29.560 to identify internal cancers at

NOTE Confidence: 0.764845291428571

00:34:29.626 --> 00:34:30.950 a much earlier stage.

NOTE Confidence: 0.764845291428571

00:34:30.950 --> 00:34:33.238 As you can see in the pictures depicted,

NOTE Confidence: 0.764845291428571

00:34:33.240 --> 00:34:35.746 the MRI clearly has a much higher

NOTE Confidence: 0.764845291428571

00:34:35.746 --> 00:34:38.522 resolution and is able to detect things

NOTE Confidence: 0.764845291428571

00:34:38.522 --> 00:34:40.964 much more clearly than in mammogram.

NOTE Confidence: 0.764845291428571

00:34:40.970 --> 00:34:43.796 However, it does need expert breast

NOTE Confidence: 0.764845291428571

00:34:43.796 --> 00:34:45.721 radiology opinion, it can be.

NOTE Confidence: 0.764845291428571

00:34:45.721 --> 00:34:48.010 And said it can be uncomfortable for

NOTE Confidence: 0.764845291428571

00:34:48.084 --> 00:34:51.148 patients and it can lead to false positives,

NOTE Confidence: 0.764845291428571

00:34:51.150 --> 00:34:54.910 leading to sometimes unnecessary biopsies.

NOTE Confidence: 0.764845291428571

00:34:54.910 --> 00:34:56.146 You might ask, well,

NOTE Confidence: 0.764845291428571

00:34:56.146 --> 00:34:58.729 what if my patient is very high risk?

NOTE Confidence: 0.764845291428571

00:34:58.730 --> 00:35:01.614 Should I also add a third breast

NOTE Confidence: 0.764845291428571

00:35:01.614 --> 00:35:04.053 imaging modalities such as an ultrasound

NOTE Confidence: 0.764845291428571

00:35:04.053 --> 00:35:06.309 to the mammogram and the MRI?

NOTE Confidence: 0.764845291428571

00:35:06.310 --> 00:35:08.758 And the answer is clearly no

NOTE Confidence: 0.764845291428571

00:35:08.758 --> 00:35:11.030 based on the Eva trial,

NOTE Confidence: 0.764845291428571

00:35:11.030 --> 00:35:13.753 the MRI plus mammogram gave the best

NOTE Confidence: 0.764845291428571

00:35:13.753 --> 00:35:16.643 cancer yield and the addition of an

NOTE Confidence: 0.764845291428571

00:35:16.643 --> 00:35:18.698 ultrasound to these two modalities

NOTE Confidence: 0.764845291428571

00:35:18.698 --> 00:35:21.080 as a third imaging procedure

NOTE Confidence: 0.764845291428571

00:35:21.080 --> 00:35:23.445 did not add anything additional.

NOTE Confidence: 0.764845291428571

00:35:23.450 --> 00:35:24.910 If for whatever reason.

NOTE Confidence: 0.764845291428571

00:35:24.910 --> 00:35:27.100 The patient cannot tolerate an MRI.

NOTE Confidence: 0.764845291428571

00:35:27.100 --> 00:35:30.604 You can see that an MRI plus ultrasound

NOTE Confidence: 0.764845291428571

00:35:30.604 --> 00:35:34.038 can also give relatively good yield.

NOTE Confidence: 0.764845291428571

00:35:34.040 --> 00:35:35.984 So back to the NCCN guidelines

NOTE Confidence: 0.764845291428571

00:35:35.984 --> 00:35:37.960 for your patients with high risk.

NOTE Confidence: 0.764845291428571

00:35:37.960 --> 00:35:39.860 It's really important to to

NOTE Confidence: 0.764845291428571

00:35:39.860 --> 00:35:41.760 know first who's at risk.

NOTE Confidence: 0.764845291428571

00:35:41.760 --> 00:35:44.760 So this comes back to good family history.

NOTE Confidence: 0.764845291428571

00:35:44.760 --> 00:35:48.263 Doing using the risk calculators and

NOTE Confidence: 0.764845291428571

00:35:48.263 --> 00:35:51.784 then the age of screening is very

NOTE Confidence: 0.764845291428571

00:35:51.784 --> 00:35:54.538 much dependent on who the youngest

NOTE Confidence: 0.764845291428571

00:35:54.538 --> 00:35:56.968 family member with the positive

NOTE Confidence: 0.764845291428571

00:35:56.968 --> 00:35:59.987 family history was and we we recommend

NOTE Confidence: 0.764845291428571

00:35:59.987 --> 00:36:02.630 starting ten years prior to that

NOTE Confidence: 0.764845291428571

00:36:02.630 --> 00:36:05.590 initial youngest family member diagnosis.

NOTE Confidence: 0.764845291428571

00:36:05.590 --> 00:36:07.066 And this should.

NOTE Confidence: 0.764845291428571

00:36:07.066 --> 00:36:10.510 This should not start prior to age

NOTE Confidence: 0.764845291428571

00:36:10.510 --> 00:36:14.046 34 for MRI to similar start 10 years

NOTE Confidence: 0.764845291428571

00:36:14.046 --> 00:36:17.787 prior to the youngest family members,

NOTE Confidence: 0.764845291428571

00:36:17.790 --> 00:36:20.176 but not prior to age 25.

NOTE Confidence: 0.764845291428571

00:36:20.176 --> 00:36:23.406 And consider risk reducing strategies,

NOTE Confidence: 0.764845291428571

00:36:23.410 --> 00:36:25.170 including medications which I'll

NOTE Confidence: 0.764845291428571

00:36:25.170 --> 00:36:26.490 briefly touch on,

NOTE Confidence: 0.764845291428571

00:36:26.490 --> 00:36:28.638 as well as continuing to emphasize

NOTE Confidence: 0.764845291428571

00:36:28.638 --> 00:36:30.875 breast awareness so your patients report

NOTE Confidence: 0.764845291428571

00:36:30.875 --> 00:36:33.835 to you if you're if they're noticing changes.

NOTE Confidence: 0.764845291428571

00:36:33.840 --> 00:36:35.996 There are multiple reasons that a patient

NOTE Confidence: 0.764845291428571

00:36:35.996 --> 00:36:38.778 can be high risk apart from family history,

NOTE Confidence: 0.764845291428571

00:36:38.780 --> 00:36:42.400 and that includes thoracic radiation

NOTE Confidence: 0.764845291428571

00:36:42.400 --> 00:36:45.172 between the ages of 10 and 30 years old,

NOTE Confidence: 0.764845291428571

00:36:45.180 --> 00:36:46.360 and as you can see,

NOTE Confidence: 0.764845291428571

00:36:46.360 --> 00:36:48.373 same idea here,

NOTE Confidence: 0.764845291428571

00:36:48.373 --> 00:36:51.946 where imaging typically starts eight years

NOTE Confidence: 0.764845291428571

00:36:51.946 --> 00:36:55.490 after radiation but not prior to age 30,

NOTE Confidence: 0.764845291428571

00:36:55.490 --> 00:36:59.386 and that also applies to breast MRI imaging.

NOTE Confidence: 0.764845291428571

00:36:59.390 --> 00:37:01.605 These are the genetic alterations

NOTE Confidence: 0.764845291428571

00:37:01.605 --> 00:37:04.389 that are recognizable to most of you,

NOTE Confidence: 0.764845291428571

00:37:04.390 --> 00:37:07.306 and it's the high penetrance and

NOTE Confidence: 0.764845291428571

00:37:07.306 --> 00:37:09.776 moderate penetrance genes that are

NOTE Confidence: 0.764845291428571

00:37:09.776 --> 00:37:12.416 that have very firm guidelines about

NOTE Confidence: 0.764845291428571

00:37:12.416 --> 00:37:15.750 earlier and more extensive breast imaging.

NOTE Confidence: 0.764845291428571

00:37:15.750 --> 00:37:17.525 Whereas the genes listed on

NOTE Confidence: 0.764845291428571

00:37:17.525 --> 00:37:18.945 the right hand column,

NOTE Confidence: 0.764845291428571

00:37:18.950 --> 00:37:20.686 which have insufficient evidence,

NOTE Confidence: 0.764845291428571

00:37:20.686 --> 00:37:24.312 we don't have as clear and evidence in

NOTE Confidence: 0.764845291428571

00:37:24.312 --> 00:37:26.667 terms of making screening recommendations

NOTE Confidence: 0.764845291428571

00:37:26.667 --> 00:37:29.817 and for for for for those category.

NOTE Confidence: 0.764845291428571

00:37:29.820 --> 00:37:30.584 Patient really,

NOTE Confidence: 0.764845291428571

00:37:30.584 --> 00:37:33.258 the screening is a lot by family

NOTE Confidence: 0.764845291428571

00:37:33.258 --> 00:37:35.697 history and if this can be confusing,

NOTE Confidence: 0.764845291428571

00:37:35.700 --> 00:37:37.445 certainly a high risk breast

NOTE Confidence: 0.764845291428571

00:37:37.445 --> 00:37:39.755 clinic can help you with those

NOTE Confidence: 0.764845291428571

00:37:39.755 --> 00:37:41.484 decision making juncture so.

NOTE Confidence: 0.764845291428571

00:37:41.484 --> 00:37:42.948 But as you can see here,

NOTE Confidence: 0.764845291428571

00:37:42.950 --> 00:37:45.666 the highest risk genes are listed in

NOTE Confidence: 0.764845291428571

00:37:45.666 --> 00:37:48.488 the red box and just reemphasizing

NOTE Confidence: 0.764845291428571

00:37:48.488 --> 00:37:51.113 the need for alternating mammogram

NOTE Confidence: 0.764845291428571

00:37:51.113 --> 00:37:54.915 and MRI starting at an early age and

NOTE Confidence: 0.764845291428571

00:37:54.915 --> 00:37:57.092 certainly at risk reducing mastectomy

NOTE Confidence: 0.764845291428571

00:37:57.092 --> 00:38:00.228 can be discussed with this very high risk.

NOTE Confidence: 0.764845291428571

00:38:00.230 --> 00:38:01.114 Population with,

NOTE Confidence: 0.764845291428571

00:38:01.114 --> 00:38:04.650 with the caveat that none of these risk

NOTE Confidence: 0.872184048125

00:38:04.737 --> 00:38:06.711 reducing surgeries have

NOTE Confidence: 0.872184048125

00:38:06.711 --> 00:38:08.685 impacted overall survival,

NOTE Confidence: 0.872184048125

00:38:08.690 --> 00:38:10.766 and so it's really about shared

NOTE Confidence: 0.872184048125

00:38:10.766 --> 00:38:12.581 decision making about many patients

NOTE Confidence: 0.872184048125

00:38:12.581 --> 00:38:14.765 can choose to follow the screening

NOTE Confidence: 0.872184048125

00:38:14.765 --> 00:38:17.057 guidelines and do not necessarily have

NOTE Confidence: 0.872184048125

00:38:17.057 --> 00:38:19.325 to have these risk reducing surgery.

NOTE Confidence: 0.872184048125

00:38:19.330 --> 00:38:22.330 If that's not their wish.

NOTE Confidence: 0.872184048125

00:38:22.330 --> 00:38:24.540 This table here summarizes who

NOTE Confidence: 0.872184048125

00:38:24.540 --> 00:38:26.308 should undergo genetic testing,

NOTE Confidence: 0.872184048125

00:38:26.310 --> 00:38:28.802 both those with a history of breast

NOTE Confidence: 0.872184048125

00:38:28.802 --> 00:38:31.860 cancer as well as those who do not have

NOTE Confidence: 0.872184048125

00:38:31.860 --> 00:38:33.810 a personal history of breast cancer

NOTE Confidence: 0.872184048125

00:38:33.810 --> 00:38:35.670 but have a strong family history.

NOTE Confidence: 0.872184048125

00:38:35.670 --> 00:38:38.897 I think if you search under NCCN

NOTE Confidence: 0.872184048125

00:38:38.897 --> 00:38:40.280 genetics training guidelines,

NOTE Confidence: 0.872184048125

00:38:40.280 --> 00:38:42.520 this would be the best way to to

NOTE Confidence: 0.872184048125

00:38:42.520 --> 00:38:45.110 kind of decide who should be tested.

NOTE Confidence: 0.872184048125

00:38:45.110 --> 00:38:47.018 So what do you do when you do find

NOTE Confidence: 0.872184048125

00:38:47.018 --> 00:38:49.016 out that your patient is high risk?

NOTE Confidence: 0.872184048125

00:38:49.020 --> 00:38:51.420 Certainly it does change their screening.

NOTE Confidence: 0.872184048125

00:38:51.420 --> 00:38:53.575 Recommendation as we talked about

NOTE Confidence: 0.872184048125

00:38:53.575 --> 00:38:56.851 there is an option of risk reducing

NOTE Confidence: 0.872184048125

00:38:56.851 --> 00:38:59.965 chemoprevention with a number of drugs,

NOTE Confidence: 0.872184048125

00:38:59.970 --> 00:39:03.045 with tamoxifen being available for

NOTE Confidence: 0.872184048125

00:39:03.045 --> 00:39:05.505 premenopausal and postmenopausal women.

NOTE Confidence: 0.872184048125

00:39:05.510 --> 00:39:08.228 Relaxed offen and exemestane and actually

NOTE Confidence: 0.872184048125

00:39:08.228 --> 00:39:11.809 also have data in post menopausal women.

NOTE Confidence: 0.872184048125

00:39:11.810 --> 00:39:13.910 Depending on the genetic risk

NOTE Confidence: 0.872184048125

00:39:13.910 --> 00:39:16.010 factor and family history risk,

NOTE Confidence: 0.872184048125

00:39:16.010 --> 00:39:18.860 reducing surgeries can also be considered

NOTE Confidence: 0.872184048125

00:39:18.860 --> 00:39:22.399 and we always want to continue to

NOTE Confidence: 0.872184048125

00:39:22.399 --> 00:39:24.479 target modifiable risk factors.

NOTE Confidence: 0.872184048125

00:39:24.480 --> 00:39:26.839 So when should you refer a patient

NOTE Confidence: 0.872184048125

00:39:26.839 --> 00:39:29.977 to to to high risk genetics clinic?

NOTE Confidence: 0.872184048125

00:39:29.980 --> 00:39:30.338 Really,

NOTE Confidence: 0.872184048125

00:39:30.338 --> 00:39:32.844 if you're not sure if they have

NOTE Confidence: 0.872184048125

00:39:32.844 --> 00:39:35.604 very high risk of history such as

NOTE Confidence: 0.872184048125

00:39:35.604 --> 00:39:37.574 prior chest wall radiation and

NOTE Confidence: 0.872184048125

00:39:37.654 --> 00:39:39.700 known hereditary alteration,

NOTE Confidence: 0.872184048125

00:39:39.700 --> 00:39:41.636 a strong family history,

NOTE Confidence: 0.872184048125

00:39:41.636 --> 00:39:44.056 that's very confusing or finding

NOTE Confidence: 0.872184048125

00:39:44.056 --> 00:39:46.668 of LCIS atypical ductal hyperplasia

NOTE Confidence: 0.872184048125

00:39:46.668 --> 00:39:49.860 or other pre invasive risk lesions.

NOTE Confidence: 0.872184048125

00:39:49.860 --> 00:39:52.420 If if if the risk model is estimating

NOTE Confidence: 0.872184048125

00:39:52.420 --> 00:39:54.350 risk as greater than 20%.

NOTE Confidence: 0.872184048125

00:39:54.350 --> 00:39:55.840 We are happy to help.

NOTE Confidence: 0.872184048125

00:39:55.840 --> 00:39:58.088 So in your busy practices I know this

NOTE Confidence: 0.872184048125

00:39:58.088 --> 00:40:00.565 can be a lot to take on sometimes

NOTE Confidence: 0.872184048125

00:40:00.565 --> 00:40:02.759 and depending on your comfort level,

NOTE Confidence: 0.872184048125

00:40:02.760 --> 00:40:05.240 we're happy to assist.

NOTE Confidence: 0.872184048125

00:40:05.240 --> 00:40:07.896 So take home points for high risk patients.

NOTE Confidence: 0.872184048125

00:40:07.900 --> 00:40:09.848 Annual mammogram alternating with

NOTE Confidence: 0.872184048125

00:40:09.848 --> 00:40:11.796 an annual breast MRI,

NOTE Confidence: 0.872184048125

00:40:11.800 --> 00:40:14.425 and there is some evidence that by

NOTE Confidence: 0.872184048125

00:40:14.425 --> 00:40:16.717 staggering these two tests you're

NOTE Confidence: 0.872184048125

00:40:16.717 --> 00:40:18.901 essentially offering your patient

NOTE Confidence: 0.872184048125

00:40:18.901 --> 00:40:21.085 close observation through imaging

NOTE Confidence: 0.872184048125

00:40:21.159 --> 00:40:22.320 every six months.

NOTE Confidence: 0.872184048125

00:40:22.320 --> 00:40:24.726 Do not screen women with life

NOTE Confidence: 0.872184048125

00:40:24.726 --> 00:40:26.860 expectancy less than 10 years,

NOTE Confidence: 0.872184048125

00:40:26.860 --> 00:40:29.110 and generally all our screening

NOTE Confidence: 0.872184048125

00:40:29.110 --> 00:40:32.183 data pretty much stops at age 75.

NOTE Confidence: 0.872184048125

00:40:32.183 --> 00:40:35.102 However, I think beyond age 75.

NOTE Confidence: 0.872184048125

00:40:35.102 --> 00:40:36.710 Depending on patient preference

NOTE Confidence: 0.872184048125

00:40:36.710 --> 00:40:37.916 and life expectancy,

NOTE Confidence: 0.872184048125

00:40:37.920 --> 00:40:41.427 I think individual decisions can be made.

NOTE Confidence: 0.872184048125

00:40:41.430 --> 00:40:43.166 A wrap up in the next few minutes

NOTE Confidence: 0.872184048125

00:40:43.166 --> 00:40:44.846 on the lifestyle factors and

NOTE Confidence: 0.872184048125

00:40:44.846 --> 00:40:46.430 breast cancer risk reduction.

NOTE Confidence: 0.872184048125

00:40:46.430 --> 00:40:49.811 I think we're all aware of multiple

NOTE Confidence: 0.872184048125

00:40:49.811 --> 00:40:53.790 sets of data and studies showing that

NOTE Confidence: 0.872184048125

00:40:53.790 --> 00:40:57.522 that diet levels can be profoundly

NOTE Confidence: 0.872184048125

00:40:57.522 --> 00:41:01.150 important for cancer risk reduction,

NOTE Confidence: 0.872184048125

00:41:01.150 --> 00:41:05.398 particularly with respect to breast cancer.

NOTE Confidence: 0.872184048125

00:41:05.400 --> 00:41:07.620 And the data are actually

NOTE Confidence: 0.872184048125

00:41:07.620 --> 00:41:09.396 strongest for physical activity.

NOTE Confidence: 0.872184048125

00:41:09.400 --> 00:41:11.880 So as you can see in this plot,

NOTE Confidence: 0.872184048125

00:41:11.880 --> 00:41:16.566 our activity level even in adolescence.

NOTE Confidence: 0.872184048125

00:41:16.570 --> 00:41:19.934 They can can help determine our future

NOTE Confidence: 0.872184048125

00:41:19.934 --> 00:41:23.030 risk of breast cancer and so so any

NOTE Confidence: 0.872184048125

00:41:23.123 --> 00:41:26.579 even patients who are who are not active,

NOTE Confidence: 0.872184048125

00:41:26.580 --> 00:41:27.044 inactive,

NOTE Confidence: 0.872184048125

00:41:27.044 --> 00:41:28.900 and adolescence but become

NOTE Confidence: 0.872184048125

00:41:28.900 --> 00:41:30.756 active later in life,

NOTE Confidence: 0.872184048125

00:41:30.760 --> 00:41:32.255 have the option of reducing

NOTE Confidence: 0.872184048125

00:41:32.255 --> 00:41:33.750 their future breast cancer risk.

NOTE Confidence: 0.872184048125

00:41:33.750 --> 00:41:35.780 So this is something that.

