

WEBVTT

NOTE duration:"01:35:39"

NOTE recognizability:0.872

NOTE language:en-us

NOTE Confidence: 0.805067728333333

00:00:00.000 --> 00:00:02.808 My name is Jeremy court Manske.

NOTE Confidence: 0.805067728333333

00:00:02.810 --> 00:00:06.415 I am a medical oncologist here at

NOTE Confidence: 0.805067728333333

00:00:06.415 --> 00:00:10.590 Smilow with a a focus in GI Oncology,

NOTE Confidence: 0.805067728333333

00:00:10.590 --> 00:00:12.522 I wanted to thank everybody for

NOTE Confidence: 0.805067728333333

00:00:12.522 --> 00:00:15.254 joining us on what I hope is the last

NOTE Confidence: 0.805067728333333

00:00:15.254 --> 00:00:17.388 gasps of winter before spring comes.

NOTE Confidence: 0.805067728333333

00:00:17.388 --> 00:00:21.020 But March is and is an important month,

NOTE Confidence: 0.805067728333333

00:00:21.020 --> 00:00:23.508 especially for those of us who

NOTE Confidence: 0.805067728333333

00:00:23.508 --> 00:00:26.016 care for patients with GI cancers,

NOTE Confidence: 0.805067728333333

00:00:26.020 --> 00:00:29.338 as it is colorectal cancer awareness Month.

NOTE Confidence: 0.805067728333333

00:00:29.340 --> 00:00:32.017 And so we have a, uh,

NOTE Confidence: 0.805067728333333

00:00:32.017 --> 00:00:34.110 a really important educational

NOTE Confidence: 0.805067728333333

00:00:34.110 --> 00:00:36.792 program today cosponsored with

NOTE Confidence: 0.805067728333333

00:00:36.792 --> 00:00:39.528 the Colon Cancer Foundation.

NOTE Confidence: 0.889954319

00:00:41.720 --> 00:00:44.144 And so I wanted to before we get

NOTE Confidence: 0.889954319

00:00:44.144 --> 00:00:45.660 even started, introduce Cindy

NOTE Confidence: 0.889954319

00:00:45.660 --> 00:00:48.390 Barassi to to get a skeleton.

NOTE Confidence: 0.737336062

00:00:51.080 --> 00:00:52.590 Thank you doctor. Court manske.

NOTE Confidence: 0.737336062

00:00:52.590 --> 00:00:54.654 I really appreciate it and I just want

NOTE Confidence: 0.737336062

00:00:54.654 --> 00:00:56.646 to welcome everyone and say First off,

NOTE Confidence: 0.737336062

00:00:56.650 --> 00:00:59.306 thank you to the Smile Center for having

NOTE Confidence: 0.737336062

00:00:59.306 --> 00:01:01.635 us and I want to say Happy March.

NOTE Confidence: 0.737336062

00:01:01.640 --> 00:01:03.740 Happy Colorectal Cancer Awareness month.

NOTE Confidence: 0.737336062

00:01:03.740 --> 00:01:05.784 So really special month for us here

NOTE Confidence: 0.737336062

00:01:05.784 --> 00:01:07.820 at the Colon Cancer Foundation.

NOTE Confidence: 0.737336062

00:01:07.820 --> 00:01:10.277 We are dedicated to a world without

NOTE Confidence: 0.737336062

00:01:10.277 --> 00:01:11.754 colon cancer, colorectal cancer.

NOTE Confidence: 0.737336062

00:01:11.754 --> 00:01:14.076 Again, my name is Cindy Barassi.

NOTE Confidence: 0.737336062

00:01:14.080 --> 00:01:15.845 I'm the President of the

NOTE Confidence: 0.737336062

00:01:15.845 --> 00:01:16.904 Colon Cancer Foundation.

NOTE Confidence: 0.737336062

00:01:16.910 --> 00:01:19.390 I also serve as a steering

NOTE Confidence: 0.737336062

00:01:19.390 --> 00:01:21.174 committee member on C5.