NOTE Confidence: 0.872184048125

00:41:35.780 --> 00:41:37.826 I think it's easy to say

NOTE Confidence: 0.872184048125

00:41:37.826 --> 00:41:39.190 it's much harder to

NOTE Confidence: 0.829417977333333

00:41:39.267 --> 00:41:41.977 implement in our sedentary society,

NOTE Confidence: 0.829417977333333

00:41:41.980 --> 00:41:44.626 but it's something that that that should

NOTE Confidence: 0.829417977333333

00:41:44.626 --> 00:41:46.529 definitely be discussed for patient.

NOTE Confidence: 0.829417977333333

00:41:46.530 --> 00:41:48.750 So in terms of next steps,

NOTE Confidence: 0.829417977333333

00:41:48.750 --> 00:41:51.450 obviously I think following the

NOTE Confidence: 0.829417977333333

00:41:51.450 --> 00:41:54.150 guidelines in terms of risk

NOTE Confidence: 0.829417977333333

00:41:54.241 --> 00:41:57.166 assessment and imaging for sure.

NOTE Confidence: 0.829417977333333

00:41:57.170 --> 00:41:59.910 And then I think we also need to focus on

NOTE Confidence: 0.829417977333333

00:41:59.986 --> 00:42:02.866 system level support for weight management,

NOTE Confidence: 0.829417977333333

00:42:02.870 --> 00:42:05.370 physical activity and diet interventions,

NOTE Confidence: 0.829417977333333

00:42:05.370 --> 00:42:08.730 and particularly the high risk populations

NOTE Confidence: 0.829417977333333

00:42:08.730 --> 00:42:11.688 and continue to promote health education

NOTE Confidence: 0.829417977333333

00:42:11.688 --> 00:42:14.153 within the Community with awareness

NOTE Confidence: 0.829417977333333

00:42:14.153 --> 00:42:16.775 of the role of obesity, obesity,

NOTE Confidence: 0.829417977333333

00:42:16.775 --> 00:42:20.730 activity level and higher breast cancer risk,

NOTE Confidence: 0.829417977333333

00:42:20.730 --> 00:42:22.848 without, of course, shaming more patients.

NOTE Confidence: 0.829417977333333

00:42:22.850 --> 00:42:26.786 Because this is, this is these issues are.

NOTE Confidence: 0.829417977333333

00:42:26.790 --> 00:42:29.736 Very endemic in our culture currently

NOTE Confidence: 0.829417977333333

00:42:29.736 --> 00:42:33.609 and it's not any one patient's fault.

NOTE Confidence: 0.829417977333333

00:42:33.610 --> 00:42:35.974 However, if we can even make

NOTE Confidence: 0.829417977333333

00:42:35.974 --> 00:42:37.550 some steps toward modifying,

NOTE Confidence: 0.829417977333333

00:42:37.550 --> 00:42:38.810 if you have these factors,

NOTE Confidence: 0.829417977333333

00:42:38.810 --> 00:42:41.310 it can reduce their risk.

NOTE Confidence: 0.829417977333333

00:42:41.310 --> 00:42:42.930 I'm happy to take questions.

NOTE Confidence: 0.829417977333333

00:42:42.930 --> 00:42:45.860 I have my cell phone number up on the slide

NOTE Confidence: 0.829417977333333

00:42:45.937 --> 00:42:48.667 and I'm happy to get curbside questions.

NOTE Confidence: 0.829417977333333

00:42:48.670 --> 00:42:50.596 My email is also listed and

NOTE Confidence: 0.829417977333333

00:42:50.596 --> 00:42:52.710 I thank you for your time.

NOTE Confidence: 0.829417977333333

00:42:52.710 --> 00:42:53.060 Thank you.

NOTE Confidence: 0.69811546948

00:42:55.210 --> 00:42:57.354 Thank you very much that the last Berg

NOTE Confidence: 0.69811546948

00:42:57.354 --> 00:42:59.903 and you can go ahead also and post your

NOTE Confidence: 0.69811546948

00:42:59.903 --> 00:43:02.087 questions to Q&amp;A or as actor last word,

NOTE Confidence: 0.69811546948

00:43:02.090 --> 00:43:03.478 make herself available through

NOTE Confidence: 0.69811546948

00:43:03.478 --> 00:43:05.213 her email and cell phone.

NOTE Confidence: 0.69811546948

00:43:05.220 --> 00:43:07.556 She's not with us tonight so she's got

NOTE Confidence: 0.69811546948

00:43:07.556 --> 00:43:09.519 some technical difficulties connecting,

NOTE Confidence: 0.69811546948

00:43:09.520 --> 00:43:11.266 so we deeply appreciate the fact

NOTE Confidence: 0.69811546948

00:43:11.266 --> 00:43:13.080 that you you made it happen.

NOTE Confidence: 0.69811546948

00:43:13.080 --> 00:43:14.368 Regardless. Thanks a lot.

NOTE Confidence: 0.69811546948

00:43:14.368 --> 00:43:17.184 We'll move on then to the lung cancer

NOTE Confidence: 0.69811546948

00:43:17.184 --> 00:43:19.214 screening with Doctor Lynn Tanui.

NOTE Confidence: 0.69811546948

00:43:19.220 --> 00:43:20.112 Thank you very much.

NOTE Confidence: 0.69811546948

00:43:20.112 --> 00:43:20.558 Doctor tanui.

NOTE Confidence: 0.923611447272727

00:43:28.630 --> 00:43:30.320 OK, thanks everybody for being

NOTE Confidence: 0.923611447272727

00:43:30.320 --> 00:43:32.450 here to listen to these talks,

NOTE Confidence: 0.923611447272727

00:43:32.450 --> 00:43:34.748 I've actually learned a huge amount

NOTE Confidence: 0.923611447272727

00:43:34.750 --> 00:43:37.446 so that that's a hard act to follow.

NOTE Confidence: 0.923611447272727

00:43:37.450 --> 00:43:38.970 My name is Lynn Tanoe.

NOTE Confidence: 0.923611447272727

00:43:38.970 --> 00:43:40.560 I'm in the Department of Medicine

NOTE Confidence: 0.923611447272727

00:43:40.560 --> 00:43:42.150 at Yale School of Medicine,

NOTE Confidence: 0.923611447272727

00:43:42.150 --> 00:43:45.155 and I direct our lung

NOTE Confidence: 0.923611447272727

00:43:45.155 --> 00:43:47.559 screening and natural program.

NOTE Confidence: 0.923611447272727

00:43:47.560 --> 00:43:50.590 I don't have any disclosures.

NOTE Confidence: 0.923611447272727

00:43:50.590 --> 00:43:54.644 And tonight what I'd like to get

NOTE Confidence: 0.923611447272727

00:43:54.644 --> 00:43:56.513 across in this talk is that you

NOTE Confidence: 0.923611447272727

00:43:56.513 --> 00:43:59.080 are aware of the updated USPSTF

NOTE Confidence: 0.923611447272727

00:43:59.080 --> 00:44:01.310 recommendations for lung cancer screening.

NOTE Confidence: 0.923611447272727

00:44:01.310 --> 00:44:03.356 I think it's important to understand

NOTE Confidence: 0.923611447272727

00:44:03.356 --> 00:44:05.232 the evidence based is demonstrating

NOTE Confidence: 0.923611447272727

00:44:05.232 --> 00:44:07.487 the mortality benefit because that

NOTE Confidence: 0.923611447272727

00:44:07.487 --> 00:44:09.564 means that screening is successful

NOTE Confidence: 0.923611447272727

00:44:09.564 --> 00:44:11.736 and lung cancer screening has been

NOTE Confidence: 0.923611447272727

00:44:11.736 --> 00:44:14.238 a long time to come to this table

NOTE Confidence: 0.923611447272727

00:44:14.240 --> 00:44:16.571 and I hope that at the end of the

NOTE Confidence: 0.923611447272727

00:44:16.571 --> 00:44:19.153 next 20 minutes that you will be

NOTE Confidence: 0.923611447272727

00:44:19.153 --> 00:44:21.226 motivated to implement lung cancer

NOTE Confidence: 0.923611447272727

00:44:21.226 --> 00:44:23.726 screening in your clinical practices.

NOTE Confidence: 0.923611447272727

00:44:23.730 --> 00:44:25.850 So I'm going to give you a very

NOTE Confidence: 0.923611447272727

00:44:25.850 --> 00:44:27.899 high level lung cancer background.

NOTE Confidence: 0.923611447272727

00:44:27.900 --> 00:44:29.835 We'll talk about the USPSTF

NOTE Confidence: 0.923611447272727

00:44:29.835 --> 00:44:31.770 recommendations for lung cancer screening,

NOTE Confidence: 0.923611447272727

00:44:31.770 --> 00:44:34.458 which we just updated last year and

NOTE Confidence: 0.923611447272727

00:44:34.458 --> 00:44:36.842 I'm just going to talk about 3 studies

NOTE Confidence: 0.923611447272727

00:44:36.842 --> 00:44:38.861 that form the fundamental evidence

NOTE Confidence: 0.923611447272727

00:44:38.861 --> 00:44:41.720 based for lung cancer screening and then,

NOTE Confidence: 0.923611447272727

00:44:41.720 --> 00:44:45.568 with the little bit about benefits and risks.

NOTE Confidence: 0.923611447272727

00:44:45.570 --> 00:44:48.330 So in the United States,

NOTE Confidence: 0.923611447272727

00:44:48.330 --> 00:44:51.330 cancer is the leading cause of lung cancer.

NOTE Confidence: 0.923611447272727

00:44:51.330 --> 00:44:53.196 Is the leading cause of cancer

NOTE Confidence: 0.923611447272727

00:44:53.196 --> 00:44:56.180 death in both men and women in 2022,

NOTE Confidence: 0.923611447272727

00:44:56.180 --> 00:44:59.450 it's estimated that about 100 eighteen

NOTE Confidence: 0.923611447272727

00:44:59.450 --> 00:45:03.033 118,000 men and 119,000 women will

NOTE Confidence: 0.923611447272727

00:45:03.033 --> 00:45:04.448 be diagnosed with lung cancer,

NOTE Confidence: 0.923611447272727

00:45:04.450 --> 00:45:07.467 and this is the first year that

NOTE Confidence: 0.923611447272727

00:45:07.467 --> 00:45:09.208 this unfortunate imbalance exists

NOTE Confidence: 0.923611447272727

00:45:09.208 --> 00:45:11.842 that women now get lung cancer

NOTE Confidence: 0.923611447272727

00:45:11.842 --> 00:45:13.420 more frequently than men.

NOTE Confidence: 0.923611447272727

00:45:13.420 --> 00:45:16.410 I guess it will cause an estimated 69,000

71

00:45:16.410 --> 00:45:21.202 deaths in men and 61,000 deaths in women.

00:45:21.202 --> 00:45:22.876 That's 130,000 people dying

00:45:22.876 --> 00:45:24.686 of lung cancer this year.

00:45:24.690 --> 00:45:27.175 These are data from the American Cancer

00:45:27.175 --> 00:45:29.435 Society going back to 1930 when the

00:45:29.435 --> 00:45:31.445 state of first started being kept

00:45:31.450 --> 00:45:33.490 lung cancer deaths and men on the top

00:45:33.490 --> 00:45:35.654 are in this red line and on women

00:45:35.654 --> 00:45:37.707 in the bottom again in the red line,

00:45:37.710 --> 00:45:39.734 and you can see that lung cancer causes

00:45:39.734 --> 00:45:41.486 more deaths than all of these other,

00:45:41.490 --> 00:45:43.258 more most common tumors.

00:45:43.258 --> 00:45:45.910 Archie causes more deaths than breast,

00:45:45.910 --> 00:45:50.230 colorectal and prostate cancer combined.

00:45:50.230 --> 00:45:52.810 It is the second most common

00:45:52.810 --> 00:45:55.190 cancer in men and women.

NOTE Confidence: 0.923611447272727

00:45:55.190 --> 00:45:55.701 Again,

NOTE Confidence: 0.923611447272727

00:45:55.701 --> 00:45:59.076 first leading cause of cancer death and

NOTE Confidence: 0.923611447272727

00:45:59.076 --> 00:46:01.218 really the problem we face with lung

NOTE Confidence: 0.923611447272727

00:46:01.218 --> 00:46:03.315 cancer is that the five year survival

NOTE Confidence: 0.923611447272727

00:46:03.315 --> 00:46:06.624 is so low and so in last year the

NOTE Confidence: 0.923611447272727

00:46:06.624 --> 00:46:10.079 five year survival for lung cancer was 22%.

NOTE Confidence: 0.923611447272727

00:46:10.079 --> 00:46:12.024 That's actually a lot better

NOTE Confidence: 0.923611447272727

00:46:12.024 --> 00:46:14.749 than it was even ten years ago,

NOTE Confidence: 0.923611447272727

00:46:14.750 --> 00:46:17.098 which reflects advances in

NOTE Confidence: 0.923611447272727

00:46:17.098 --> 00:46:18.859 research and therapies.

NOTE Confidence: 0.923611447272727

00:46:18.860 --> 00:46:20.720 But you can see that that.

NOTE Confidence: 0.923611447272727

00:46:20.720 --> 00:46:23.090 I just survival really pales into

NOTE Confidence: 0.923611447272727

00:46:23.090 --> 00:46:25.242 comparison with what we have

NOTE Confidence: 0.923611447272727

00:46:25.242 --> 00:46:27.238 achieved for colorectal breast.

NOTE Confidence: 0.923611447272727

00:46:27.240 --> 00:46:29.020 And prostate cancers at three.

NOTE Confidence: 0.923611447272727

00:46:29.020 --> 00:46:32.451 Next most common cancers where five

NOTE Confidence: 0.923611447272727

00:46:32.451 --> 00:46:35.002 years of Bible has improved tremendously

NOTE Confidence: 0.923611447272727

00:46:35.002 --> 00:46:37.174 and for many of these cancers,

NOTE Confidence: 0.923611447272727

00:46:37.180 --> 00:46:39.924 we're talking about 10 and 20 years survival.

NOTE Confidence: 0.923611447272727

00:46:39.930 --> 00:46:41.855 And that is really what we need

NOTE Confidence: 0.923611447272727

00:46:41.855 --> 00:46:43.450 to achieve with lung cancer.

NOTE Confidence: 0.923611447272727

00:46:43.450 --> 00:46:45.998 But it's a big mountain to climb,

NOTE Confidence: 0.794239041111111

00:46:46.000 --> 00:46:47.632 and the reason 5 year survival

NOTE Confidence: 0.794239041111111

00:46:47.632 --> 00:46:49.834 is so poor in lung cancer is

NOTE Confidence: 0.794239041111111

00:46:49.834 --> 00:46:51.574 that we diagnose cancers late,

NOTE Confidence: 0.794239041111111

00:46:51.580 --> 00:46:53.197 and so if we look at this

NOTE Confidence: 0.794239041111111

00:46:53.197 --> 00:46:54.659 pie chart for lung cancer,

NOTE Confidence: 0.794239041111111

00:46:54.660 --> 00:46:57.467 nearly half are diagnosed at stage 4.

NOTE Confidence: 0.794239041111111

00:46:57.470 --> 00:47:01.208 Or when disease is already metastatic

NOTE Confidence: 0.794239041111111

00:47:01.208 --> 00:47:04.136 and only 23% at stage one.

NOTE Confidence: 0.794239041111111

74

00:47:04.136 --> 00:47:07.176 The earliest stage that we can find

NOTE Confidence: 0.794239041111111

00:47:07.176 --> 00:47:10.200 that cancer and when cure is possible.

NOTE Confidence: 0.794239041111111

00:47:10.200 --> 00:47:13.140 And when you look at five year

NOTE Confidence: 0.794239041111111

00:47:13.140 --> 00:47:15.095 survival for the stages 1234,

NOTE Confidence: 0.794239041111111

00:47:15.095 --> 00:47:17.615 you can see how steeply that falls off.

NOTE Confidence: 0.794239041111111

00:47:17.620 --> 00:47:18.875 We certainly need to do

NOTE Confidence: 0.794239041111111

00:47:18.875 --> 00:47:19.879 better with stage one,

NOTE Confidence: 0.794239041111111

00:47:19.880 --> 00:47:22.810 but when you have a four 4% five

NOTE Confidence: 0.794239041111111

00:47:22.810 --> 00:47:24.210 year survival for stage four

NOTE Confidence: 0.794239041111111

00:47:24.210 --> 00:47:26.142 and half of the patients are

NOTE Confidence: 0.794239041111111

00:47:26.142 --> 00:47:27.857 being diagnosed at that stage.

NOTE Confidence: 0.794239041111111

00:47:27.860 --> 00:47:30.052 You can see then why our five year

NOTE Confidence: 0.794239041111111

00:47:30.052 --> 00:47:33.320 survival rate overall is so low and the in.

NOTE Confidence: 0.794239041111111

00:47:33.320 --> 00:47:35.730 In contrast, breast cancer really

NOTE Confidence: 0.794239041111111

00:47:35.730 --> 00:47:37.020 demonstrates the opposite,

NOTE Confidence: 0.794239041111111

00:47:37.020 --> 00:47:39.498 where half of patients with breast

NOTE Confidence: 0.794239041111111

00:47:39.498 --> 00:47:41.523 cancer are diagnosed at stage

NOTE Confidence: 0.794239041111111

00:47:41.523 --> 00:47:43.521 one and only 6% at stage four.

NOTE Confidence: 0.794239041111111

00:47:43.521 --> 00:47:45.734 And when you look then at five year

NOTE Confidence: 0.794239041111111

00:47:45.734 --> 00:47:47.722 survival for each stage you can see

NOTE Confidence: 0.794239041111111

00:47:47.722 --> 00:47:49.709 why the breast cancer survival over

NOTE Confidence: 0.794239041111111

00:47:49.709 --> 00:47:52.053 five years is so high because most

NOTE Confidence: 0.794239041111111

00:47:52.053 --> 00:47:53.618 patients are really being diagnosed

NOTE Confidence: 0.794239041111111

00:47:53.618 --> 00:47:56.195 here and so we really need to do

NOTE Confidence: 0.794239041111111

00:47:56.195 --> 00:47:57.775 early detection for lung cancer.

NOTE Confidence: 0.794239041111111

00:47:57.780 --> 00:48:00.195 And for the past eight or nine

NOTE Confidence: 0.794239041111111

00:48:00.195 --> 00:48:02.650 years we have had that ability,

NOTE Confidence: 0.794239041111111

00:48:02.650 --> 00:48:05.690 but we've been underusing it.

NOTE Confidence: 0.794239041111111

00:48:05.690 --> 00:48:09.833 So in on the very last day of 2013,

NOTE Confidence: 0.794239041111111

00:48:09.833 --> 00:48:12.698 USPSTF made this landmark recommendation

NOTE Confidence: 0.794239041111111

00:48:12.698 --> 00:48:15.822 for annual screening for lung cancer

NOTE Confidence: 0.794239041111111

00:48:15.822 --> 00:48:18.362 with low dose CT in adults aged age

NOTE Confidence: 0.794239041111111

00:48:18.362 --> 00:48:21.123 50 to 80 years of a 30 pack year

NOTE Confidence: 0.794239041111111

00:48:21.123 --> 00:48:23.403 smoking history and currently smoke or

NOTE Confidence: 0.794239041111111

00:48:23.403 --> 00:48:25.900 have quit within the past 15 years.

NOTE Confidence: 0.794239041111111

00:48:25.900 --> 00:48:29.372 And that was the first time that

NOTE Confidence: 0.794239041111111

00:48:29.372 --> 00:48:32.059 USPSTF recommended any lung cancer

NOTE Confidence: 0.794239041111111

00:48:32.059 --> 00:48:34.829 screening in the United States.

NOTE Confidence: 0.794239041111111

00:48:34.830 --> 00:48:36.546 Decades has been spent looking at

NOTE Confidence: 0.794239041111111

00:48:36.546 --> 00:48:38.839 chest X ray as an intervention for

NOTE Confidence: 0.794239041111111

00:48:38.839 --> 00:48:41.017 lung cancer screening and the bottom

NOTE Confidence: 0.794239041111111

00:48:41.017 --> 00:48:43.406 line was all the Childs were negative,

NOTE Confidence: 0.794239041111111

00:48:43.410 --> 00:48:45.210 culminating really in the publication

NOTE Confidence: 0.794239041111111

00:48:45.210 --> 00:48:47.374 from the prostate, lung colon,

NOTE Confidence: 0.794239041111111

00:48:47.374 --> 00:48:50.084 and ovarian PLO screening trial.

NOTE Confidence: 0.794239041111111

00:48:50.090 --> 00:48:53.224 Looking at their 155,000 participants

NOTE Confidence: 0.794239041111111

00:48:53.224 --> 00:48:56.986 who've been followed for multiple years,

NOTE Confidence: 0.794239041111111

00:48:56.990 --> 00:48:59.258 they looked at chest X ray versus

NOTE Confidence: 0.794239041111111

00:48:59.258 --> 00:48:59.906 no screening,

NOTE Confidence: 0.794239041111111

00:48:59.910 --> 00:49:02.140 which was actually standard of

NOTE Confidence: 0.794239041111111

00:49:02.140 --> 00:49:03.850 care and it really doesn't matter

NOTE Confidence: 0.794239041111111

00:49:03.850 --> 00:49:05.449 whether you had a chest X ray.

NOTE Confidence: 0.794239041111111

00:49:05.450 --> 00:49:06.920 Or no chest X ray,

NOTE Confidence: 0.794239041111111

00:49:06.920 --> 00:49:09.230 because the curves for cumulative

NOTE Confidence: 0.794239041111111

00:49:09.230 --> 00:49:11.981 deaths superimpose and so chest X

NOTE Confidence: 0.794239041111111

00:49:11.981 --> 00:49:14.159 ray is not an effective screening

NOTE Confidence: 0.794239041111111

00:49:14.159 --> 00:49:16.600 tool because it does not increase,

NOTE Confidence: 0.794239041111111

00:49:16.600 --> 00:49:19.680 it does not decrease mortality with a

NOTE Confidence: 0.794239041111111

00:49:19.680 --> 00:49:22.641 decrease in mortality being the gold

NOTE Confidence: 0.794239041111111

00:49:22.641 --> 00:49:24.729 standard for successful screening.

NOTE Confidence: 0.794239041111111

00:49:24.730 --> 00:49:28.490 The USPSTF change in recommendation

NOTE Confidence: 0.794239041111111

00:49:28.490 --> 00:49:29.348 December 31st,

NOTE Confidence: 0.794239041111111

00:49:29.348 --> 00:49:31.493 2013 really was based predominantly

NOTE Confidence: 0.794239041111111

00:49:31.493 --> 00:49:34.218 on the national lung screening trial,

NOTE Confidence: 0.794239041111111

00:49:34.220 --> 00:49:36.364 which is the first of the three studies.

NOTE Confidence: 0.794239041111111

00:49:36.370 --> 00:49:39.488 I would like you to see and LST

NOTE Confidence: 0.794239041111111

00:49:39.488 --> 00:49:41.135 enrolled 53,000 participants

NOTE Confidence: 0.794239041111111

00:49:41.135 --> 00:49:44.510 and followed them for six years.

NOTE Confidence: 0.794239041111111

00:49:44.510 --> 00:49:47.275 High risk for lung cancer for this

NOTE Confidence: 0.794239041111111

00:49:47.275 --> 00:49:49.609 study was identified was identified,

NOTE Confidence: 0.794239041111111

00:49:49.610 --> 00:49:52.615 identified as ages 55 to 74

NOTE Confidence: 0.794239041111111

00:49:52.615 --> 00:49:54.565 greater than or equal to 30.

NOTE Confidence: 0.794239041111111

00:49:54.570 --> 00:49:56.328 Pack years of smoking and currently

NOTE Confidence: 0.794239041111111

00:49:56.328 --> 00:49:58.009 smoking or quit within 15 years.

NOTE Confidence: 0.794239041111111

00:49:58.010 --> 00:49:59.135 And if that sounds familiar

NOTE Confidence: 0.794239041111111

00:49:59.135 --> 00:50:00.260 because I just said it.

NOTE Confidence: 0.82325725375

00:50:00.260 --> 00:50:04.556 For USPSTF, it's because it's based on this.

NOTE Confidence: 0.82325725375

00:50:04.560 --> 00:50:07.086 Patients were randomized to either annual

00:50:07.086 --> 00:50:09.999 screening with low dose CT or chest X ray.

00:50:10.000 --> 00:50:12.648 There were a total of three screens done

00:50:12.648 --> 00:50:15.507 over the span of three years once a year

00:50:15.507 --> 00:50:18.494 and the study was powered so that it could

00:50:18.494 --> 00:50:21.318 identify a 20% reduction in mortality

00:50:21.318 --> 00:50:25.260 from lung cancer which was felt to be.

00:50:25.260 --> 00:50:28.935 Kind of a threshold for successful screening.

00:50:28.940 --> 00:50:34.248 This study cost $250 million to do and and

00:50:34.248 --> 00:50:36.810 really involve so many patients because

00:50:36.896 --> 00:50:40.400 that was the power that was required to

00:50:40.400 --> 00:50:43.400 achieve potentially that mortality reduction

00:50:43.400 --> 00:50:45.480 and the data are here on the right.

00:50:45.480 --> 00:50:48.965 And what you can see is that in terms of

00:50:48.965 --> 00:50:50.975 the number of lung cancers identified,

00:50:50.980 --> 00:50:53.892 low dose CT identified more than chest

00:50:53.892 --> 00:50:56.340 radiography and that was significant.

NOTE Confidence: 0.82325725375

00:50:56.340 --> 00:50:59.488 But more importantly, more.

NOTE Confidence: 0.82325725375

00:50:59.490 --> 00:51:02.157 People who were enrolled in the intervention

NOTE Confidence: 0.82325725375

00:51:02.157 --> 00:51:05.310 model CT arm had fewer lung cancer deaths.

NOTE Confidence: 0.82325725375

00:51:05.310 --> 00:51:07.404 The study was actually stopped early

NOTE Confidence: 0.82325725375

00:51:07.404 --> 00:51:09.544 because it was clear that this

NOTE Confidence: 0.82325725375

00:51:09.544 --> 00:51:11.566 endpoint was going to be achieved.

NOTE Confidence: 0.82325725375

00:51:11.570 --> 00:51:13.900 So what the actual mortality

NOTE Confidence: 0.82325725375

00:51:13.900 --> 00:51:15.764 reduction could have been.

NOTE Confidence: 0.82325725375

00:51:15.770 --> 00:51:17.342 We're never going to know because

NOTE Confidence: 0.82325725375

00:51:17.342 --> 00:51:19.630 it was stopped when the 20% became

NOTE Confidence: 0.82325725375

00:51:19.630 --> 00:51:22.990 inevitable to be achieved.

NOTE Confidence: 0.82325725375

00:51:22.990 --> 00:51:25.012 The other important piece of information

NOTE Confidence: 0.82325725375

00:51:25.012 --> 00:51:27.478 is that most of the cancers diagnosed

NOTE Confidence: 0.82325725375

00:51:27.478 --> 00:51:28.886 in NLST were early.

NOTE Confidence: 0.82325725375

00:51:28.890 --> 00:51:33.309 Age 63% were stage one and so the screening,

NOTE Confidence: 0.82325725375

00:51:33.310 --> 00:51:35.926 in this case achieved what the intent was,

NOTE Confidence: 0.82325725375

00:51:35.930 --> 00:51:38.672 which which was to diagnose cancers

NOTE Confidence: 0.82325725375

00:51:38.672 --> 00:51:41.310 early when they could be cured

NOTE Confidence: 0.82325725375

00:51:41.310 --> 00:51:42.718 and to decrease mortality,

NOTE Confidence: 0.82325725375

00:51:42.718 --> 00:51:45.261 and this study had probably the shortest

NOTE Confidence: 0.82325725375

00:51:45.261 --> 00:51:47.445 conclusion I've ever seen for it.

NOTE Confidence: 0.82325725375

00:51:47.450 --> 00:51:49.725 New England Journal of Medicine

NOTE Confidence: 0.82325725375

00:51:49.725 --> 00:51:52.547 Paper screening with low dose CT

NOTE Confidence: 0.82325725375

00:51:52.547 --> 00:51:54.907 reduces mortality from lung cancer.

NOTE Confidence: 0.82325725375

00:51:54.910 --> 00:51:57.185 This study was followed by a study

NOTE Confidence: 0.82325725375

00:51:57.185 --> 00:51:59.309 in Europe called the Nelson study.

NOTE Confidence: 0.82325725375

00:51:59.310 --> 00:52:01.230 This was done in the Netherlands

NOTE Confidence: 0.82325725375

00:52:01.230 --> 00:52:02.190 and in Belgium.

NOTE Confidence: 0.82325725375

00:52:02.190 --> 00:52:04.598 It was a smaller study but also a

NOTE Confidence: 0.82325725375

00:52:04.598 --> 00:52:06.909 double blind randomized control trial.

NOTE Confidence: 0.82325725375

00:52:06.910 --> 00:52:08.810 They had 16,000 participants,

NOTE Confidence: 0.82325725375

00:52:08.810 --> 00:52:11.185 most of whom were men.

NOTE Confidence: 0.82325725375

00:52:11.190 --> 00:52:13.062 They were ages 50 to 75,

NOTE Confidence: 0.82325725375

00:52:13.062 --> 00:52:15.414 so included a a slightly younger

NOTE Confidence: 0.82325725375

00:52:15.414 --> 00:52:17.990 population and less cigarette exposure.

NOTE Confidence: 0.82325725375

00:52:17.990 --> 00:52:20.426 Greater than 15 cigarettes per day

NOTE Confidence: 0.82325725375

00:52:20.426 --> 00:52:22.850 for 25 years, or 10 cigarettes a day.

NOTE Confidence: 0.82325725375

00:52:22.850 --> 00:52:24.310 For more than 30 years.

NOTE Confidence: 0.82325725375

00:52:24.310 --> 00:52:27.054 They were the heavy smokers and the

NOTE Confidence: 0.82325725375

00:52:27.054 --> 00:52:29.318 medium smoking history was 38 Packers.

NOTE Confidence: 0.82325725375

00:52:29.320 --> 00:52:31.342 They had to have been more

NOTE Confidence: 0.82325725375

00:52:31.342 --> 00:52:32.016 approximately smoking,

NOTE Confidence: 0.82325725375

00:52:32.020 --> 00:52:34.428 currently smoking or quit within 10 years

NOTE Confidence: 0.82325725375

00:52:34.428 --> 00:52:36.974 and the Nelson study had the advantage

NOTE Confidence: 0.82325725375

00:52:36.974 --> 00:52:39.770 over NLST of measuring the positive findings,

NOTE Confidence: 0.82325725375

00:52:39.770 --> 00:52:42.283 which are lung nodules by volume as

NOTE Confidence: 0.82325725375

00:52:42.283 --> 00:52:45.244 opposed to linear diameter and so they

NOTE Confidence: 0.82325725375

00:52:45.244 --> 00:52:47.504 could actually calculate doubling time,

NOTE Confidence: 0.82325725375

00:52:47.510 --> 00:52:50.191 which is a much more sensitive measure

NOTE Confidence: 0.82325725375

00:52:50.191 --> 00:52:53.080 of growth than a than linear diameter.

NOTE Confidence: 0.82325725375

00:52:53.080 --> 00:52:54.652 We do have actually the capability

NOTE Confidence: 0.82325725375

00:52:54.652 --> 00:52:55.438 in our city.

NOTE Confidence: 0.82325725375

00:52:55.440 --> 00:52:56.812 Scanners to do this,

NOTE Confidence: 0.82325725375

00:52:56.812 --> 00:52:59.054 but it is very time intensive

NOTE Confidence: 0.82325725375

00:52:59.054 --> 00:53:00.350 for the radiologist.

NOTE Confidence: 0.82325725375

00:53:00.350 --> 00:53:02.516 This is probably the next iteration

NOTE Confidence: 0.82325725375

00:53:02.516 --> 00:53:04.755 of screening down the road in

NOTE Confidence: 0.82325725375

00:53:04.755 --> 00:53:06.565 the United States to incorporate

NOTE Confidence: 0.82325725375

00:53:06.570 --> 00:53:07.674 natural volume measurement,

NOTE Confidence: 0.82325725375

00:53:07.674 --> 00:53:10.613 but for the time being you are have

NOTE Confidence: 0.82325725375

00:53:10.613 --> 00:53:12.699 no results will be reported back to

NOTE Confidence: 0.82325725375

84

00:53:12.699 --> 00:53:15.139 you as linear diameters of noxious.

NOTE Confidence: 0.82325725375

00:53:15.140 --> 00:53:16.972 These patients were randomized

NOTE Confidence: 0.82325725375

00:53:16.972 --> 00:53:19.720 to low dose CT screening or

NOTE Confidence: 0.825854819090909

00:53:19.807 --> 00:53:21.368 nothing, but they did not

NOTE Confidence: 0.825854819090909

00:53:21.368 --> 00:53:22.760 do a chest X ray arm.

NOTE Confidence: 0.825854819090909

00:53:22.760 --> 00:53:24.867 There were four low dose CT done

NOTE Confidence: 0.825854819090909

00:53:24.867 --> 00:53:27.249 over the span of six years and

NOTE Confidence: 0.825854819090909

00:53:27.249 --> 00:53:29.570 the patients were followed for 10

NOTE Confidence: 0.825854819090909

00:53:29.570 --> 00:53:31.845 years so they're duration between

NOTE Confidence: 0.825854819090909

00:53:31.845 --> 00:53:34.300 screens was longer than analyst.

NOTE Confidence: 0.825854819090909

00:53:34.300 --> 00:53:36.120 The study was also positive,

NOTE Confidence: 0.825854819090909

00:53:36.120 --> 00:53:38.976 not stopped early and the data are here,

NOTE Confidence: 0.825854819090909

00:53:38.980 --> 00:53:40.140 and although the curves

NOTE Confidence: 0.825854819090909

00:53:40.140 --> 00:53:41.300 look different than NLST,

NOTE Confidence: 0.825854819090909

00:53:41.300 --> 00:53:43.386 what you can see is that there

NOTE Confidence: 0.825854819090909

00:53:43.386 --> 00:53:44.970 were more cancers diagnosed.

NOTE Confidence: 0.825854819090909

00:53:44.970 --> 00:53:46.670 That's good that was screened

NOTE Confidence: 0.825854819090909

00:53:46.670 --> 00:53:48.030 with low dose CT.

NOTE Confidence: 0.825854819090909

00:53:48.030 --> 00:53:49.110 Then in the control group.

NOTE Confidence: 0.825854819090909

00:53:49.110 --> 00:53:51.480 That didn't get any screening and

NOTE Confidence: 0.825854819090909

00:53:51.480 --> 00:53:54.387 there were fewer cancer deaths in the

NOTE Confidence: 0.825854819090909

00:53:54.387 --> 00:53:56.883 screening group compared to the control.

NOTE Confidence: 0.825854819090909

00:53:56.890 --> 00:53:59.732 So the cumulative rate ratio for death

NOTE Confidence: 0.825854819090909

00:53:59.732 --> 00:54:02.990 from lung cancer was .76 and that was

NOTE Confidence: 0.825854819090909

00:54:02.990 --> 00:54:04.295 statistically significant significance.

NOTE Confidence: 0.825854819090909

00:54:04.300 --> 00:54:06.440 So they actually had a 24% reduction

NOTE Confidence: 0.825854819090909

00:54:06.440 --> 00:54:09.170 in lung cancer mortality and there

NOTE Confidence: 0.825854819090909

00:54:09.170 --> 00:54:12.528 was a signal that this was actually

NOTE Confidence: 0.825854819090909

00:54:12.528 --> 00:54:15.253 stronger in women with the 34.

NOTE Confidence: 0.825854819090909

00:54:15.253 --> 00:54:15.616 Percent,

NOTE Confidence: 0.825854819090909

00:54:15.616 --> 00:54:17.794 I'm sorry this is 24 percent

NOTE Confidence: 0.825854819090909

00:54:17.800 --> 00:54:19.224 34% reduction in mortality,

NOTE Confidence: 0.825854819090909

00:54:19.224 --> 00:54:21.004 but there weren't enough women

NOTE Confidence: 0.825854819090909

00:54:21.004 --> 00:54:22.878 in this study unfortunately.

NOTE Confidence: 0.825854819090909

00:54:22.880 --> 00:54:24.780 To reach significant significance.

NOTE Confidence: 0.825854819090909

00:54:24.780 --> 00:54:29.930 Although this was a very interesting finding.

NOTE Confidence: 0.825854819090909

00:54:29.930 --> 00:54:31.514 Nelson also demonstrated again

NOTE Confidence: 0.825854819090909

00:54:31.514 --> 00:54:33.890 that there is a shift towards

NOTE Confidence: 0.825854819090909

00:54:33.965 --> 00:54:35.950 earlier stage when you screen,

NOTE Confidence: 0.825854819090909

00:54:35.950 --> 00:54:38.026 and so the Nelson intervention group

NOTE Confidence: 0.825854819090909

00:54:38.026 --> 00:54:40.846 with low dose CT is shown here in the

NOTE Confidence: 0.825854819090909

00:54:40.846 --> 00:54:43.145 blue bars and you can see that more

NOTE Confidence: 0.825854819090909

00:54:43.145 --> 00:54:45.548 than 50% of patients were diagnosed

NOTE Confidence: 0.825854819090909

00:54:45.548 --> 00:54:49.068 with cancer at early stage stage 1A and B.

NOTE Confidence: 0.825854819090909

00:54:49.070 --> 00:54:50.970 This is solitary nodule

NOTE Confidence: 0.825854819090909

00:54:50.970 --> 00:54:52.870 less than 3 centimeters,

NOTE Confidence: 0.825854819090909

00:54:52.870 --> 00:54:54.970 whereas only about 11% were

NOTE Confidence: 0.825854819090909

00:54:54.970 --> 00:54:56.650 diagnosed with stage four.

NOTE Confidence: 0.825854819090909

00:54:56.650 --> 00:54:58.008 And if you remember the pie chart,

NOTE Confidence: 0.825854819090909

00:54:58.010 --> 00:55:00.030 this is a dramatic change.

NOTE Confidence: 0.825854819090909

00:55:00.030 --> 00:55:01.915 From that distribution and what's

NOTE Confidence: 0.825854819090909

00:55:01.915 --> 00:55:04.426 really striking is that the bars in

NOTE Confidence: 0.825854819090909

00:55:04.426 --> 00:55:06.372 red and green are the control arm

NOTE Confidence: 0.825854819090909

00:55:06.372 --> 00:55:08.698 and green and their cancer registry,

NOTE Confidence: 0.825854819090909

00:55:08.700 --> 00:55:10.240 which is essentially another

NOTE Confidence: 0.825854819090909

00:55:10.240 --> 00:55:11.780 sort of control group,

NOTE Confidence: 0.825854819090909

00:55:11.780 --> 00:55:13.887 and you can see that half of

NOTE Confidence: 0.825854819090909

00:55:13.887 --> 00:55:15.498 patients are diagnosed at stage 4,

NOTE Confidence: 0.825854819090909

00:55:15.500 --> 00:55:17.208 which is again with that pie chart

NOTE Confidence: 0.825854819090909

00:55:17.208 --> 00:55:19.170 shows so when you look at the blue

NOTE Confidence: 0.825854819090909

00:55:19.170 --> 00:55:20.959 bars compared the red and green bars,

NOTE Confidence: 0.825854819090909

00:55:20.960 --> 00:55:24.146 you really see this move with

NOTE Confidence: 0.825854819090909

00:55:24.146 --> 00:55:25.739 screening towards detecting

00:55:25.739 --> 00:55:28.190 cancer at much earlier stage.

00:55:28.190 --> 00:55:30.530 And the last study is the

00:55:30.530 --> 00:55:32.090 Southern Community Cohort study.