NOTE Confidence: 0.737336062

00:01:21.180 --> 00:01:23.742 Which is the New York City wide

NOTE Confidence: 0.737336062

00:01:23.742 --> 00:01:25.620 colon Cancer control coalition?

NOTE Confidence: 0.737336062

00:01:25.620 --> 00:01:29.076 I serve on the New York State Cancer

NOTE Confidence: 0.737336062

00:01:29.076 --> 00:01:31.941 Consortium as a cancer action team

NOTE Confidence: 0.737336062

00:01:31.941 --> 00:01:35.654 member and I serve on the family health,

NOTE Confidence: 0.737336062

00:01:35.654 --> 00:01:36.938 history and early age.

NOTE Confidence: 0.737336062

00:01:36.940 --> 00:01:39.872 Set colorectal cancer task force at

NOTE Confidence: 0.737336062

00:01:39.872 --> 00:01:42.362 the national colorectal cancer level.

NOTE Confidence: 0.737336062

00:01:42.370 --> 00:01:44.806 So quite involved in in colon

NOTE Confidence: 0.737336062

00:01:44.806 --> 00:01:47.560 cancer as all of you are,

NOTE Confidence: 0.737336062

00:01:47.560 --> 00:01:49.528 I'm going to share a few slides not

NOTE Confidence: 0.737336062

00:01:49.528 --> 00:01:51.797 take up too much of your time tonight.

NOTE Confidence: 0.737336062

00:01:51.800 --> 00:01:53.870 Just bear with me as I put those on.  
NOTE Confidence: 0.6218254475

00:01:59.110 --> 00:02:00.518 There we go OK.  
NOTE Confidence: 0.94455107125

00:02:01.390 --> 00:02:03.886 So we just went through all of that.  
NOTE Confidence: 0.94455107125

00:02:03.890 --> 00:02:06.176 So the Colon Cancer Foundation for stuff.  
NOTE Confidence: 0.94455107125

00:02:06.176 --> 00:02:07.986 Can you guys see that?  
NOTE Confidence: 0.94455107125

00:02:07.990 --> 00:02:09.064 Just if you could not for  
NOTE Confidence: 0.94455107125

00:02:09.064 --> 00:02:10.435 me that would be great.  
NOTE Confidence: 0.94455107125

00:02:10.435 --> 00:02:13.088 Perfect, we've been around for 19 years.  
NOTE Confidence: 0.94455107125

00:02:13.090 --> 00:02:15.346 We were founded by surgical oncologist.  
NOTE Confidence: 0.94455107125

00:02:15.350 --> 00:02:17.324 His name with Doctor Thomas K Webber.  
NOTE Confidence: 0.94455107125

00:02:17.330 --> 00:02:19.610 He we unfortunately lost him,  
NOTE Confidence: 0.94455107125

00:02:19.610 --> 00:02:21.160 ironically to another form of  
NOTE Confidence: 0.94455107125

00:02:21.160 --> 00:02:23.000 cancer a couple of years ago.  
NOTE Confidence: 0.94455107125

00:02:23.000 --> 00:02:25.844 But he, as all of you are was quite  
NOTE Confidence: 0.94455107125

00:02:25.844 --> 00:02:28.158 passionate about the disease and seeing  
NOTE Confidence: 0.94455107125

00:02:28.158 --> 00:02:30.842 too many patients walk into his office

NOTE Confidence: 0.94455107125

00:02:30.842 --> 00:02:33.250 with a late stage of colon cancer.

NOTE Confidence: 0.94455107125

00:02:33.250 --> 00:02:34.366 So he actually.

NOTE Confidence: 0.94455107125

00:02:34.366 --> 00:02:36.598 Founded one of the nation's first

NOTE Confidence: 0.94455107125

00:02:36.598 --> 00:02:39.169 walks and runs to raise awareness of

NOTE Confidence: 0.94455107125

00:02:39.169 --> 00:02:41.700 the disease in the New York metro area

NOTE Confidence: 0.94455107125

00:02:41.700 --> 00:02:43.620 called the Colon Cancer Challenge.