00:55:32.090 --> 00:55:33.242 There are clearly many,

00:55:33.242 --> 00:55:34.682 many studies looking at screening,

00:55:34.690 --> 00:55:36.690 but this particular one was

00:55:36.690 --> 00:55:38.290 important because it really

00:55:38.290 --> 00:55:40.606 addressed health disparities in lung

00:55:40.606 --> 00:55:42.446 cancer and lung cancer screening.

00:55:42.450 --> 00:55:43.848 So, Doctor Aldrich,

00:55:43.848 --> 00:55:45.246 who's from Vanderbilt,

00:55:45.250 --> 00:55:47.416 did a prospective study of lung

00:55:47.416 --> 00:55:49.417 cancer screening and 12 Southern

00:55:49.417 --> 00:55:52.803 states in the in 2002 to 2009.

00:55:52.803 --> 00:55:56.168 They looked at everybody in

NOTE Confidence: 0.825854819090909

00:55:56.170 --> 00:55:59.320 a lot of community clinics.

NOTE Confidence: 0.825854819090909

00:55:59.320 --> 00:56:00.482 Predominantly convenient,

NOTE Confidence: 0.825854819090909

00:56:00.482 --> 00:56:02.806 not academic Medical Center

NOTE Confidence: 0.825854819090909

00:56:02.806 --> 00:56:05.823 clinics and they looked at 48,000

NOTE Confidence: 0.825854819090909

00:56:05.823 --> 00:56:08.138 African American and white current

NOTE Confidence: 0.825854819090909

00:56:08.138 --> 00:56:10.836 and former smokers is 40 to 79.

NOTE Confidence: 0.825854819090909

00:56:10.836 --> 00:56:12.816 Two thirds of the population

NOTE Confidence: 0.825854819090909

00:56:12.816 --> 00:56:15.202 was African American and 1/3 was

NOTE Confidence: 0.825854819090909

00:56:15.202 --> 00:56:18.009 white and what they what they saw

NOTE Confidence: 0.825854819090909

00:56:18.009 --> 00:56:20.788 was that 17% of African American

NOTE Confidence: 0.825854819090909

00:56:20.788 --> 00:56:23.198 smokers were eligible for screening

NOTE Confidence: 0.825854819090909

00:56:23.200 --> 00:56:26.536 compared to 31% of white smokers.

NOTE Confidence: 0.825854819090909

00:56:26.540 --> 00:56:27.950 And so there's this big

NOTE Confidence: 0.825854819090909

00:56:27.950 --> 00:56:29.078 discrepancy in who would.

NOTE Confidence: 0.825854819090909

00:56:29.080 --> 00:56:30.810 To be eligible of course,

NOTE Confidence: 0.825854819090909

00:56:30.810 --> 00:56:34.206 screening that was associated with race.

NOTE Confidence: 0.825854819090909

00:56:34.210 --> 00:56:36.004 They then looked at all of

NOTE Confidence: 0.825854819090909

00:56:36.004 --> 00:56:37.200 the cancers that occurred

NOTE Confidence: 0.854431875882353

00:56:37.265 --> 00:56:39.568 in this population over that time frame,

NOTE Confidence: 0.854431875882353

00:56:39.570 --> 00:56:42.198 and they came up with about

NOTE Confidence: 0.854431875882353

00:56:42.198 --> 00:56:44.486 1300 new lung cancers and when

NOTE Confidence: 0.854431875882353

00:56:44.486 --> 00:56:45.826 they looked at those patients,

NOTE Confidence: 0.854431875882353

00:56:45.830 --> 00:56:48.868 what they found was that 32% of

NOTE Confidence: 0.854431875882353

00:56:48.868 --> 00:56:50.144 the African American patients

NOTE Confidence: 0.854431875882353

00:56:50.144 --> 00:56:52.252 who had gotten lung cancer were

NOTE Confidence: 0.854431875882353

00:56:52.252 --> 00:56:54.167 eligible for lung cancer screening.

NOTE Confidence: 0.854431875882353

00:56:54.170 --> 00:56:57.476 Based on the USPSTF criteria compared

NOTE Confidence: 0.854431875882353

00:56:57.476 --> 00:57:00.550 to 56% of white so many more.

NOTE Confidence: 0.854431875882353

00:57:00.550 --> 00:57:03.170 Whites were eligible for lung

NOTE Confidence: 0.854431875882353

00:57:03.170 --> 00:57:05.094 cancer screening than blacks,

NOTE Confidence: 0.854431875882353

00:57:05.094 --> 00:57:07.716 and really the lack of eligibility

91

NOTE Confidence: 0.854431875882353

00:57:07.716 --> 00:57:10.106 was primarily associated with lesser

NOTE Confidence: 0.854431875882353

00:57:10.106 --> 00:57:12.026 smoking among African Americans

NOTE Confidence: 0.854431875882353

00:57:12.026 --> 00:57:15.003 who got lung cancer with the median

NOTE Confidence: 0.854431875882353

00:57:15.003 --> 00:57:17.990 pack years of 26 compared to 48 in.

NOTE Confidence: 0.854431875882353

00:57:17.990 --> 00:57:20.360 In the white smoking patients who

NOTE Confidence: 0.854431875882353

00:57:20.360 --> 00:57:23.147 had gotten lung cancer and this

NOTE Confidence: 0.854431875882353

00:57:23.147 --> 00:57:25.547 really again brought out this

NOTE Confidence: 0.854431875882353

00:57:25.547 --> 00:57:27.429 observation that African Americans

NOTE Confidence: 0.854431875882353

00:57:27.429 --> 00:57:30.516 and women seem to get lung cancer.

NOTE Confidence: 0.854431875882353

00:57:30.520 --> 00:57:34.060 That's a lower smoking intensity

NOTE Confidence: 0.854431875882353

00:57:34.060 --> 00:57:38.180 exposure and also at younger age.

NOTE Confidence: 0.854431875882353

00:57:38.180 --> 00:57:40.088 So that aldriches group.

NOTE Confidence: 0.854431875882353

00:57:40.088 --> 00:57:42.473 Has recommended that the smoking

NOTE Confidence: 0.854431875882353

00:57:42.473 --> 00:57:44.974 pack here eligibility criteria for

NOTE Confidence: 0.854431875882353

00:57:44.974 --> 00:57:47.884 USPS screening be decreased to 20

NOTE Confidence: 0.854431875882353

00:57:47.965 --> 00:57:50.982 pack years to try to address this

NOTE Confidence: 0.854431875882353

00:57:50.982 --> 00:57:53.198 health disparity where fewer African

NOTE Confidence: 0.854431875882353

00:57:53.198 --> 00:57:55.493 Americans were being screened because

NOTE Confidence: 0.854431875882353

00:57:55.493 --> 00:57:57.857 they weren't eligible on the basis

NOTE Confidence: 0.854431875882353

00:57:57.857 --> 00:57:59.705 of the smoking intensity and if

NOTE Confidence: 0.854431875882353

00:57:59.705 --> 00:58:01.962 that were to be implemented that

NOTE Confidence: 0.854431875882353

00:58:01.962 --> 00:58:03.847 it would increase the percentage

NOTE Confidence: 0.854431875882353

00:58:03.850 --> 00:58:05.850 of African African American smokers

NOTE Confidence: 0.854431875882353

00:58:05.850 --> 00:58:08.339 who would be eligible for screening

NOTE Confidence: 0.854431875882353

00:58:08.339 --> 00:58:10.865 and they did this very interesting.

NOTE Confidence: 0.854431875882353

00:58:10.870 --> 00:58:13.334 Sensitivity study and I'm not going to

NOTE Confidence: 0.854431875882353

00:58:13.334 --> 00:58:15.268 go through everything on this graph,

NOTE Confidence: 0.854431875882353

00:58:15.270 --> 00:58:18.000 but what they looked at was in

NOTE Confidence: 0.854431875882353

00:58:18.000 --> 00:58:20.460 the population with the existing

NOTE Confidence: 0.854431875882353

00:58:20.460 --> 00:58:21.670 USPSTF guidelines,

NOTE Confidence: 0.854431875882353

00:58:21.670 --> 00:58:23.470 what is the sensitivity of screening

NOTE Confidence: 0.854431875882353

00:58:23.470 --> 00:58:26.222 to pick up a lung cancer and African

NOTE Confidence: 0.854431875882353

00:58:26.222 --> 00:58:28.658 American sensitivity is shown here in

NOTE Confidence: 0.854431875882353

00:58:28.658 --> 00:58:31.332 the solid orange line and whites in

NOTE Confidence: 0.854431875882353

00:58:31.332 --> 00:58:33.933 the dotted orange line and you can

NOTE Confidence: 0.854431875882353

00:58:33.933 --> 00:58:36.159 see that the sensitivity of screening

NOTE Confidence: 0.854431875882353

00:58:36.159 --> 00:58:39.787 was much much lower and so the question is,

NOTE Confidence: 0.854431875882353

00:58:39.790 --> 00:58:41.730 well, how can you?

NOTE Confidence: 0.854431875882353

00:58:41.730 --> 00:58:44.155 Bring that sensitivity more equitably

NOTE Confidence: 0.854431875882353

00:58:44.155 --> 00:58:47.526 to so the curves look more similarly,

NOTE Confidence: 0.854431875882353

00:58:47.530 --> 00:58:49.060 and they modeled out what would

NOTE Confidence: 0.854431875882353

00:58:49.060 --> 00:58:49.825 happen if you,

NOTE Confidence: 0.854431875882353

00:58:49.830 --> 00:58:52.231 if we had screened at 20 pack

NOTE Confidence: 0.854431875882353

00:58:52.231 --> 00:58:54.160 years as the threshold,

NOTE Confidence: 0.854431875882353

00:58:54.160 --> 00:58:57.008 and you can see that the the solid

NOTE Confidence: 0.854431875882353

00:58:57.008 --> 00:58:58.832 orange line and the dotted orange

NOTE Confidence: 0.854431875882353

00:58:58.832 --> 00:59:00.458 line still don't quite meet,

NOTE Confidence: 0.854431875882353

00:59:00.460 --> 00:59:02.080 but they become much closer,

NOTE Confidence: 0.854431875882353

00:59:02.080 --> 00:59:04.810 and there is no decrease in sensitivity

NOTE Confidence: 0.854431875882353

00:59:04.810 --> 00:59:08.419 in whites by making that change.

NOTE Confidence: 0.854431875882353

00:59:08.420 --> 00:59:09.386 And so on.

NOTE Confidence: 0.854431875882353

00:59:09.386 --> 00:59:12.060 The basis of that and actually many other

NOTE Confidence: 0.854431875882353

00:59:12.060 --> 00:59:15.260 cancer screening studies last March.

NOTE Confidence: 0.854431875882353

00:59:15.260 --> 00:59:16.844 So a year ago,

NOTE Confidence: 0.854431875882353

00:59:16.844 --> 00:59:18.428 USPSTF updated its recommendation

NOTE Confidence: 0.854431875882353

00:59:18.428 --> 00:59:20.739 for lung cancer screening to include

NOTE Confidence: 0.854431875882353

00:59:20.739 --> 00:59:23.400 adults now ages 50 to 80 years.

NOTE Confidence: 0.854431875882353

00:59:23.400 --> 00:59:25.871 So younger population with a 20 pack

NOTE Confidence: 0.854431875882353

00:59:25.871 --> 00:59:28.060 year smoking history along the lines

NOTE Confidence: 0.854431875882353

00:59:28.060 --> 00:59:30.190 of the recommendation of the group

NOTE Confidence: 0.854431875882353

00:59:30.190 --> 00:59:31.965 from Vanderbilt who are currently

NOTE Confidence: 0.854431875882353

00:59:31.965 --> 00:59:34.599 smoking or quit within the past 15 years.

NOTE Confidence: 0.854431875882353

00:59:34.600 --> 00:59:39.164 And this expansion of the USPSTF criteria.

NOTE Confidence: 0.854431875882353

00:59:39.170 --> 00:59:42.344 Now makes about 14 million Americans

NOTE Confidence: 0.854431875882353

00:59:42.344 --> 00:59:45.420 eligible for lung cancer screening.

NOTE Confidence: 0.854431875882353

00:59:45.420 --> 00:59:48.090 So.

NOTE Confidence: 0.854431875882353

00:59:48.090 --> 00:59:50.322 Both speakers so far have mentioned

NOTE Confidence: 0.854431875882353

00:59:50.322 --> 00:59:52.458 shared decision making and I think

NOTE Confidence: 0.854431875882353

00:59:52.458 --> 00:59:53.928 we incorporate that into all

NOTE Confidence: 0.854431875882353

00:59:53.928 --> 00:59:55.470 of our daily practices.

NOTE Confidence: 0.854431875882353

00:59:55.470 --> 00:59:57.800 Lung cancer screening does differ

NOTE Confidence: 0.854431875882353

00:59:57.800 --> 01:00:00.130 from other screening for cancers

NOTE Confidence: 0.854431875882353

01:00:00.201 --> 01:00:02.389 because it's actually mandatory

NOTE Confidence: 0.854431875882353

01:00:02.390 --> 01:00:04.496 that you do it to be for the test

NOTE Confidence: 0.854431875882353

01:00:04.496 --> 01:00:06.783 to be reimbursed by Medicare so

NOTE Confidence: 0.854431875882353

01:00:06.783 --> 01:00:08.768 that there must be documentation

NOTE Confidence: 0.886341455416667

01:00:08.833 --> 01:00:10.758 that is shared decision making

NOTE Confidence: 0.886341455416667

01:00:10.758 --> 01:00:12.898 session with the patient was

NOTE Confidence: 0.886341455416667

01:00:12.898 --> 01:00:15.110 actually actually occurred.

NOTE Confidence: 0.886341455416667

01:00:15.110 --> 01:00:17.780 The updated guidelines.

NOTE Confidence: 0.886341455416667

01:00:17.780 --> 01:00:20.628 Now do not make it necessary for that

NOTE Confidence: 0.886341455416667

01:00:20.628 --> 01:00:22.817 shared decision making to occur with.

NOTE Confidence: 0.886341455416667

01:00:22.820 --> 01:00:24.509 Position or PRN?

NOTE Confidence: 0.886341455416667

01:00:24.509 --> 01:00:27.324 A trained individual including a

NOTE Confidence: 0.886341455416667

01:00:27.324 --> 01:00:30.917 our end or some other healthcare

NOTE Confidence: 0.886341455416667

01:00:30.920 --> 01:00:33.350 providing person can now do that

NOTE Confidence: 0.886341455416667

01:00:33.350 --> 01:00:35.328 shared decision making our visit

NOTE Confidence: 0.886341455416667

01:00:35.328 --> 01:00:37.680 and it is very important because

NOTE Confidence: 0.886341455416667

01:00:37.749 --> 01:00:39.979 like all other cancer screenings,

NOTE Confidence: 0.886341455416667

01:00:39.980 --> 01:00:42.550 there are known benefits and

NOTE Confidence: 0.886341455416667

01:00:42.550 --> 01:00:44.750 potential harms that we're very

NOTE Confidence: 0.886341455416667

01:00:44.750 --> 01:00:47.090 clear in all of these studies.

NOTE Confidence: 0.886341455416667

01:00:47.090 --> 01:00:49.729 This is a CT scan that actually

NOTE Confidence: 0.886341455416667

01:00:49.729 --> 01:00:51.711 includes imaging of every part

NOTE Confidence: 0.886341455416667

01:00:51.711 --> 01:00:54.039 of the chest and upper abdomen,

NOTE Confidence: 0.886341455416667

01:00:54.040 --> 01:00:55.390 and that makes it different.

NOTE Confidence: 0.886341455416667

01:00:55.390 --> 01:00:57.808 Than other cancer screenings where it's

NOTE Confidence: 0.886341455416667

01:00:57.808 --> 01:01:00.554 really only the organ of interest that

NOTE Confidence: 0.886341455416667

01:01:00.554 --> 01:01:04.090 appears on whatever study is being done.

NOTE Confidence: 0.886341455416667

01:01:04.090 --> 01:01:06.898 There are a lot of false positive the false

NOTE Confidence: 0.886341455416667

01:01:06.898 --> 01:01:09.158 positive rate and NLST was actually 94%,

NOTE Confidence: 0.886341455416667

01:01:09.158 --> 01:01:11.782 so most of the nodules that are identified

NOTE Confidence: 0.886341455416667

01:01:11.782 --> 01:01:14.210 by screening are not going to be cancers,

NOTE Confidence: 0.886341455416667

01:01:14.210 --> 01:01:17.770 and so it is very important that the.

NOTE Confidence: 0.886341455416667

01:01:17.770 --> 01:01:20.080 American College of Radiology Lung

NOTE Confidence: 0.886341455416667

01:01:20.080 --> 01:01:22.390 Rads algorithm for natural evaluation

NOTE Confidence: 0.886341455416667

01:01:22.458 --> 01:01:24.970 is used because the intent of that is

NOTE Confidence: 0.886341455416667

01:01:24.970 --> 01:01:26.863 to minimize unnecessary evaluation of

NOTE Confidence: 0.886341455416667

01:01:26.863 --> 01:01:29.649 nodules that are not likely to harm,

NOTE Confidence: 0.886341455416667

01:01:29.650 --> 01:01:31.354 and it does provide this opportunity

NOTE Confidence: 0.886341455416667

01:01:31.354 --> 01:01:33.550 to talk to the patient about tobacco

NOTE Confidence: 0.886341455416667

01:01:33.550 --> 01:01:35.554 cessation and many people feel this

NOTE Confidence: 0.886341455416667

01:01:35.554 --> 01:01:37.821 is the teachable moment that when a

NOTE Confidence: 0.886341455416667

01:01:37.821 --> 01:01:40.894 patient is motivated to listen to you as

NOTE Confidence: 0.886341455416667

01:01:40.894 --> 01:01:43.630 the expert about lung cancer screening,

NOTE Confidence: 0.886341455416667

01:01:43.630 --> 01:01:45.889 that that may be the time when your 3

NOTE Confidence: 0.886341455416667

01:01:45.889 --> 01:01:47.979 minutes of smoking cessation counseling.

NOTE Confidence: 0.886341455416667

01:01:47.980 --> 01:01:50.410 He's most effective.

NOTE Confidence: 0.886341455416667

01:01:50.410 --> 01:01:53.259 So there are also lung cancer risk

NOTE Confidence: 0.886341455416667

01:01:53.259 --> 01:01:55.015 assessment models for patients

NOTE Confidence: 0.886341455416667

01:01:55.015 --> 01:01:57.300 who smoked or actually didn't

NOTE Confidence: 0.886341455416667

01:01:57.300 --> 01:01:59.494 smoke lung cancer screening.

NOTE Confidence: 0.886341455416667

01:01:59.494 --> 01:02:02.756 Those only offered by Medicare to

NOTE Confidence: 0.886341455416667

01:02:02.756 --> 01:02:04.586 patients with that pretty incentive.

NOTE Confidence: 0.886341455416667

01:02:04.590 --> 01:02:05.480 Smoking history.

NOTE Confidence: 0.886341455416667

01:02:05.480 --> 01:02:08.150 This is the prostate lung colon

NOTE Confidence: 0.886341455416667

01:02:08.150 --> 01:02:10.628 ovarian model that was developed in

NOTE Confidence: 0.886341455416667

01:02:10.630 --> 01:02:13.710 2012 based on the PL fuel population.

NOTE Confidence: 0.886341455416667

01:02:13.710 --> 01:02:16.125 This is the website where you can

NOTE Confidence: 0.886341455416667

01:02:16.125 --> 01:02:18.488 get it really easy by Googling.

NOTE Confidence: 0.886341455416667

01:02:18.490 --> 01:02:20.054 PLCOM 2012, Brock University.

NOTE Confidence: 0.886341455416667

01:02:20.054 --> 01:02:22.400 The primary author for this model

NOTE Confidence: 0.886341455416667

01:02:22.466 --> 01:02:24.638 is that Brock University in Canada,

NOTE Confidence: 0.886341455416667

01:02:24.640 --> 01:02:26.670 and I think what this demonstrates is

NOTE Confidence: 0.886341455416667

01:02:26.670 --> 01:02:29.107 that there are a lot of risk factors

NOTE Confidence: 0.886341455416667

01:02:29.107 --> 01:02:30.612 for lung cancer besides smoking.

NOTE Confidence: 0.886341455416667

01:02:30.620 --> 01:02:33.340 Although smoking is the causative

NOTE Confidence: 0.886341455416667

01:02:33.340 --> 01:02:36.762 agent in probably 85 to 90% of

NOTE Confidence: 0.886341455416667

01:02:36.762 --> 01:02:38.634 of all comers with lung cancer,

NOTE Confidence: 0.886341455416667

01:02:38.640 --> 01:02:40.850 or at least a contributor.

NOTE Confidence: 0.886341455416667

01:02:40.850 --> 01:02:44.180 But many other factors create

NOTE Confidence: 0.886341455416667

01:02:44.180 --> 01:02:46.035 risk body mass index.

NOTE Confidence: 0.886341455416667

01:02:46.035 --> 01:02:48.405 Whether you have other lung disease.

NOTE Confidence: 0.886341455416667

01:02:48.410 --> 01:02:51.506 If you hadn't other cancer yourself,

NOTE Confidence: 0.886341455416667

01:02:51.510 --> 01:02:53.814 or that there's a family history

NOTE Confidence: 0.886341455416667

01:02:53.814 --> 01:02:56.138 of cancer and there's definitely

NOTE Confidence: 0.886341455416667

01:02:56.138 --> 01:02:59.650 influence based on race and ethnicity

NOTE Confidence: 0.886341455416667

01:02:59.650 --> 01:03:01.771 as well as smoking intensity and the

NOTE Confidence: 0.886341455416667

01:03:01.771 --> 01:03:03.638 nice thing about this calculator is

NOTE Confidence: 0.886341455416667

01:03:03.638 --> 01:03:05.724 it does give you a probability of

NOTE Confidence: 0.886341455416667

01:03:05.782 --> 01:03:07.728 lung cancer in the next six years.

NOTE Confidence: 0.886341455416667

01:03:07.730 --> 01:03:09.794 And so for this 73 year old patient

NOTE Confidence: 0.886341455416667

01:03:09.794 --> 01:03:11.519 who has these demographics?

NOTE Confidence: 0.886341455416667

01:03:11.520 --> 01:03:13.816 That lung cancer risk is about 5%

NOTE Confidence: 0.886341455416667

01:03:13.820 --> 01:03:16.641 and that actually turns out to be

NOTE Confidence: 0.886341455416667

01:03:16.641 --> 01:03:19.418 double the risk of NLST or Nelson,

NOTE Confidence: 0.886341455416667

01:03:19.420 --> 01:03:21.076 and so this patient would be

NOTE Confidence: 0.886341455416667

01:03:21.076 --> 01:03:22.748 considered very high risk even though

NOTE Confidence: 0.886341455416667

01:03:22.748 --> 01:03:24.540 that number may not look so high.

NOTE Confidence: 0.886341455416667

01:03:24.540 --> 01:03:26.220 So it's important to ground that in.

NOTE Confidence: 0.889394671

01:03:26.220 --> 01:03:27.972 Who is the high risk population

NOTE Confidence: 0.889394671

01:03:27.972 --> 01:03:29.140 for all those studies?

NOTE Confidence: 0.889394671

01:03:29.140 --> 01:03:31.310 And what did that mean?

NOTE Confidence: 0.889394671

01:03:31.310 --> 01:03:33.134 So the benefits of lung cancer

NOTE Confidence: 0.889394671

01:03:33.134 --> 01:03:35.290 screening I think are pretty obvious.

NOTE Confidence: 0.889394671

01:03:35.290 --> 01:03:36.678 Decreased lung cancer mortality,

NOTE Confidence: 0.889394671

01:03:36.678 --> 01:03:38.066 detection of lung cancer,

NOTE Confidence: 0.889394671

01:03:38.070 --> 01:03:39.938 early stage detection of

NOTE Confidence: 0.889394671

01:03:39.938 --> 01:03:41.806 disease when it's treatable,

NOTE Confidence: 0.889394671

01:03:41.810 --> 01:03:44.029 improvement in survival and quality of life,

NOTE Confidence: 0.889394671

01:03:44.030 --> 01:03:45.770 and providing that teachable

NOTE Confidence: 0.889394671

01:03:45.770 --> 01:03:47.510 moment for tobacco cessation.

NOTE Confidence: 0.889394671

01:03:47.510 --> 01:03:49.230 But there are also risks,

NOTE Confidence: 0.889394671

01:03:49.230 --> 01:03:51.024 predominantly related to

NOTE Confidence: 0.889394671

01:03:51.024 --> 01:03:53.416 the high false positive.

NOTE Confidence: 0.889394671

01:03:53.420 --> 01:03:55.205 Likelihood of finding a nodules

NOTE Confidence: 0.889394671

01:03:55.205 --> 01:03:57.380 that are not destined to harm,

NOTE Confidence: 0.889394671

01:03:57.380 --> 01:03:59.630 and those nodules can create unnecessary

NOTE Confidence: 0.889394671

01:03:59.630 --> 01:04:01.700 testing and procedures and economic,

NOTE Confidence: 0.889394671

01:04:01.700 --> 01:04:03.885 emotional and physical costs which

NOTE Confidence: 0.889394671

01:04:03.885 --> 01:04:06.070 hopefully can be minimized if

NOTE Confidence: 0.889394671

01:04:06.142 --> 01:04:08.260 we stick to the algorithm used.

NOTE Confidence: 0.889394671

01:04:08.260 --> 01:04:11.908 Meeting of Longreads given to us by PCR.

NOTE Confidence: 0.889394671

01:04:11.910 --> 01:04:14.016 There can be false negative results.

NOTE Confidence: 0.889394671

01:04:14.020 --> 01:04:16.657 We used to worry a lot more about the

NOTE Confidence: 0.889394671

01:04:16.657 --> 01:04:18.509 detection of indolent disease that

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NOTE Confidence: 0.889394671

01:04:18.509 --> 01:04:20.753 would really not render any benefit

NOTE Confidence: 0.889394671

01:04:20.817 --> 01:04:22.995 and that is known as overdiagnosis.

NOTE Confidence: 0.889394671

01:04:23.000 --> 01:04:24.408 There is some radiation.

NOTE Confidence: 0.889394671

01:04:24.408 --> 01:04:26.168 Exposure related to having a

NOTE Confidence: 0.889394671

01:04:26.168 --> 01:04:28.169 test with radiation every year,

NOTE Confidence: 0.889394671

01:04:28.170 --> 01:04:30.156 but it really takes thousands and

NOTE Confidence: 0.889394671

01:04:30.156 --> 01:04:31.939 10s of thousands of examinations

NOTE Confidence: 0.889394671

01:04:31.939 --> 01:04:34.267 to generate enough harm that one

NOTE Confidence: 0.889394671

01:04:34.267 --> 01:04:36.693 person would get lung cancer or

NOTE Confidence: 0.889394671

01:04:36.693 --> 01:04:38.688 another cancer from their screening.

NOTE Confidence: 0.889394671

01:04:38.690 --> 01:04:40.305 And then I've already mentioned

NOTE Confidence: 0.889394671

01:04:40.305 --> 01:04:43.056 that this is a CT scan of more

NOTE Confidence: 0.889394671

01:04:43.056 --> 01:04:45.192 than one organ and so incidental

NOTE Confidence: 0.889394671

01:04:45.192 --> 01:04:46.868 findings are quite frequent.

NOTE Confidence: 0.889394671

01:04:46.870 --> 01:04:49.210 Speaking with patients in these and

NOTE Confidence: 0.889394671

01:04:49.210 --> 01:04:51.310 these shared decision making visits

NOTE Confidence: 0.889394671

01:04:51.310 --> 01:04:54.315 makes it clear what that there are

NOTE Confidence: 0.889394671

01:04:54.315 --> 01:04:56.047 actually individual patient level

NOTE Confidence: 0.889394671

01:04:56.047 --> 01:04:57.893 barriers to lung cancer screening

NOTE Confidence: 0.889394671

01:04:57.893 --> 01:05:00.430 related to stigma of fear of a test,

NOTE Confidence: 0.889394671

01:05:00.430 --> 01:05:02.392 and in particular this is often

NOTE Confidence: 0.889394671

01:05:02.392 --> 01:05:04.394 confused with a closed MRI and

NOTE Confidence: 0.889394671

01:05:04.394 --> 01:05:05.646 you can alleviate that.

NOTE Confidence: 0.889394671

01:05:05.650 --> 01:05:07.360 Patients are afraid of getting

NOTE Confidence: 0.889394671

01:05:07.360 --> 01:05:09.503 a cancer diagnosis so may avoid

NOTE Confidence: 0.889394671

01:05:09.503 --> 01:05:11.990 having the screen they're afraid of

NOTE Confidence: 0.889394671

01:05:11.990 --> 01:05:14.550 having surgery or radiation or more.

NOTE Confidence: 0.889394671

01:05:14.550 --> 01:05:16.794 You know, medical therapy.

NOTE Confidence: 0.889394671

01:05:16.794 --> 01:05:17.916 By screening,

NOTE Confidence: 0.889394671

01:05:17.920 --> 01:05:20.426 APRN recently had a patient telling her

NOTE Confidence: 0.889394671

01:05:20.426 --> 01:05:22.536 I can't afford to have lung cancer.

NOTE Confidence: 0.889394671

01:05:22.536 --> 01:05:24.500 I'm not sure I want this screen

NOTE Confidence: 0.889394671

01:05:24.500 --> 01:05:25.379 access and cost,

NOTE Confidence: 0.889394671

01:05:25.379 --> 01:05:28.239 and I think we all of these are common,

NOTE Confidence: 0.889394671

01:05:28.240 --> 01:05:31.280 perhaps to all screening interventions,

NOTE Confidence: 0.889394671

01:05:31.280 --> 01:05:34.028 but particularly too long.

NOTE Confidence: 0.889394671

01:05:34.030 --> 01:05:36.158 And then I I just want to encourage

NOTE Confidence: 0.889394671

01:05:36.158 --> 01:05:37.968 everybody on this call to think

NOTE Confidence: 0.889394671

01:05:37.968 --> 01:05:39.798 about lung cancer screening and talk

NOTE Confidence: 0.889394671

01:05:39.853 --> 01:05:42.100 to their patients because it is a

NOTE Confidence: 0.889394671

01:05:42.100 --> 01:05:43.530 relatively new screening program.

NOTE Confidence: 0.889394671

01:05:43.530 --> 01:05:46.290 We should have had this long

NOTE Confidence: 0.889394671

01:05:46.290 --> 01:05:48.880 ago because lung cancer kills so

NOTE Confidence: 0.889394671

01:05:48.880 --> 01:05:50.584 many patients every year.

NOTE Confidence: 0.889394671

01:05:50.590 --> 01:05:52.798 These are these are statistics across

NOTE Confidence: 0.889394671

01:05:52.798 --> 01:05:55.797 the states in the United States in 2020,

NOTE Confidence: 0.889394671

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01:05:55.797 --> 01:05:58.506 and this is Connecticut and you can

NOTE Confidence: 0.889394671

01:05:58.506 --> 01:06:01.150 see that in 2020 in Connecticut,

NOTE Confidence: 0.889394671

01:06:01.150 --> 01:06:03.370 7% of eligible patients underwent.

NOTE Confidence: 0.889394671

01:06:03.370 --> 01:06:06.716 Cell cancer screening which is really low.

NOTE Confidence: 0.889394671

01:06:06.720 --> 01:06:08.184 We really need to increase that

NOTE Confidence: 0.889394671

01:06:08.184 --> 01:06:09.960 number if we want to get to that.

NOTE Confidence: 0.889394671

01:06:09.960 --> 01:06:12.381 We can save 20 out of 100 lives from

NOTE Confidence: 0.889394671

01:06:12.381 --> 01:06:14.309 cancer and what's really ironic on

NOTE Confidence: 0.889394671

01:06:14.309 --> 01:06:16.719 this slide is the state of Kentucky,

NOTE Confidence: 0.889394671

01:06:16.720 --> 01:06:18.485 which has the highest smoking

NOTE Confidence: 0.889394671

01:06:18.485 --> 01:06:20.250 prevalence in the country and

NOTE Confidence: 0.889394671

01:06:20.313 --> 01:06:22.228 the highest lung cancer incidence

NOTE Confidence: 0.889394671

01:06:22.228 --> 01:06:24.143 actually is screening twice as

NOTE Confidence: 0.889394671

01:06:24.206 --> 01:06:26.136 many patients percentage wise as

NOTE Confidence: 0.889394671

01:06:26.136 --> 01:06:27.680 we are doing Connecticut,

NOTE Confidence: 0.889394671

01:06:27.680 --> 01:06:29.738 and the reason that this is actually

NOTE Confidence: 0.889394671

01:06:29.738 --> 01:06:32.033 really taken off and Kentucky is because

NOTE Confidence: 0.889394671

01:06:32.033 --> 01:06:34.061 of Community and state based efforts.

NOTE Confidence: 0.791462477368421

01:06:34.070 --> 01:06:36.742 To really get the word out and so

NOTE Confidence: 0.791462477368421

01:06:36.742 --> 01:06:39.623 there have been laws passing the

NOTE Confidence: 0.791462477368421

01:06:39.623 --> 01:06:41.751 Legislature support lung cancer

NOTE Confidence: 0.791462477368421

01:06:41.751 --> 01:06:43.920 screening and a lot of community

NOTE Confidence: 0.791462477368421

01:06:43.920 --> 01:06:46.070 advocacy groups that have to take in

NOTE Confidence: 0.791462477368421

01:06:46.070 --> 01:06:48.286 this on and so the take home points

NOTE Confidence: 0.791462477368421

01:06:48.286 --> 01:06:50.471 for tonight from this section is that

NOTE Confidence: 0.791462477368421

01:06:50.471 --> 01:06:52.404 remember lung cancer is the leading

NOTE Confidence: 0.791462477368421

01:06:52.404 --> 01:06:54.860 cause of cancer deaths in both men and

NOTE Confidence: 0.791462477368421

01:06:54.860 --> 01:06:57.168 women in this country in the world.

NOTE Confidence: 0.791462477368421

01:06:57.170 --> 01:06:59.418 It is the leading cause of cancer death.

NOTE Confidence: 0.791462477368421

01:06:59.420 --> 01:07:02.450 1.6 million deaths last year,

NOTE Confidence: 0.791462477368421

01:07:02.450 --> 01:07:04.448 detection of disease at early stage.

NOTE Confidence: 0.791462477368421

01:07:04.450 --> 01:07:05.914 Improved survival and increases

NOTE Confidence: 0.791462477368421

01:07:05.914 --> 01:07:07.378 the chance of cure.

NOTE Confidence: 0.791462477368421

01:07:07.380 --> 01:07:09.280 There's a very strong evidence

NOTE Confidence: 0.791462477368421

01:07:09.280 --> 01:07:10.800 based demonstrating that screening

NOTE Confidence: 0.791462477368421

01:07:10.800 --> 01:07:13.254 for lung cancer with low dose CT

NOTE Confidence: 0.791462477368421

01:07:13.254 --> 01:07:14.598 decreases lung cancer mortality,

NOTE Confidence: 0.791462477368421

01:07:14.600 --> 01:07:16.980 so this will save lives.

NOTE Confidence: 0.791462477368421

01:07:16.980 --> 01:07:19.356 The 2021 updated recommendations

NOTE Confidence: 0.791462477368421

01:07:19.356 --> 01:07:22.920 expands the populations of all people,

NOTE Confidence: 0.791462477368421

01:07:22.920 --> 01:07:25.900 but particularly is geared towards

NOTE Confidence: 0.791462477368421

01:07:25.900 --> 01:07:27.544 resolving the health disparities

NOTE Confidence: 0.791462477368421

01:07:27.544 --> 01:07:30.010 that we see for African Americans

NOTE Confidence: 0.791462477368421

01:07:30.073 --> 01:07:32.353 and women who are now increasingly

NOTE Confidence: 0.791462477368421

01:07:32.353 --> 01:07:34.619 eligible for screening and 14 million.

NOTE Confidence: 0.791462477368421

01:07:34.620 --> 01:07:36.768 People are eligible in this country,

NOTE Confidence: 0.791462477368421

01:07:36.770 --> 01:07:38.894 but right now we're screening only

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NOTE Confidence: 0.791462477368421

01:07:38.894 --> 01:07:41.970 5 to 10% and so just to remind you,

NOTE Confidence: 0.791462477368421

01:07:41.970 --> 01:07:44.210 please screen your patient to

NOTE Confidence: 0.791462477368421

01:07:44.210 --> 01:07:46.002 meet the eligibility criteria.

NOTE Confidence: 0.791462477368421

01:07:46.010 --> 01:07:48.380 50 to 80 years old who have a 20 pack

NOTE Confidence: 0.791462477368421

01:07:48.446 --> 01:07:50.750 year smoking history and currently smoke

NOTE Confidence: 0.791462477368421

01:07:50.750 --> 01:07:53.508 or have quit within the past 15 years.

NOTE Confidence: 0.791462477368421

01:07:53.510 --> 01:07:55.040 Thanks very much for listening.

NOTE Confidence: 0.661004378

01:07:57.530 --> 01:07:58.700 Thank you very much, Doctor.

NOTE Confidence: 0.661004378

01:07:58.700 --> 01:08:01.136 Thank you for this wonderful review

NOTE Confidence: 0.661004378

01:08:01.136 --> 01:08:03.160 and hopefully hopefully we'll start

NOTE Confidence: 0.661004378

01:08:03.160 --> 01:08:04.856 getting more and more patients

NOTE Confidence: 0.661004378

01:08:04.856 --> 01:08:06.586 referred for lung cancer screening.

NOTE Confidence: 0.661004378

01:08:06.590 --> 01:08:08.870 As important as you've shown.

NOTE Confidence: 0.661004378

01:08:08.870 --> 01:08:10.718 Very good and we're gonna move

NOTE Confidence: 0.661004378

01:08:10.718 --> 01:08:13.280 on now to the last presentation.

NOTE Confidence: 0.661004378

01:08:13.280 --> 01:08:15.898 And that's on a colorectal cancer screening.

NOTE Confidence: 0.917452572222222

01:08:19.910 --> 01:08:21.550 And I have no conflicts

NOTE Confidence: 0.917452572222222

01:08:21.550 --> 01:08:22.862 of interest to disclose,

NOTE Confidence: 0.917452572222222

01:08:22.870 --> 01:08:26.070 so we're gonna reveal colorectal

NOTE Confidence: 0.917452572222222

01:08:26.070 --> 01:08:28.731 cancer incidence trends to The Tonight.

NOTE Confidence: 0.917452572222222

01:08:28.731 --> 01:08:30.879 We are going to be looking at screening

NOTE Confidence: 0.917452572222222

01:08:30.879 --> 01:08:33.051 with ALITIES and also we'll review

NOTE Confidence: 0.917452572222222

01:08:33.051 --> 01:08:34.780 the newest guidelines and starting

NOTE Confidence: 0.917452572222222

01:08:34.780 --> 01:08:36.817 screening at an earlier age that most

NOTE Confidence: 0.917452572222222

01:08:36.817 --> 01:08:39.690 of you are familiar with already.

NOTE Confidence: 0.917452572222222

01:08:39.690 --> 01:08:41.220 So colorectal cancer,

NOTE Confidence: 0.917452572222222

01:08:41.220 --> 01:08:43.770 still the third leading cancer,

NOTE Confidence: 0.917452572222222

01:08:43.770 --> 01:08:46.284 and both men and women and

NOTE Confidence: 0.917452572222222

01:08:46.284 --> 01:08:47.960 also the third leading.