NOTE Confidence: 0.94455107125

00:02:43.620 --> 00:02:45.240 And we're actually having the

NOTE Confidence: 0.94455107125

00:02:45.240 --> 00:02:47.157 19th version of that walking run

NOTE Confidence: 0.94455107125

00:02:47.157 --> 00:02:48.549 at the end of this month,

NOTE Confidence: 0.94455107125

00:02:48.550 --> 00:02:51.980 month March 27th in Queens Flushing Meadows.

NOTE Confidence: 0.94455107125

00:02:51.980 --> 00:02:54.228 So we would love for all of you

NOTE Confidence: 0.94455107125

00:02:54.228 --> 00:02:56.812 to join us at that event so we

NOTE Confidence: 0.94455107125

00:02:56.812 --> 00:02:59.188 have 3 prongs to our mission.

NOTE Confidence: 0.94455107125

00:02:59.190 --> 00:03:00.420 Prevention, advocacy,

NOTE Confidence: 0.94455107125

00:03:00.420 --> 00:03:03.495 and research and under prevention

NOTE Confidence: 0.94455107125

00:03:03.495 --> 00:03:06.540 we focus primarily on education  
NOTE Confidence: 0.94455107125

00:03:06.540 --> 00:03:09.330 and awareness and under education.  
NOTE Confidence: 0.94455107125

00:03:09.330 --> 00:03:11.425 We focus heavily on patients  
NOTE Confidence: 0.94455107125

00:03:11.425 --> 00:03:14.134 and caregivers and then we also  
NOTE Confidence: 0.94455107125

00:03:14.134 --> 00:03:16.266 focus on educating clinicians,  
NOTE Confidence: 0.94455107125

00:03:16.270 --> 00:03:18.505 and we're beefing that section  
NOTE Confidence: 0.94455107125

00:03:18.505 --> 00:03:21.050 of our website and materials up.  
NOTE Confidence: 0.94455107125

00:03:21.050 --> 00:03:23.570 And when I say clinicians,  
NOTE Confidence: 0.94455107125

00:03:23.570 --> 00:03:26.370 we've really focused over the last eight  
NOTE Confidence: 0.94455107125

00:03:26.370 --> 00:03:29.186 years on educating clinicians about the.  
NOTE Confidence: 0.94455107125

00:03:29.186 --> 00:03:31.706 Rapid rise of early age  
NOTE Confidence: 0.94455107125

00:03:31.706 --> 00:03:33.789 onset colorectal cancer,  
NOTE Confidence: 0.94455107125

00:03:33.790 --> 00:03:35.890 which will probably dig into later on  
NOTE Confidence: 0.94455107125

00:03:35.890 --> 00:03:38.357 this call if not circle back and I'll,  
NOTE Confidence: 0.94455107125

00:03:38.360 --> 00:03:40.424 I'll tell you some more about that myself,  
NOTE Confidence: 0.94455107125

00:03:40.430 --> 00:03:42.006 but it's a trend that we've been seeing.

NOTE Confidence: 0.94455107125  
00:03:42.010 --> 00:03:42.710 Unfortunately,  
NOTE Confidence: 0.94455107125  
00:03:42.710 --> 00:03:46.170 grow over the last decade.  
NOTE Confidence: 0.94455107125  
00:03:46.170 --> 00:03:48.991 Second prong of our mission is advocacy  
NOTE Confidence: 0.94455107125  
00:03:48.991 --> 00:03:51.738 and we advocate for quality of life,  
NOTE Confidence: 0.94455107125  
00:03:51.740 --> 00:03:52.125 fertility,  
NOTE Confidence: 0.94455107125  
00:03:52.125 --> 00:03:54.050 preserving treatment for all patients,  
NOTE Confidence: 0.94455107125  
00:03:54.050 --> 00:03:55.890 regardless of where they're treated,  
NOTE Confidence: 0.94455107125  
00:03:55.890 --> 00:03:58.544 whether they're treated here at at Yale,  
NOTE Confidence: 0.94455107125  
00:03:58.544 --> 00:04:00.428 in New Haven, or whether they're  
NOTE Confidence: 0.94455107125  
00:04:00.428 --> 00:04:02.908 treated in a community Cancer Center.  
NOTE Confidence: 0.94455107125  
00:04:02.910 --> 00:04:04.146 You know, anywhere else in the  
NOTE Confidence: 0.94455107125  
00:04:04.146 --> 00:04:05.250 country or around the world.  
NOTE Confidence: 0.94455107125  
00:04:05.250 --> 00:04:06.492 For that matter,  
NOTE Confidence: 0.94455107125  
00:04:06.492 --> 00:04:08.562 we advocate for equal opportunity  
NOTE Confidence: 0.94455107125  
00:04:08.562 --> 00:04:11.010 access to testing and screening,  
NOTE Confidence: 0.94455107125

00:04:11.010 --> 00:04:13.355 as well as treatment for all patients,  
NOTE Confidence: 0.94455107125

00:04:13.360 --> 00:04:16.580 and then also for assistance for caregivers.  
NOTE Confidence: 0.94455107125

00:04:16.580 --> 00:04:18.630 Because that assistance needs to  
NOTE Confidence: 0.94455107125

00:04:18.630 --> 00:04:20.680 needs to continue throughout the  
NOTE Confidence: 0.94455107125

00:04:20.746 --> 00:04:22.638 patients and their caregivers.  
NOTE Confidence: 0.94455107125

00:04:22.640 --> 00:04:24.408 Entire continuum of care.  
NOTE Confidence: 0.94455107125

00:04:24.408 --> 00:04:27.640 We call it even through end of life.  
NOTE Confidence: 0.94455107125

00:04:27.640 --> 00:04:29.616 And we do a large portion of that  
NOTE Confidence: 0.94455107125

00:04:29.616 --> 00:04:31.879 through our own event called the early  
NOTE Confidence: 0.94455107125

00:04:31.879 --> 00:04:33.584 age onset colorectal Cancer Summit,  
NOTE Confidence: 0.94455107125

00:04:33.590 --> 00:04:36.334 which we're now going into our 9th year,  
NOTE Confidence: 0.94455107125

00:04:36.340 --> 00:04:37.790 and that focuses largely largely  
NOTE Confidence: 0.94455107125

00:04:37.790 --> 00:04:40.167 again on the fact that this is a  
NOTE Confidence: 0.94455107125

00:04:40.167 --> 00:04:41.617 fact affecting younger and younger  
NOTE Confidence: 0.94455107125

00:04:41.620 --> 00:04:44.440 men and women throughout the world,  
NOTE Confidence: 0.94455107125

00:04:44.440 --> 00:04:46.000 and then finally the last problem



NOTE Confidence: 0.94455107125

00:04:46.000 --> 00:04:47.550 of our mission is research.

NOTE Confidence: 0.94455107125

00:04:47.550 --> 00:04:50.046 We we focus on primarily supporting

NOTE Confidence: 0.94455107125

00:04:50.046 --> 00:04:52.155 young investigators who travel to

NOTE Confidence: 0.94455107125

00:04:52.155 --> 00:04:54.045 conferences around the globe and

NOTE Confidence: 0.94455107125

00:04:54.045 --> 00:04:56.526 support their efforts in moving the

NOTE Confidence: 0.94455107125

00:04:56.526 --> 00:04:58.776 ball forward in translational research.

NOTE Confidence: 0.897968

00:05:04.750 --> 00:05:08.387 See if I can move my OK, so for 2022,

NOTE Confidence: 0.897968

00:05:08.387 --> 00:05:10.181 just very briefly we have some

NOTE Confidence: 0.897968

00:05:10.181 --> 00:05:11.840 big hairy audacious goals or

NOTE Confidence: 0.897968

00:05:11.840 --> 00:05:14.170 behaves as we like to call them.

NOTE Confidence: 0.897968

00:05:14.170 --> 00:05:17.824 We want to raise enough money to.