NOTE Confidence: 0.917452572222222

01:08:47.960 --> 01:08:50.888 Cancer related deaths both in men and women,

NOTE Confidence: 0.917452572222222

01:08:50.890 --> 01:08:52.150 but the good news really,

NOTE Confidence: 0.917452572222222

01:08:52.150 --> 01:08:53.618 on colorectal cancer is

NOTE Confidence: 0.917452572222222

01:08:53.618 --> 01:08:55.086 what I'm showing here,

NOTE Confidence: 0.917452572222222

01:08:55.090 --> 01:08:58.018 which is these very nice steady

NOTE Confidence: 0.917452572222222

01:08:58.018 --> 01:09:00.511 decrease in both incidence and

NOTE Confidence: 0.917452572222222

01:09:00.511 --> 01:09:02.978 mortality since the mid 1980s,

NOTE Confidence: 0.917452572222222

01:09:02.978 --> 01:09:06.218 beginning 1990s of colorectal cancer.

NOTE Confidence: 0.917452572222222

01:09:06.220 --> 01:09:07.676 Again incidence and mortality,

NOTE Confidence: 0.917452572222222

01:09:07.676 --> 01:09:11.059 and a lot of it has to do with

NOTE Confidence: 0.917452572222222

01:09:11.059 --> 01:09:12.924 exactly what I'm showing here,

NOTE Confidence: 0.917452572222222

01:09:12.930 --> 01:09:15.695 which is this steady increase also in

NOTE Confidence: 0.917452572222222

01:09:15.695 --> 01:09:18.219 the utilization of colonoscopy as we.

NOTE Confidence: 0.917452572222222

01:09:18.220 --> 01:09:20.436 Been doing more colonoscopies,

NOTE Confidence: 0.917452572222222

01:09:20.436 --> 01:09:22.058 uh, we've seen that decrease

NOTE Confidence: 0.917452572222222

01:09:22.058 --> 01:09:23.126 in the incidence rate.

NOTE Confidence: 0.917452572222222

01:09:23.130 --> 01:09:25.573 Other factors have played also a role

NOTE Confidence: 0.917452572222222

01:09:25.573 --> 01:09:28.050 in that decrease in colorectal cancer,

NOTE Confidence: 0.917452572222222

01:09:28.050 --> 01:09:30.549 but certainly screening has played a very,

NOTE Confidence: 0.917452572222222

01:09:30.550 --> 01:09:33.806 very important role over the last few years.

NOTE Confidence: 0.917452572222222

01:09:33.810 --> 01:09:35.408 We've been hearing more and more

NOTE Confidence: 0.917452572222222

01:09:35.410 --> 01:09:38.555 about not starting with colonoscopy

NOTE Confidence: 0.917452572222222

01:09:38.555 --> 01:09:42.450 screening as the first screening option,

NOTE Confidence: 0.917452572222222

01:09:42.450 --> 01:09:46.668 but also other types of screening

NOTE Confidence: 0.917452572222222

01:09:46.668 --> 01:09:48.777 tests that recent.

NOTE Confidence: 0.917452572222222

01:09:48.780 --> 01:09:51.996 Studies have shown their their usefulness

NOTE Confidence: 0.917452572222222

01:09:51.996 --> 01:09:54.140 for colorectal cancer screening,

NOTE Confidence: 0.917452572222222

01:09:54.140 --> 01:09:56.240 so those include city colonography,

NOTE Confidence: 0.917452572222222

01:09:56.240 --> 01:10:00.516 but it also includes stool based studies

NOTE Confidence: 0.917452572222222

01:10:00.516 --> 01:10:03.229 that basically test for alterations,

NOTE Confidence: 0.917452572222222

01:10:03.229 --> 01:10:06.330 either blood or cold blood in the

NOTE Confidence: 0.917452572222222

01:10:06.419 --> 01:10:09.502 stool or some a cold blood plus DNA

NOTE Confidence: 0.917452572222222

01:10:09.502 --> 01:10:11.830 abnormalities related to malignant

NOTE Confidence: 0.917452572222222

01:10:11.830 --> 01:10:16.143 cells that at the end of the day would

NOTE Confidence: 0.917452572222222

01:10:16.143 --> 01:10:18.807 result in a positive test that would require.

NOTE Confidence: 0.917452572222222

01:10:18.810 --> 01:10:22.458 The follow up colonoscopy but the

NOTE Confidence: 0.917452572222222

01:10:22.458 --> 01:10:25.066 issue about this test is that really

NOTE Confidence: 0.917452572222222

01:10:25.066 --> 01:10:28.192 and that was very recognized in

NOTE Confidence: 0.917452572222222

01:10:28.192 --> 01:10:31.454 nineteen 2016 by USPSTF is that we

NOTE Confidence: 0.917452572222222

01:10:31.454 --> 01:10:34.938 really don't have a lot of data

NOTE Confidence: 0.917452572222222

01:10:34.938 --> 01:10:36.405 that compares head-to-head.

NOTE Confidence: 0.917452572222222

01:10:36.410 --> 01:10:37.898 Those different screening methods.

NOTE Confidence: 0.917452572222222

01:10:37.898 --> 01:10:40.122 We have very good studies showing

NOTE Confidence: 0.917452572222222

01:10:40.122 --> 01:10:42.318 efficacy of all the methods that

NOTE Confidence: 0.917452572222222

01:10:42.318 --> 01:10:44.869 I showed to you and the legitimacy

NOTE Confidence: 0.917452572222222

01:10:44.869 --> 01:10:46.269 of using these methods,

NOTE Confidence: 0.917452572222222

01:10:46.270 --> 01:10:47.820 but not much comparison between

NOTE Confidence: 0.917452572222222

01:10:47.820 --> 01:10:49.060 the the two different.

NOTE Confidence: 0.917452572222222

01:10:49.060 --> 01:10:51.244 Fans in in the also stated that

NOTE Confidence: 0.917452572222222

01:10:51.244 --> 01:10:53.097 all those single test performance

NOTE Confidence: 0.917452572222222

01:10:53.097 --> 01:10:54.789 is an important issue.

NOTE Confidence: 0.917452572222222

01:10:54.790 --> 01:10:56.142 The detection of colorectal

NOTE Confidence: 0.917452572222222

01:10:56.142 --> 01:10:57.832 cancer sensitivity of the test

NOTE Confidence: 0.917452572222222

01:10:57.832 --> 01:10:59.726 of our time is more important.

NOTE Confidence: 0.917452572222222

01:10:59.730 --> 01:11:02.940 How the test perform over time.

NOTE Confidence: 0.917452572222222

01:11:02.940 --> 01:11:05.480 So with that in mind,

NOTE Confidence: 0.917452572222222

01:11:05.480 --> 01:11:06.713 they try USPSTF.

NOTE Confidence: 0.917452572222222

01:11:06.713 --> 01:11:09.590 What they did is they commissioned what

NOTE Confidence: 0.917452572222222

01:11:09.670 --> 01:11:13.018 they called the cancer intervention and

NOTE Confidence: 0.917452572222222

01:11:13.018 --> 01:11:15.250 Surveillance Modeling network sysnet

NOTE Confidence: 0.917452572222222

01:11:15.331 --> 01:11:17.826 and that included three different.

NOTE Confidence: 0.917452572222222

01:11:17.830 --> 01:11:20.010 Analytical models have performed

NOTE Confidence: 0.917452572222222

01:11:20.010 --> 01:11:22.190 in different institutions to

NOTE Confidence: 0.917452572222222

01:11:22.190 --> 01:11:24.740 inform really recommendations for

NOTE Confidence: 0.917452572222222

01:11:24.740 --> 01:11:25.922 colorectal cancer screening.

NOTE Confidence: 0.917452572222222

01:11:25.922 --> 01:11:27.892 These are the three different

NOTE Confidence: 0.917452572222222

01:11:27.892 --> 01:11:29.996 groups and what they did is they

NOTE Confidence: 0.917452572222222

01:11:29.996 --> 01:11:32.089 use the they based the modeling on

NOTE Confidence: 0.917452572222222

01:11:32.089 --> 01:11:33.641 historical colorectal cancer incidence

NOTE Confidence: 0.917452572222222

01:11:33.641 --> 01:11:36.260 data from the pre screening area.

NOTE Confidence: 0.917452572222222

01:11:36.260 --> 01:11:39.296 So from 1975 to 1979 were really we

NOTE Confidence: 0.917452572222222

01:11:39.296 --> 01:11:41.133 could not see the effects of screening

NOTE Confidence: 0.917452572222222

01:11:41.133 --> 01:11:43.148 because colorectal cancer screening

NOTE Confidence: 0.917452572222222

01:11:43.148 --> 01:11:46.320 cannot be implemented at that time.

NOTE Confidence: 0.917452572222222

01:11:46.320 --> 01:11:49.850 So and the analysis would have to.

NOTE Confidence: 0.917452572222222

01:11:49.850 --> 01:11:51.076 Include benefits,

NOTE Confidence: 0.917452572222222

01:11:51.076 --> 01:11:54.141 harms and burden of colorectal

NOTE Confidence: 0.917452572222222

01:11:54.141 --> 01:11:55.367 cancer screening.

NOTE Confidence: 0.917452572222222

01:11:55.370 --> 01:11:57.206 That's what they really looked at,

NOTE Confidence: 0.7747178925

01:11:57.210 --> 01:12:00.110 so this is some of the data that came

NOTE Confidence: 0.7747178925

01:12:00.110 --> 01:12:02.397 out of that modeling commissioned

NOTE Confidence: 0.7747178925

01:12:02.397 --> 01:12:06.506 by USPSTF here on the left side.

NOTE Confidence: 0.7747178925

01:12:06.510 --> 01:12:08.874 You see all the different modalities

NOTE Confidence: 0.7747178925

01:12:08.874 --> 01:12:10.450 of colorectal cancer screening.

NOTE Confidence: 0.7747178925

01:12:10.450 --> 01:12:12.942 There's an added one which is the

NOTE Confidence: 0.7747178925

01:12:12.942 --> 01:12:15.108 multi target stool DNA every year,

NOTE Confidence: 0.7747178925

01:12:15.110 --> 01:12:16.598 which is not the recommended one.

NOTE Confidence: 0.7747178925

01:12:16.600 --> 01:12:18.406 Recommended one is every three years.

NOTE Confidence: 0.7747178925

01:12:18.410 --> 01:12:19.994 The other ones are.

NOTE Confidence: 0.7747178925

01:12:19.994 --> 01:12:21.578 Standard of care recommendations,

NOTE Confidence: 0.7747178925

01:12:21.580 --> 01:12:23.740 but they look that went to in that

NOTE Confidence: 0.7747178925

01:12:23.740 --> 01:12:25.894 specific time frame and there were several

NOTE Confidence: 0.7747178925

01:12:25.894 --> 01:12:28.010 things that we assessed in this one.

NOTE Confidence: 0.7747178925

01:12:28.010 --> 01:12:31.004 I'm showing life years gained per

NOTE Confidence: 0.7747178925

01:12:31.004 --> 01:12:33.459 thousand individual screen and what

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01:12:33.459 --> 01:12:36.451 they saw is I'm showing here the the

01:12:36.451 --> 01:12:39.597 middle of the different of the different

01:12:39.597 --> 01:12:42.950 brackets when it comes to the estimates.

01:12:42.950 --> 01:12:44.380 According to the three models,

01:12:44.380 --> 01:12:47.726 so they life years gained per thousand

01:12:47.726 --> 01:12:50.240 colonoscopies actually using colonoscopies.

01:12:50.240 --> 01:12:54.104 Primary methods would be 270 will end

01:12:54.104 --> 01:12:56.603 the one with the lowest performance will

01:12:56.603 --> 01:12:59.041 be flexible sigmoidoscopy every five

01:12:59.041 --> 01:13:01.520 years with 221 at the end of the day.

01:13:01.520 --> 01:13:06.343 Though all the all the different screening

01:13:06.343 --> 01:13:09.322 modalities were within were yielding

01:13:09.322 --> 01:13:12.354 within the 18% range of the highest

01:13:12.354 --> 01:13:14.850 performer which would be colonoscopy here.

01:13:14.850 --> 01:13:17.700 So pretty good performance and

01:13:17.700 --> 01:13:20.871 as assessed per life years game.

NOTE Confidence: 0.7747178925

01:13:20.871 --> 01:13:22.819 For 1000 screen individuals,

NOTE Confidence: 0.7747178925

01:13:22.820 --> 01:13:24.505 and this is another one

NOTE Confidence: 0.7747178925

01:13:24.505 --> 01:13:25.516 that's colorectal cancer.

NOTE Confidence: 0.7747178925

01:13:25.520 --> 01:13:28.630 Deaths averted per thousand screen

NOTE Confidence: 0.7747178925

01:13:28.630 --> 01:13:32.075 and they got 24 and the modeling for

NOTE Confidence: 0.7747178925

01:13:32.075 --> 01:13:34.118 colonoscopy every 10 years versus the

NOTE Confidence: 0.7747178925

01:13:34.118 --> 01:13:36.138 lowest performers which were flexible

NOTE Confidence: 0.7747178925

01:13:36.138 --> 01:13:37.754 sigmoidoscopy every five years,

NOTE Confidence: 0.7747178925

01:13:37.760 --> 01:13:39.690 and the multi target stool

NOTE Confidence: 0.7747178925

01:13:39.690 --> 01:13:41.234 DNA every three years.

NOTE Confidence: 0.7747178925

01:13:41.240 --> 01:13:42.920 But at the end of the day again,

NOTE Confidence: 0.7747178925

01:13:42.920 --> 01:13:44.816 a difference of one to four,

NOTE Confidence: 0.7747178925

01:13:44.820 --> 01:13:47.977 depending on which modeling you would use.

NOTE Confidence: 0.7747178925

01:13:47.980 --> 01:13:49.654 One to four deaths of difference

NOTE Confidence: 0.7747178925

01:13:49.654 --> 01:13:50.770 among the different screening.

NOTE Confidence: 0.7747178925

01:13:50.770 --> 01:13:53.145 Questions per thousand screened individuals

NOTE Confidence: 0.7747178925

01:13:53.145 --> 01:13:56.600 and they look also for complications.

NOTE Confidence: 0.7747178925

01:13:56.600 --> 01:13:59.687 And here obviously the more aggressive test

NOTE Confidence: 0.7747178925

01:13:59.687 --> 01:14:02.699 for screening is obviously colonoscopy,

NOTE Confidence: 0.7747178925

01:14:02.700 --> 01:14:08.311 and that had the highest number of predicted

NOTE Confidence: 0.7747178925

01:14:08.311 --> 01:14:11.666 complications with the lowest number

NOTE Confidence: 0.7747178925

01:14:11.666 --> 01:14:17.100 being 9 for the multi targets to DNA test,

NOTE Confidence: 0.7747178925

01:14:17.100 --> 01:14:19.698 so a difference overall from four

NOTE Confidence: 0.7747178925

01:14:19.698 --> 01:14:21.430 to six complication difference.

NOTE Confidence: 0.7747178925

01:14:21.430 --> 01:14:24.154 Among the different screening options per

NOTE Confidence: 0.7747178925

01:14:24.154 --> 01:14:26.830 hundred per thousand screen individuals,

NOTE Confidence: 0.7747178925

01:14:26.830 --> 01:14:28.937 finally they look at the burden of

NOTE Confidence: 0.7747178925

01:14:28.937 --> 01:14:31.467 these and the burden here in this case,

NOTE Confidence: 0.7747178925

01:14:31.470 --> 01:14:34.277 looking at how many colonoscopies it does

NOTE Confidence: 0.7747178925

01:14:34.277 --> 01:14:36.710 require per thousand individual screen.

NOTE Confidence: 0.7747178925

01:14:36.710 --> 01:14:38.906 So when they looked at colonoscopies

NOTE Confidence: 0.7747178925

01:14:38.906 --> 01:14:41.238 needed when you are using colonoscopy

NOTE Confidence: 0.7747178925

01:14:41.238 --> 01:14:43.632 every five every 10 years as

NOTE Confidence: 0.7747178925

01:14:43.632 --> 01:14:45.608 your screening method of choice.

NOTE Confidence: 0.7747178925

01:14:45.610 --> 01:14:48.436 That would be about four colonoscopies

NOTE Confidence: 0.7747178925

01:14:48.436 --> 01:14:51.330 in a lifetime per individual.

NOTE Confidence: 0.7747178925

01:14:51.330 --> 01:14:51.934 But, uh,

NOTE Confidence: 0.7747178925

01:14:51.934 --> 01:14:53.746 if we look at the lowest,

NOTE Confidence: 0.7747178925

01:14:53.750 --> 01:14:55.820 the one that required less colonoscopy,

NOTE Confidence: 0.7747178925

01:14:55.820 --> 01:14:58.556 that will be when screening for

NOTE Confidence: 0.7747178925

01:14:58.556 --> 01:15:01.789 with a feed test every year that

NOTE Confidence: 0.7747178925

01:15:01.789 --> 01:15:04.370 will be close to 2000 colonoscopies

NOTE Confidence: 0.7747178925

01:15:04.370 --> 01:15:06.050 per thousand individual screens.

NOTE Confidence: 0.7747178925

01:15:06.050 --> 01:15:08.078 So that would mean that basically

NOTE Confidence: 0.7747178925

01:15:08.078 --> 01:15:11.225 that would cut in half the number of

NOTE Confidence: 0.7747178925

01:15:11.225 --> 01:15:13.350 colonoscopies needed per patient from

NOTE Confidence: 0.7747178925

01:15:13.350 --> 01:15:15.450 4 colonoscopies to two colonoscopies

NOTE Confidence: 0.7747178925

01:15:15.450 --> 01:15:18.227 to that still a significant burden.

NOTE Confidence: 0.7747178925

01:15:18.230 --> 01:15:21.387 Even using the these other pre screening.

NOTE Confidence: 0.7747178925

01:15:21.390 --> 01:15:23.830 Test if if we choose to do so,

NOTE Confidence: 0.7747178925

01:15:23.830 --> 01:15:26.590 but certainly it would definitely decrease

NOTE Confidence: 0.7747178925

01:15:26.590 --> 01:15:29.660 the overall burden of for colonoscopy.

NOTE Confidence: 0.809567796933333

01:15:29.660 --> 01:15:32.015 So non colonoscopy strategies pretty

NOTE Confidence: 0.809567796933333

01:15:32.015 --> 01:15:35.542 much resulted in about half of the

NOTE Confidence: 0.809567796933333

01:15:35.542 --> 01:15:37.177 total colonoscopies performed.

NOTE Confidence: 0.809567796933333

01:15:37.180 --> 01:15:38.880 So based on all that,

NOTE Confidence: 0.809567796933333

01:15:38.880 --> 01:15:42.378 the USPSTF really departed from the

NOTE Confidence: 0.809567796933333

01:15:42.378 --> 01:15:45.699 prior iterations where really there was.

NOTE Confidence: 0.809567796933333

01:15:45.700 --> 01:15:47.248 There were sets of preferred tests

NOTE Confidence: 0.809567796933333

01:15:47.248 --> 01:15:49.300 and in this case it was colonoscopy.

NOTE Confidence: 0.809567796933333

01:15:49.300 --> 01:15:51.300 The preferred test to are

NOTE Confidence: 0.809567796933333

01:15:51.300 --> 01:15:52.900 no longer emphasizing that,

NOTE Confidence: 0.809567796933333

01:15:52.900 --> 01:15:54.860 and really emphasizing that the

NOTE Confidence: 0.809567796933333

01:15:54.860 --> 01:15:56.820 clinical decision should involve all

NOTE Confidence: 0.809567796933333

01:15:56.880 --> 01:15:58.945 the considerations that we're talking

NOTE Confidence: 0.809567796933333

01:15:58.945 --> 01:16:01.460 about in not only evidence alone

NOTE Confidence: 0.809567796933333

01:16:01.460 --> 01:16:04.036 and more options than that's there

NOTE Confidence: 0.809567796933333

01:16:04.036 --> 01:16:06.780 a good number of studies that show.

NOTE Confidence: 0.809567796933333

01:16:06.780 --> 01:16:09.258 And more options can result in

NOTE Confidence: 0.809567796933333

01:16:09.258 --> 01:16:10.497 better screening uptake.

NOTE Confidence: 0.809567796933333

01:16:10.500 --> 01:16:12.282 Some individuals may be more amenable

NOTE Confidence: 0.809567796933333

01:16:12.282 --> 01:16:14.619 to some of the options and others,

NOTE Confidence: 0.809567796933333

01:16:14.620 --> 01:16:17.539 and in some other cases availability of

NOTE Confidence: 0.809567796933333

01:16:17.539 --> 01:16:19.556 some tests, particularly colonoscopy,

NOTE Confidence: 0.809567796933333

01:16:19.556 --> 01:16:22.496 may not be as available,

NOTE Confidence: 0.809567796933333

01:16:22.500 --> 01:16:25.938 and therefore the stool based test,

NOTE Confidence: 0.809567796933333

01:16:25.940 --> 01:16:27.128 for instance,

01:16:27.128 --> 01:16:30.098 or city colonography could be

01:16:30.098 --> 01:16:31.286 more attractive.

01:16:31.290 --> 01:16:31.750 Choices,

01:16:31.750 --> 01:16:34.050 so individualized decision making to

01:16:34.050 --> 01:16:36.377 the specific patient or situation

01:16:36.377 --> 01:16:38.861 as well as local availability of

01:16:38.861 --> 01:16:40.973 testing options was really emphasized,

01:16:40.973 --> 01:16:44.197 so I think that goes also to doctor

01:16:44.197 --> 01:16:46.429 Tannous comment about the shared

01:16:46.429 --> 01:16:49.063 decision making where more and more

01:16:49.070 --> 01:16:51.038 with all the options that we have and

01:16:51.038 --> 01:16:53.449 none of them really being right and wrong,

01:16:53.450 --> 01:16:57.880 but really making sure that

01:16:57.880 --> 01:17:01.424 everything or every we.

01:17:01.430 --> 01:17:03.710 Look at all the different

01:17:03.710 --> 01:17:05.534 possibilities that can actually

NOTE Confidence: 0.809567796933333

01:17:05.534 --> 01:17:07.788 fit our individual patient.

NOTE Confidence: 0.809567796933333

01:17:07.790 --> 01:17:09.270 That's probably the what's going

NOTE Confidence: 0.809567796933333

01:17:09.270 --> 01:17:11.425 to give us the best chance for

NOTE Confidence: 0.809567796933333

01:17:11.425 --> 01:17:12.970 a high uptake of screening,

NOTE Confidence: 0.809567796933333

01:17:12.970 --> 01:17:15.224 and this is an important message that

NOTE Confidence: 0.809567796933333

01:17:15.224 --> 01:17:17.785 came out from those guidelines in 2016.

NOTE Confidence: 0.809567796933333

01:17:17.785 --> 01:17:20.215 They they stated the screening is

NOTE Confidence: 0.809567796933333

01:17:20.215 --> 01:17:23.018 a cascade of activities that must

NOTE Confidence: 0.809567796933333

01:17:23.018 --> 01:17:25.338 occur in concert cohesively and

NOTE Confidence: 0.809567796933333

01:17:25.417 --> 01:17:27.715 in an organized way for benefits

NOTE Confidence: 0.809567796933333

01:17:27.715 --> 01:17:30.345 to be realized from the point of

NOTE Confidence: 0.809567796933333

01:17:30.345 --> 01:17:31.805 the initial screening examination,

NOTE Confidence: 0.809567796933333

01:17:31.810 --> 01:17:32.986 including related interventions

NOTE Confidence: 0.809567796933333

01:17:32.986 --> 01:17:34.946 or services that are required

NOTE Confidence: 0.809567796933333

01:17:34.946 --> 01:17:36.571 for successful administration of

NOTE Confidence: 0.809567796933333

01:17:36.571 --> 01:17:37.747 the screening tests.

NOTE Confidence: 0.809567796933333

01:17:37.750 --> 01:17:39.438 Such as a bowel preparation for instance.

NOTE Confidence: 0.809567796933333

01:17:39.440 --> 01:17:41.848 Or sedation with endoscopy to the timely

NOTE Confidence: 0.809567796933333

01:17:41.848 --> 01:17:44.259 receipt of any necessary diagnostic.

NOTE Confidence: 0.809567796933333

01:17:44.260 --> 01:17:45.604 Follow up and treatment.

NOTE Confidence: 0.809567796933333

01:17:45.604 --> 01:17:47.620 So really we have to put

NOTE Confidence: 0.809567796933333

01:17:47.694 --> 01:17:49.479 it in this larger context.

NOTE Confidence: 0.809567796933333

01:17:49.480 --> 01:17:51.540 We can screen with colonoscopies,

NOTE Confidence: 0.809567796933333

01:17:51.540 --> 01:17:53.934 but beef patients are not well prepped.

NOTE Confidence: 0.809567796933333

01:17:53.940 --> 01:17:57.524 We are going to fail in in really

NOTE Confidence: 0.809567796933333

01:17:57.524 --> 01:17:59.859 detecting lesion so there's just

NOTE Confidence: 0.809567796933333

01:17:59.860 --> 01:18:01.750 anywhere using a stool based test

NOTE Confidence: 0.809567796933333

01:18:01.750 --> 01:18:04.230 if we don't have a proper way to

NOTE Confidence: 0.809567796933333

01:18:04.230 --> 01:18:05.964 really follow up and make sure

NOTE Confidence: 0.809567796933333

01:18:06.036 --> 01:18:07.986 that they happen in the either.

NOTE Confidence: 0.809567796933333

01:18:07.990 --> 01:18:10.192 Yearly or every three years for

NOTE Confidence: 0.809567796933333

01:18:10.192 --> 01:18:12.050 the multitarget stool DNA test.

NOTE Confidence: 0.809567796933333

01:18:12.050 --> 01:18:13.805 We are not going to be able to succeed.

NOTE Confidence: 0.809567796933333

01:18:13.810 --> 01:18:15.114 So whatever we do,

NOTE Confidence: 0.809567796933333

01:18:15.114 --> 01:18:17.936 it should be in an organized fashion to

NOTE Confidence: 0.809567796933333

01:18:17.936 --> 01:18:21.610 really maximize the benefit from it.

NOTE Confidence: 0.809567796933333

01:18:21.610 --> 01:18:24.039 So with all these where we stand

NOTE Confidence: 0.809567796933333

01:18:24.039 --> 01:18:26.269 with oral cancer screening in the

NOTE Confidence: 0.809567796933333

01:18:26.269 --> 01:18:28.129 US after all these years,

NOTE Confidence: 0.809567796933333

01:18:28.130 --> 01:18:30.895 screening rates have increases have

NOTE Confidence: 0.809567796933333

01:18:30.895 --> 01:18:32.812 slowed over the last few years and

NOTE Confidence: 0.809567796933333

01:18:32.812 --> 01:18:35.680 we still close to 1/3 of eligible

NOTE Confidence: 0.809567796933333

01:18:35.680 --> 01:18:39.229 individuals who are not up to date

NOTE Confidence: 0.809567796933333

01:18:39.229 --> 01:18:41.920 with screening and individual groups

NOTE Confidence: 0.809567796933333

01:18:41.920 --> 01:18:45.684 that are less than 50% up to date

NOTE Confidence: 0.809567796933333

01:18:45.684 --> 01:18:47.374 with screening would be individuals

NOTE Confidence: 0.809567796933333

01:18:47.374 --> 01:18:49.906 in the 50 to 54 years of age range.

NOTE Confidence: 0.809567796933333

01:18:49.910 --> 01:18:50.261 Hispanics,

NOTE Confidence: 0.809567796933333

01:18:50.261 --> 01:18:52.367 people with less than high school.

NOTE Confidence: 0.75358565

01:18:52.370 --> 01:18:53.780 Diploma or individuals

NOTE Confidence: 0.75358565

01:18:53.780 --> 01:18:55.660 with Medicaid or uninsured.

NOTE Confidence: 0.75358565

01:18:55.660 --> 01:18:58.546 So there's these groups of individuals

NOTE Confidence: 0.75358565

01:18:58.546 --> 01:19:01.335 were really screening is a dismal

NOTE Confidence: 0.75358565

01:19:01.335 --> 01:19:03.675 still has dismal numbers among all

NOTE Confidence: 0.75358565

01:19:03.675 --> 01:19:06.213 the non up-to-date group over a

NOTE Confidence: 0.75358565

01:19:06.213 --> 01:19:09.061 third are individuals age 50 to 54.

NOTE Confidence: 0.75358565

01:19:09.061 --> 01:19:11.629 So even though for many years we've been

NOTE Confidence: 0.75358565

01:19:11.629 --> 01:19:13.639 recommending to start screening at age 50,

NOTE Confidence: 0.75358565

01:19:13.640 --> 01:19:16.660 we still underperformed dramatically in

NOTE Confidence: 0.75358565

01:19:16.660 --> 01:19:19.060 that age, and there are a lot of reasons.

NOTE Confidence: 0.75358565

01:19:19.060 --> 01:19:21.195 Some of them is that lack time.

NOTE Confidence: 0.75358565

01:19:21.200 --> 01:19:23.480 That I'm stating here where.

NOTE Confidence: 0.75358565

01:19:23.480 --> 01:19:27.064 Need for screening to really finally happen.

NOTE Confidence: 0.75358565

01:19:27.070 --> 01:19:29.374 We do need to talk to patients for a

NOTE Confidence: 0.75358565

01:19:29.374 --> 01:19:31.460 while before they become convinced,

NOTE Confidence: 0.75358565

01:19:31.460 --> 01:19:32.820 but also they are.

NOTE Confidence: 0.75358565

01:19:32.820 --> 01:19:34.860 The other reason is that more

NOTE Confidence: 0.75358565

01:19:34.938 --> 01:19:37.026 as as the population is younger,

NOTE Confidence: 0.75358565

01:19:37.026 --> 01:19:39.306 they have less medical illnesses.

NOTE Confidence: 0.75358565

01:19:39.310 --> 01:19:41.160 They have less contact with

NOTE Confidence: 0.75358565

01:19:41.160 --> 01:19:42.270 the medical system.

NOTE Confidence: 0.75358565

01:19:42.270 --> 01:19:43.765 There are less opportunities for

NOTE Confidence: 0.75358565

01:19:43.765 --> 01:19:46.206 us to really talk to them about

NOTE Confidence: 0.75358565

01:19:46.206 --> 01:19:47.529 colorectal cancer screening,

NOTE Confidence: 0.75358565

01:19:47.530 --> 01:19:49.410 but also have of the,

NOTE Confidence: 0.75358565

01:19:49.410 --> 01:19:51.433 even though we said that Medicaid and

NOTE Confidence: 0.75358565

01:19:51.433 --> 01:19:53.538 uninsured have the lowest screening rates.

NOTE Confidence: 0.75358565

01:19:53.540 --> 01:19:55.754 Half of the.

NOTE Confidence: 0.75358565

01:19:55.754 --> 01:19:56.492 Individuals,

NOTE Confidence: 0.75358565

01:19:56.492 --> 01:19:57.968 private insurance,

NOTE Confidence: 0.75358565

01:19:57.970 --> 01:20:00.007 and a quarter of medical patients do

NOTE Confidence: 0.75358565

01:20:00.007 --> 01:20:02.438 are not up to date with screenings.

NOTE Confidence: 0.75358565

01:20:02.440 --> 01:20:03.980 Or certainly there's a lot of room.

NOTE Confidence: 0.75358565

01:20:03.980 --> 01:20:04.618 But anyways,

NOTE Confidence: 0.75358565

01:20:04.618 --> 01:20:06.532 we are much more effective screening

NOTE Confidence: 0.75358565

01:20:06.532 --> 01:20:08.480 the captive audience as we were

NOTE Confidence: 0.75358565

01:20:08.480 --> 01:20:10.050 talking about individuals we have.

NOTE Confidence: 0.840105356666667

01:20:12.630 --> 01:20:14.555 Context and then regular basis

NOTE Confidence: 0.840105356666667

01:20:14.555 --> 01:20:16.095 with our healthcare system,

NOTE Confidence: 0.840105356666667

01:20:16.100 --> 01:20:18.044 we really need to figure out a way

NOTE Confidence: 0.840105356666667

01:20:18.044 --> 01:20:19.912 to really reach out those those

NOTE Confidence: 0.840105356666667

01:20:19.912 --> 01:20:21.567 individuals who are not regularly

NOTE Confidence: 0.840105356666667

01:20:21.567 --> 01:20:23.311 seen by medical providers and who

NOTE Confidence: 0.840105356666667

01:20:23.311 --> 01:20:25.212 happen to be in this younger age.

NOTE Confidence: 0.840105356666667

01:20:25.212 --> 01:20:27.109 And I'll show you in a minute

NOTE Confidence: 0.840105356666667

01:20:27.109 --> 01:20:28.678 why that is so important.

NOTE Confidence: 0.840105356666667

01:20:28.680 --> 01:20:31.638 So without this.

NOTE Confidence: 0.840105356666667

01:20:31.640 --> 01:20:35.042 In in, in one of the facts that we

NOTE Confidence: 0.840105356666667

01:20:35.042 --> 01:20:38.293 really recognize over the last few years

NOTE Confidence: 0.840105356666667

01:20:38.293 --> 01:20:41.989 is that in spite of these wonderful.

NOTE Confidence: 0.840105356666667

01:20:41.990 --> 01:20:44.550 Data over the last 30 years or so

NOTE Confidence: 0.840105356666667

01:20:44.550 --> 01:20:47.590 on the steady decrease in incidence.

NOTE Confidence: 0.840105356666667

01:20:47.590 --> 01:20:50.476 Colorectal cancer in older than 50.

NOTE Confidence: 0.840105356666667

01:20:50.480 --> 01:20:53.280 We have seen this very steady increase

NOTE Confidence: 0.840105356666667

01:20:53.280 --> 01:20:55.738 in the incidence of the younger

NOTE Confidence: 0.840105356666667

01:20:55.738 --> 01:20:58.489 individuals in between 20 and 49 that's

NOTE Confidence: 0.840105356666667

01:20:58.566 --> 01:21:01.134 translated in an increase in annual

NOTE Confidence: 0.840105356666667

01:21:01.134 --> 01:21:05.370 increase of 1.8% from 2006 to 2015.

01:21:05.370 --> 01:21:09.360 Individuals that are younger than 55 really

01:21:09.360 --> 01:21:12.200 pretty significant increase particularly.

01:21:12.200 --> 01:21:14.200 So when comparing with the

01:21:14.200 --> 01:21:15.995 overall numbers in that,

01:21:15.995 --> 01:21:19.020 so I'm adults younger than 55,

01:21:19.020 --> 01:21:22.266 there's been a 51% increase in

01:21:22.266 --> 01:21:24.176 incidence of colorectal cancer from

01:21:24.180 --> 01:21:27.512 94 to 2014 and an 11% increase

01:21:27.512 --> 01:21:29.753 in mortality from 2005 to 2015.

01:21:29.753 --> 01:21:32.070 And if you look at here in

01:21:32.155 --> 01:21:34.639 this graph here we have years,

01:21:34.640 --> 01:21:38.536 year of birth, and if you look closely,

01:21:38.540 --> 01:21:41.520 basically almost all individuals.

01:21:41.520 --> 01:21:46.902 Uh, were born after eight after uh, 1960.

01:21:46.902 --> 01:21:48.950 In all age groups,

01:21:48.950 --> 01:21:51.782 we see an uptick in colorectal

NOTE Confidence: 0.840105356666667

01:21:51.782 --> 01:21:52.726 cancer incidence.

NOTE Confidence: 0.840105356666667

01:21:52.730 --> 01:21:55.150 So anyone basically who has

NOTE Confidence: 0.840105356666667

01:21:55.150 --> 01:21:57.983 been born after that after 1960,

NOTE Confidence: 0.840105356666667

01:21:57.983 --> 01:22:00.461 we've seen that increase in colorectal

NOTE Confidence: 0.840105356666667

01:22:00.461 --> 01:22:02.936 cancer incidence and the increase in

NOTE Confidence: 0.840105356666667

01:22:02.936 --> 01:22:05.264 the annual percentage change in the

NOTE Confidence: 0.840105356666667

01:22:05.264 --> 01:22:07.624 incidence rate for adults aged 40 to 49,

NOTE Confidence: 0.840105356666667

01:22:07.630 --> 01:22:10.480 which is a which has been on average 1.3%

NOTE Confidence: 0.840105356666667

01:22:10.480 --> 01:22:13.270 has been more than twice that of the adults.

NOTE Confidence: 0.840105356666667

01:22:13.270 --> 01:22:15.178 Age 50 to 54.

NOTE Confidence: 0.840105356666667

01:22:15.178 --> 01:22:18.040 So really dramatic increase in the

NOTE Confidence: 0.840105356666667

01:22:18.148 --> 01:22:20.979 younger side of the of these patients.

NOTE Confidence: 0.840105356666667

01:22:20.979 --> 01:22:22.857 This suggests that the risk for

NOTE Confidence: 0.840105356666667

01:22:22.857 --> 01:22:24.626 the younger cohort will continue

NOTE Confidence: 0.840105356666667

01:22:24.626 --> 01:22:26.951 to carry forward into the group age

NOTE Confidence: 0.840105356666667

01:22:26.951 --> 01:22:29.256 50 to 54 over the next few years.

NOTE Confidence: 0.840105356666667

01:22:29.260 --> 01:22:29.700 Therefore,

NOTE Confidence: 0.840105356666667

01:22:29.700 --> 01:22:32.340 the the effect will be really

NOTE Confidence: 0.840105356666667

01:22:32.340 --> 01:22:34.240 important and and what I'm really

NOTE Confidence: 0.840105356666667

01:22:34.240 --> 01:22:36.544 showing here is that truly what

NOTE Confidence: 0.840105356666667

01:22:36.544 --> 01:22:39.798 we call the age 45 is the new 50

NOTE Confidence: 0.840105356666667

01:22:39.798 --> 01:22:42.560 and and that clearly is been shown

NOTE Confidence: 0.840105356666667

01:22:42.560 --> 01:22:44.129 here where basically.

NOTE Confidence: 0.840105356666667

01:22:44.130 --> 01:22:44.599 Uh,

NOTE Confidence: 0.840105356666667

01:22:44.599 --> 01:22:47.882 what we've seen is that the incidence

NOTE Confidence: 0.840105356666667

01:22:47.882 --> 01:22:51.291 of a of the colorectal cancer at

NOTE Confidence: 0.840105356666667

01:22:51.291 --> 01:22:55.130 age 45 in 2015 has reached the same

NOTE Confidence: 0.840105356666667

01:22:55.130 --> 01:22:58.330 incidence that we had at age 15,

NOTE Confidence: 0.840105356666667

01:22:58.330 --> 01:22:59.304 nineteen, 93,

NOTE Confidence: 0.840105356666667

01:22:59.304 --> 01:23:02.462 which is about 30 per 100,000 individuals.

NOTE Confidence: 0.840105356666667

01:23:02.462 --> 01:23:05.230 And that's where we say 45 is the

NOTE Confidence: 0.840105356666667

01:23:05.230 --> 01:23:06.830 new 50 in colorectal cancer,

NOTE Confidence: 0.840105356666667

01:23:06.830 --> 01:23:08.126 because that's where we.

NOTE Confidence: 0.840105356666667

01:23:08.126 --> 01:23:10.070 That's where we are right now.

NOTE Confidence: 0.840105356666667

01:23:10.070 --> 01:23:12.596 And that's how backing away we've

NOTE Confidence: 0.840105356666667

01:23:12.596 --> 01:23:14.280 moved from that standpoint.