NOTE Confidence: 0.897968

00:05:17.830 --> 00:05:19.910 Essentially, provide 10,000 free

NOTE Confidence: 0.897968

00:05:19.910 --> 00:05:22.602 screening test kits in underserved

NOTE Confidence: 0.897968

00:05:22.602 --> 00:05:24.866 and underinsured and underinsured

NOTE Confidence: 0.897968

00:05:24.866 --> 00:05:27.130 communities throughout the nation

NOTE Confidence: 0.897968

00:05:27.130 --> 00:05:30.505 and we want to be able to tell 21  
NOTE Confidence: 0.897968

00:05:30.505 --> 00:05:33.169 million Americans ages 45 to 49.  
NOTE Confidence: 0.897968

00:05:33.170 --> 00:05:34.778 That 45 is the new 50.  
NOTE Confidence: 0.94173657

00:05:38.600 --> 00:05:40.896 And one of the ways that we're doing  
NOTE Confidence: 0.94173657

00:05:40.896 --> 00:05:43.135 that is through our major campaign  
NOTE Confidence: 0.94173657

00:05:43.135 --> 00:05:44.696 called let's get screened.org.  
NOTE Confidence: 0.94173657

00:05:44.696 --> 00:05:46.476 So if you actually visit  
NOTE Confidence: 0.94173657

00:05:46.476 --> 00:05:47.900 that website is live.  
NOTE Confidence: 0.94173657

00:05:47.900 --> 00:05:49.742 We started that campaign with Walgreens  
NOTE Confidence: 0.94173657

00:05:49.742 --> 00:05:51.860 last year and we're continuing that.  
NOTE Confidence: 0.94173657

00:05:51.860 --> 00:05:54.218 So we invite you to to  
NOTE Confidence: 0.94173657

00:05:54.218 --> 00:05:55.568 go to letsgetscreen.org.  
NOTE Confidence: 0.94173657

00:05:55.568 --> 00:05:57.800 There are materials there.  
NOTE Confidence: 0.94173657

00:05:57.800 --> 00:05:59.907 There are social media kits there and  
NOTE Confidence: 0.94173657

00:05:59.907 --> 00:06:02.179 we would love for you to be a part  
NOTE Confidence: 0.94173657

00:06:02.179 --> 00:06:04.060 of that and just spread the word.

NOTE Confidence: 0.94173657

00:06:04.060 --> 00:06:05.772 And with that I will turn it back

NOTE Confidence: 0.94173657

00:06:05.772 --> 00:06:08.063 over to doctor, Court, Manske and.

NOTE Confidence: 0.94173657

00:06:08.063 --> 00:06:10.510 I look forward to hearing everything

NOTE Confidence: 0.94173657

00:06:10.510 --> 00:06:11.810 everyone has to say tonight.

NOTE Confidence: 0.94173657

00:06:11.810 --> 00:06:12.300 Thank you.

NOTE Confidence: 0.878923815

00:06:13.000 --> 00:06:14.732 Alright, thank you Cindy.

NOTE Confidence: 0.878923815

00:06:14.732 --> 00:06:18.800 I think nobody can oversell the

NOTE Confidence: 0.878923815

00:06:18.800 --> 00:06:22.000 the importance of colonoscopies

NOTE Confidence: 0.878923815

00:06:22.000 --> 00:06:26.460 and so I I hope during our program

NOTE Confidence: 0.878923815

00:06:26.460 --> 00:06:29.820 tonight you know we brought together

NOTE Confidence: 0.878923815

00:06:29.820 --> 00:06:33.942 a lot of experts on diagnosis and

NOTE Confidence: 0.878923815

00:06:33.942 --> 00:06:35.978 treatment but with colonoscopies

NOTE Confidence: 0.878923815

00:06:35.978 --> 00:06:38.894 this could be a preventable disease

NOTE Confidence: 0.878923815

00:06:38.894 --> 00:06:42.579 which is the hope for all of us.

NOTE Confidence: 0.878923815

00:06:42.580 --> 00:06:44.416 In the treatment of colon cancer,

NOTE Confidence: 0.878923815

00:06:44.420 --> 00:06:47.498 we know that it is a disease that takes,

NOTE Confidence: 0.878923815

00:06:47.500 --> 00:06:49.048 takes a team.

NOTE Confidence: 0.878923815

00:06:49.048 --> 00:06:50.596 It takes gastroenterologists

NOTE Confidence: 0.878923815

00:06:50.600 --> 00:06:52.940 and surgeons and radiation,

NOTE Confidence: 0.878923815

00:06:52.940 --> 00:06:54.695 oncologists and medical

NOTE Confidence: 0.878923815

00:06:54.695 --> 00:06:57.240 oncologists all working together.

NOTE Confidence: 0.878923815

00:06:57.240 --> 00:07:00.600 And so we designed a program tonight

NOTE Confidence: 0.878923815

00:07:00.600 --> 00:07:03.638 that that does just that and so

NOTE Confidence: 0.878923815

00:07:03.640 --> 00:07:08.099 we have a hammy to soccer from

NOTE Confidence: 0.878923815

00:07:08.099 --> 00:07:12.290 gastroenterology to give us words about.

NOTE Confidence: 0.878923815

00:07:12.290 --> 00:07:14.254 Screening and some syndromes.

NOTE Confidence: 0.878923815

00:07:14.254 --> 00:07:17.200 The newest advances in in surgical

NOTE Confidence: 0.878923815

00:07:17.277 --> 00:07:19.025 management with Doctor Ann

NOTE Confidence: 0.878923815

00:07:19.025 --> 00:07:21.647 Manju and Doctor Ahmed Khan A.

NOTE Confidence: 0.878923815

00:07:21.650 --> 00:07:24.030 Advances in radiation oncology with

NOTE Confidence: 0.878923815

00:07:24.030 --> 00:07:27.484 Doctor Kevin do and then taking us

NOTE Confidence: 0.878923815  
00:07:27.484 --> 00:07:30.475 home advances in medical oncology with  
NOTE Confidence: 0.878923815  
00:07:30.475 --> 00:07:33.660 Doctor Justin Persico and so with that,  
NOTE Confidence: 0.878923815  
00:07:33.660 --> 00:07:35.880 I'd like to turn the baton  
NOTE Confidence: 0.878923815  
00:07:35.880 --> 00:07:37.360 over to Doctor Sachar.  
NOTE Confidence: 0.665817204444444  
00:07:40.530 --> 00:07:41.445 Thank you Jeremy.  
NOTE Confidence: 0.665817204444444  
00:07:41.445 --> 00:07:43.275 I'm just gonna share my slides.  
NOTE Confidence: 0.879697207  
00:07:48.690 --> 00:07:53.202 OK, so I'm going to be talking today  
NOTE Confidence: 0.879697207  
00:07:53.202 --> 00:07:55.341 about some about colorectal cancer  
NOTE Confidence: 0.879697207  
00:07:55.341 --> 00:07:58.153 screening and sort of some of the updates  
NOTE Confidence: 0.879697207  
00:07:58.153 --> 00:08:00.848 that were provided in the new USPSTF  
NOTE Confidence: 0.879697207  
00:08:00.848 --> 00:08:02.720 recommendations that were given in 2021.  
NOTE Confidence: 0.90182907  
00:08:05.340 --> 00:08:07.920 So colon cancer is important.  
NOTE Confidence: 0.90182907  
00:08:07.920 --> 00:08:09.540 It's the third leading cause of  
NOTE Confidence: 0.90182907  
00:08:09.540 --> 00:08:11.375 cancer death in the United States  
NOTE Confidence: 0.90182907  
00:08:11.375 --> 00:08:13.115 only lagging behind lung cancer,  
NOTE Confidence: 0.90182907

00:08:13.120 --> 00:08:16.710 breast and prostate cancer in 2021 alone,  
NOTE Confidence: 0.90182907

00:08:16.710 --> 00:08:18.650 approximately 53,000 people were  
NOTE Confidence: 0.90182907