NOTE Confidence: 0.840105356666667

01:23:14.280 --> 01:23:14.830 Unfortunately,

NOTE Confidence: 0.840105356666667

01:23:14.830 --> 01:23:18.143 so adults born around 1990 have twice

NOTE Confidence: 0.840105356666667

01:23:18.143 --> 01:23:20.369 the risk of colorectal cancer and

NOTE Confidence: 0.840105356666667

01:23:20.369 --> 01:23:23.077 four times the risk of rectal cancer

NOTE Confidence: 0.840105356666667

01:23:23.077 --> 01:23:25.654 compared to adults born around 1950,

NOTE Confidence: 0.840105356666667

01:23:25.654 --> 01:23:30.910 so and so we can see that while in

NOTE Confidence: 0.840105356666667

01:23:30.910 --> 01:23:32.780 1996.4% of colorectal cancers were

NOTE Confidence: 0.840105356666667

01:23:32.780 --> 01:23:34.650 among individuals younger than 50

NOTE Confidence: 0.840105356666667

01:23:34.714 --> 01:23:38.294 that in 2015 had doubled to 12.4%,

NOTE Confidence: 0.840105356666667

01:23:38.294 --> 01:23:40.310 so really significant increase,

NOTE Confidence: 0.840105356666667

01:23:40.310 --> 01:23:42.090 and I think that really,

NOTE Confidence: 0.840105356666667

01:23:42.090 --> 01:23:44.746 this like really shows a lot which is.

NOTE Confidence: 0.9089634125

01:23:44.750 --> 01:23:47.320 Even though the numbers are much

NOTE Confidence: 0.9089634125

01:23:47.320 --> 01:23:49.084 lower in this younger population,

NOTE Confidence: 0.9089634125

01:23:49.084 --> 01:23:51.340 when you look at life years,

NOTE Confidence: 0.9089634125

01:23:51.340 --> 01:23:54.784 life years lost due to this

NOTE Confidence: 0.9089634125

01:23:54.784 --> 01:23:56.984 disease in the group of 45 to 49,

NOTE Confidence: 0.9089634125

01:23:56.990 --> 01:23:58.448 that's about 10% of all life

NOTE Confidence: 0.9089634125

01:23:58.448 --> 01:24:00.159 years lost due to this disease.

NOTE Confidence: 0.9089634125

01:24:00.160 --> 01:24:03.340 And that compares to 13% for the 50 to 54.

NOTE Confidence: 0.9089634125

01:24:03.340 --> 01:24:07.366 And this is really a strong.

NOTE Confidence: 0.9089634125

01:24:07.370 --> 01:24:09.800 Argument to make a about

NOTE Confidence: 0.9089634125

01:24:09.800 --> 01:24:12.590 decreasing screening at age to 45.

NOTE Confidence: 0.9089634125

01:24:12.590 --> 01:24:14.810 So the with all these data,

NOTE Confidence: 0.9089634125

01:24:14.810 --> 01:24:17.029 the ACS in 2018 that decided to

NOTE Confidence: 0.9089634125

01:24:17.029 --> 01:24:19.172 reevaluate the optimal age to start

NOTE Confidence: 0.9089634125

01:24:19.172 --> 01:24:21.052 screening for average risk population

NOTE Confidence: 0.9089634125

01:24:21.052 --> 01:24:22.689 and basically what they did.

NOTE Confidence: 0.9089634125

01:24:22.690 --> 01:24:24.082 Is that OK?

NOTE Confidence: 0.9089634125

01:24:24.082 --> 01:24:26.866 Well, they look at the Commission.

NOTE Confidence: 0.9089634125

01:24:26.870 --> 01:24:30.104 One of these modeling groups that

NOTE Confidence: 0.9089634125

01:24:30.104 --> 01:24:33.901 actually USPSTF has been using and what

NOTE Confidence: 0.9089634125

01:24:33.901 --> 01:24:36.997 they did is they analyzed outcomes.

NOTE Confidence: 0.9089634125

01:24:37.000 --> 01:24:39.514 Not only under that assumption that

NOTE Confidence: 0.9089634125

01:24:39.514 --> 01:24:42.839 that the of the prescreening years,

NOTE Confidence: 0.9089634125

01:24:42.840 --> 01:24:45.136 but also the what they did is

NOTE Confidence: 0.9089634125

01:24:45.136 --> 01:24:47.025 they incorporated the the recent

NOTE Confidence: 0.9089634125

01:24:47.025 --> 01:24:48.697 cleared data incidence data,

NOTE Confidence: 0.9089634125

01:24:48.700 --> 01:24:50.220 showing that increase in the

NOTE Confidence: 0.9089634125

01:24:50.220 --> 01:24:51.436 young set colorectal cancer.

NOTE Confidence: 0.9089634125

01:24:51.440 --> 01:24:52.340 And in that case,

NOTE Confidence: 0.9089634125

01:24:52.340 --> 01:24:53.690 what they showed is that here

NOTE Confidence: 0.9089634125

01:24:53.742 --> 01:24:55.177 we have the different methods.

NOTE Confidence: 0.9089634125

01:24:55.180 --> 01:24:56.530 Colonoscopy, CT, Colonography,

NOTE Confidence: 0.9089634125

01:24:56.530 --> 01:24:56.980 flex,

NOTE Confidence: 0.9089634125

01:24:56.980 --> 01:25:00.120 6 feet and others to test as

NOTE Confidence: 0.9089634125

01:25:00.120 --> 01:25:02.298 starting either at 45 versus 50.

NOTE Confidence: 0.9089634125

01:25:02.300 --> 01:25:05.386 What they saw is that moving to 45

NOTE Confidence: 0.9089634125

01:25:05.386 --> 01:25:08.278 starting training range we would increase.

NOTE Confidence: 0.9089634125

01:25:08.280 --> 01:25:11.248 6.2% live years again with the cost

NOTE Confidence: 0.9089634125

01:25:11.248 --> 01:25:13.285 of about 717% more colonoscopies,

NOTE Confidence: 0.9089634125

01:25:13.285 --> 01:25:15.655 so they did conclude that modeling

NOTE Confidence: 0.9089634125

01:25:15.655 --> 01:25:17.561 convincingly demonstrated that due to

NOTE Confidence: 0.9089634125

01:25:17.561 --> 01:25:19.371 the rising incidence of colorectal

NOTE Confidence: 0.9089634125

01:25:19.371 --> 01:25:21.059 cancer in younger individuals,

NOTE Confidence: 0.9089634125

01:25:21.060 --> 01:25:22.885 screening all average risk persons

NOTE Confidence: 0.9089634125

01:25:22.885 --> 01:25:25.619 between the ages of 45 and 75

NOTE Confidence: 0.9089634125

01:25:25.619 --> 01:25:27.307 reduces mortality from colorectal

NOTE Confidence: 0.9089634125

01:25:27.307 --> 01:25:29.807 cancer with an acceptable risk as

NOTE Confidence: 0.9089634125

01:25:29.807 --> 01:25:31.662 measured by number of colonoscopies

NOTE Confidence: 0.9089634125

01:25:31.662 --> 01:25:33.211 per life years gained,

NOTE Confidence: 0.9089634125

01:25:33.211 --> 01:25:35.797 so the trend of increasing colorectal

NOTE Confidence: 0.9089634125

01:25:35.797 --> 01:25:37.890 cancer incidents in in success.

NOTE Confidence: 0.9089634125

01:25:37.890 --> 01:25:40.235 That successfully younger birth cohort

NOTE Confidence: 0.9089634125

01:25:40.235 --> 01:25:42.111 suggests that these recommendations

NOTE Confidence: 0.9089634125

01:25:42.111 --> 01:25:44.269 will really continue to be appropriate

NOTE Confidence: 0.9089634125

01:25:44.269 --> 01:25:46.764 in the future and the benefit burden

NOTE Confidence: 0.9089634125

01:25:46.764 --> 01:25:49.164 balance strongly favors changing to 45.

NOTE Confidence: 0.9089634125

01:25:49.170 --> 01:25:49.788 After that,

NOTE Confidence: 0.9089634125

01:25:49.788 --> 01:25:51.642 the USPSTF and that was published

NOTE Confidence: 0.9089634125

01:25:51.642 --> 01:25:53.105 last year commissioned the

NOTE Confidence: 0.9089634125

01:25:53.105 --> 01:25:54.566 same modeling groups again,

NOTE Confidence: 0.9089634125

01:25:54.566 --> 01:25:56.354 and they did the same process

NOTE Confidence: 0.9089634125

01:25:56.354 --> 01:25:59.430 that it did before in 2016,

NOTE Confidence: 0.9089634125

01:25:59.430 --> 01:26:03.966 comparing age 50 versus 8 starting at age 45.

NOTE Confidence: 0.9089634125

01:26:03.970 --> 01:26:06.328 And here we they look at

NOTE Confidence: 0.9089634125

01:26:06.328 --> 01:26:07.900 additional live years game.

NOTE Confidence: 0.9089634125

01:26:07.900 --> 01:26:10.077 And basically what they saw is that

NOTE Confidence: 0.9089634125

01:26:10.077 --> 01:26:12.900 starting at 45 to 75 they would.

NOTE Confidence: 0.9089634125

01:26:12.900 --> 01:26:16.196 We would increase about from 22 to 27.

NOTE Confidence: 0.9089634125

01:26:16.200 --> 01:26:18.727 The number of additional life years gained

NOTE Confidence: 0.9089634125

01:26:18.727 --> 01:26:21.560 per hundred per thousand individual screen.

NOTE Confidence: 0.9089634125

01:26:21.560 --> 01:26:23.445 Here they looked at additional

NOTE Confidence: 0.9089634125

01:26:23.445 --> 01:26:24.199 colorectal cancers,

NOTE Confidence: 0.9089634125

01:26:24.200 --> 01:26:28.029 averted and starting at food at 45

NOTE Confidence: 0.9089634125

01:26:28.029 --> 01:26:31.105 would result in three more additional

NOTE Confidence: 0.9089634125

01:26:31.105 --> 01:26:34.214 colorectal cancers averted out of 1000

NOTE Confidence: 0.9089634125

140

01:26:34.214 --> 01:26:37.616 individual screen would again with 17% more.

NOTE Confidence: 0.9089634125

01:26:37.616 --> 01:26:38.054 Colonoscopies,

NOTE Confidence: 0.9089634125

01:26:38.054 --> 01:26:39.806 so all these data.

NOTE Confidence: 0.9089634125

01:26:39.810 --> 01:26:41.880 USPSTF came up with the same

NOTE Confidence: 0.9089634125

01:26:41.880 --> 01:26:43.566 recommendation with it that the

NOTE Confidence: 0.9089634125

01:26:43.566 --> 01:26:46.577 ACS came up with in 2018 which was

NOTE Confidence: 0.9089634125

01:26:46.577 --> 01:26:49.013 starting screening for average

NOTE Confidence: 0.9089634125

01:26:49.013 --> 01:26:51.924 average risk individuals at 45 instead

NOTE Confidence: 0.9089634125

01:26:51.924 --> 01:26:54.940 of age 50 as it had been so far.

NOTE Confidence: 0.9089634125

01:26:54.940 --> 01:26:58.468 So for the USPSTF in summary screening,

NOTE Confidence: 0.9089634125

01:26:58.470 --> 01:26:59.474 average risk,

NOTE Confidence: 0.9089634125

01:26:59.474 --> 01:27:01.984 asymptomatic adults age 50 to

NOTE Confidence: 0.9089634125

01:27:01.990 --> 01:27:04.100 75 is of substantial benefit,

NOTE Confidence: 0.9089634125

01:27:04.100 --> 01:27:06.075 and modeling suggests the benefits

NOTE Confidence: 0.9089634125

01:27:06.075 --> 01:27:08.560 will also be substantial for age 45.

NOTE Confidence: 0.858586135

01:27:08.560 --> 01:27:10.726 The benefits of early detection and

NOTE Confidence: 0.858586135

01:27:10.726 --> 01:27:12.170 intervention for colorectal cancer

NOTE Confidence: 0.858586135

01:27:12.231 --> 01:27:14.591 screening seem to decline after age 75

NOTE Confidence: 0.858586135

01:27:14.591 --> 01:27:17.897 and decision to screen individuals from

NOTE Confidence: 0.858586135

01:27:17.900 --> 01:27:20.539 76 to 85 should really be individual

NOTE Confidence: 0.858586135

01:27:20.539 --> 01:27:23.186 and the individual one considering over

NOTE Confidence: 0.858586135

01:27:23.186 --> 01:27:26.066 our health prior screening history and

NOTE Confidence: 0.858586135

01:27:26.066 --> 01:27:28.814 benefiting after age 85 seems to be a very,

NOTE Confidence: 0.858586135

01:27:28.820 --> 01:27:31.285 very unlikely benefit given the

NOTE Confidence: 0.858586135

01:27:31.285 --> 01:27:33.257 potential for adverse events.

NOTE Confidence: 0.858586135

01:27:33.260 --> 01:27:37.068 So, with all these,

NOTE Confidence: 0.858586135

01:27:37.070 --> 01:27:39.366 group of us have tried to really.

NOTE Confidence: 0.858586135

01:27:39.370 --> 01:27:42.346 Incorporate all that type of information

NOTE Confidence: 0.858586135

01:27:42.350 --> 01:27:44.950 in a way that the providers in our

NOTE Confidence: 0.858586135

01:27:44.950 --> 01:27:47.236 system will have all the tools to

NOTE Confidence: 0.858586135

01:27:47.236 --> 01:27:49.040 really work on that decision making

NOTE Confidence: 0.858586135

01:27:49.040 --> 01:27:50.490 process shared with the patients

NOTE Confidence: 0.858586135

01:27:50.537 --> 01:27:52.103 and trying to really find the

NOTE Confidence: 0.858586135

01:27:52.103 --> 01:27:53.770 appropriate way to screen individuals.

NOTE Confidence: 0.858586135

01:27:53.770 --> 01:27:56.178 And that came out came life in

NOTE Confidence: 0.858586135

01:27:56.178 --> 01:27:58.259 the epic system wide at Yale,

NOTE Confidence: 0.858586135

01:27:58.260 --> 01:28:00.600 New Haven Health just yesterday.

NOTE Confidence: 0.858586135

01:28:00.600 --> 01:28:03.294 And that's the correct cancer screening

NOTE Confidence: 0.858586135

01:28:03.294 --> 01:28:07.025 pathway where we really go through the

NOTE Confidence: 0.858586135

01:28:07.025 --> 01:28:09.604 different recommendations when it comes for.

NOTE Confidence: 0.858586135

01:28:09.604 --> 01:28:10.860 Uh, when we should?

NOTE Confidence: 0.858586135

01:28:10.860 --> 01:28:12.380 We should not screen,

NOTE Confidence: 0.858586135

01:28:12.380 --> 01:28:15.969 but then after that it gives you the takes

NOTE Confidence: 0.858586135

01:28:15.969 --> 01:28:18.429 you into evaluating if the individual

NOTE Confidence: 0.858586135

01:28:18.429 --> 01:28:21.186 is high risk versus average risk.

NOTE Confidence: 0.858586135

01:28:21.186 --> 01:28:24.324 Here we have some examples where

NOTE Confidence: 0.858586135

01:28:24.324 --> 01:28:27.060 basically as you hover in all

NOTE Confidence: 0.858586135

01:28:27.060 --> 01:28:28.892 these blue text you'll see,

NOTE Confidence: 0.858586135

01:28:28.892 --> 01:28:29.580 for instance,

NOTE Confidence: 0.858586135

01:28:29.580 --> 01:28:31.736 this is hovering over stool based testing

NOTE Confidence: 0.858586135

01:28:31.736 --> 01:28:34.600 will be a benefits and risk for instance.

NOTE Confidence: 0.858586135

01:28:34.600 --> 01:28:36.724 Or actually you can have here

NOTE Confidence: 0.858586135

01:28:36.724 --> 01:28:39.329 opening up a table of sensitivity,

NOTE Confidence: 0.858586135

01:28:39.330 --> 01:28:42.100 specificity of all the different.

NOTE Confidence: 0.858586135

01:28:42.100 --> 01:28:45.796 Screening tests for both polyps and cancer,

NOTE Confidence: 0.858586135

01:28:45.800 --> 01:28:49.094 and it takes you down here helps you also

NOTE Confidence: 0.858586135

01:28:49.094 --> 01:28:51.770 analyze who is at high risk and therefore

NOTE Confidence: 0.858586135

01:28:51.770 --> 01:28:54.251 we would be suggesting colonoscopy

NOTE Confidence: 0.858586135

01:28:54.251 --> 01:28:56.280 versus non colonoscopy approaches

NOTE Confidence: 0.858586135

01:28:56.280 --> 01:28:59.740 and basically at the end of the day.

NOTE Confidence: 0.858586135

01:28:59.740 --> 01:29:02.260 Once you make that decision,

NOTE Confidence: 0.858586135

01:29:02.260 --> 01:29:04.570 it also allows you to really place

NOTE Confidence: 0.858586135

01:29:04.570 --> 01:29:06.600 the orders directly for colonoscopy,

NOTE Confidence: 0.858586135

01:29:06.600 --> 01:29:08.472 for City colonography and

NOTE Confidence: 0.858586135

01:29:08.472 --> 01:29:11.650 for a stool based test so it.

NOTE Confidence: 0.858586135

01:29:11.650 --> 01:29:13.498 Within the same path we were able to

NOTE Confidence: 0.858586135

01:29:13.498 --> 01:29:15.327 really go through the whole process,

NOTE Confidence: 0.858586135

01:29:15.330 --> 01:29:16.902 so we hope that these two

NOTE Confidence: 0.858586135

01:29:16.902 --> 01:29:17.950 will be really helpful,

NOTE Confidence: 0.858586135

01:29:17.950 --> 01:29:19.516 not only to increase screening grades,

NOTE Confidence: 0.858586135

01:29:19.520 --> 01:29:22.215 but also to help the providers to

NOTE Confidence: 0.858586135

01:29:22.215 --> 01:29:24.598 have those discussions with the right

NOTE Confidence: 0.858586135

01:29:24.598 --> 01:29:26.908 information and and making sure that

NOTE Confidence: 0.858586135

01:29:26.908 --> 01:29:29.515 that every patient does have the

NOTE Confidence: 0.858586135

01:29:29.515 --> 01:29:32.905 benefit of really being able to.

NOTE Confidence: 0.858586135

01:29:32.910 --> 01:29:36.318 Make a well informed decision about

NOTE Confidence: 0.858586135

01:29:36.318 --> 01:29:39.450 screening approaches and that is all

NOTE Confidence: 0.858586135

01:29:39.450 --> 01:29:42.522 I wanted to talk to you about tonight

NOTE Confidence: 0.858586135

01:29:42.617 --> 01:29:45.585 and I think we'll run out of time.

NOTE Confidence: 0.858586135

01:29:45.590 --> 01:29:48.230 So.

NOTE Confidence: 0.858586135

01:29:48.230 --> 01:29:51.324 We may not have time for answers,

NOTE Confidence: 0.858586135

01:29:51.330 --> 01:29:54.290 but anyone can feel free to email us

NOTE Confidence: 0.858586135

01:29:54.290 --> 01:29:57.572 and we'll be very happy to to address

NOTE Confidence: 0.858586135

01:29:57.572 --> 01:29:59.940 any questions from this session.

NOTE Confidence: 0.858586135

01:29:59.940 --> 01:30:01.608 Unfortunately, yeah, time will run out,

NOTE Confidence: 0.858586135

01:30:01.610 --> 01:30:02.338 but again,

NOTE Confidence: 0.858586135

01:30:02.338 --> 01:30:04.886 Richard was directly be very happy and,

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01:30:04.890 --> 01:30:09.538 again, thanking tremendously doctors.

NOTE Confidence: 0.858586135

01:30:09.540 --> 01:30:14.220 There is a tanui and lasberg for being here,

NOTE Confidence: 0.858586135

01:30:14.220 --> 01:30:15.483 sharing their knowledge,

NOTE Confidence: 0.858586135

01:30:15.483 --> 01:30:17.588 and in such wonderful presentations

NOTE Confidence: 0.858586135

01:30:17.588 --> 01:30:19.934 it's been a pleasure to to share

NOTE Confidence: 0.858586135

01:30:19.934 --> 01:30:21.082 that time with them.

NOTE Confidence: 0.858586135

01:30:21.090 --> 01:30:23.330 Thank you all for being here tonight.

NOTE Confidence: 0.858586135

01:30:23.330 --> 01:30:23.770 Goodnight