00:08:18.650 --> 00:08:21.968 estimated to pass away from this disease.  
NOTE Confidence: 0.98048365

00:08:25.060 --> 00:08:26.540 So the important take away take  
NOTE Confidence: 0.98048365

00:08:26.540 --> 00:08:28.384 away playing from all of this is  
NOTE Confidence: 0.98048365

00:08:28.384 --> 00:08:29.908 that this cancer can be prevented,  
NOTE Confidence: 0.98048365

00:08:29.910 --> 00:08:32.398 or it can be detected fairly early such  
NOTE Confidence: 0.98048365

00:08:32.398 --> 00:08:35.139 that no one should have to die from it.  
NOTE Confidence: 0.98048365

00:08:35.140 --> 00:08:37.247 This schematic that I have down over  
NOTE Confidence: 0.98048365

00:08:37.247 --> 00:08:39.389 here primarily is just trying to show  
NOTE Confidence: 0.98048365

00:08:39.389 --> 00:08:41.159 what the Natural History of colon  
NOTE Confidence: 0.98048365

00:08:41.222 --> 00:08:43.894 cancer would be like without any sort of  
NOTE Confidence: 0.98048365

00:08:43.894 --> 00:08:45.320 intervention that's made by screening.  
NOTE Confidence: 0.98048365

00:08:45.320 --> 00:08:47.070 So you sort of start out with  
NOTE Confidence: 0.98048365

00:08:47.129 --> 00:08:48.795 not having any sort of a lesion,  
NOTE Confidence: 0.98048365

00:08:48.800 --> 00:08:50.310 and then you eventually grow

NOTE Confidence: 0.98048365

00:08:50.310 --> 00:08:51.518 something called a polyp,

NOTE Confidence: 0.98048365

00:08:51.520 --> 00:08:53.795 or what we call a precancerous lesion,

NOTE Confidence: 0.98048365

00:08:53.800 --> 00:08:54.895 or an adenoma.

NOTE Confidence: 0.98048365

00:08:54.895 --> 00:08:57.085 And eventually that if not intervened

NOTE Confidence: 0.98048365

00:08:57.085 --> 00:08:58.945 upon that could potentially

NOTE Confidence: 0.98048365

00:08:58.945 --> 00:09:00.849 become an undiagnosed cancer.

NOTE Confidence: 0.98048365

00:09:00.850 --> 00:09:03.666 So that would basically mean you would not

NOTE Confidence: 0.98048365

00:09:03.666 --> 00:09:06.390 yet exhibit any symptoms from this cancer,

NOTE Confidence: 0.98048365

00:09:06.390 --> 00:09:07.890 but it's in there,

NOTE Confidence: 0.98048365

00:09:07.890 --> 00:09:09.765 and eventually that will become

NOTE Confidence: 0.98048365

00:09:09.765 --> 00:09:11.828 something that would cause symptoms.

NOTE Confidence: 0.98048365

00:09:11.830 --> 00:09:13.650 So things like rectal bleeding,

NOTE Confidence: 0.98048365

00:09:13.650 --> 00:09:15.250 change in your bowel habits,

NOTE Confidence: 0.98048365

00:09:15.250 --> 00:09:17.956 weight loss, that kind of stuff,

NOTE Confidence: 0.98048365

00:09:17.960 --> 00:09:18.596 and again,

NOTE Confidence: 0.98048365

00:09:18.596 --> 00:09:20.504 if not intervened upon it can  
NOTE Confidence: 0.98048365

00:09:20.504 --> 00:09:22.728 result in colorectal cancer death.  
NOTE Confidence: 0.98048365

00:09:22.730 --> 00:09:25.730 So the point here is that screening effects.  
NOTE Confidence: 0.98048365

00:09:25.730 --> 00:09:28.426 But can can mimic sort of the biological  
NOTE Confidence: 0.98048365

00:09:28.426 --> 00:09:31.070 cycle of this cancer and sort of  
NOTE Confidence: 0.98048365

00:09:31.070 --> 00:09:33.340 interventions can be made early so  
NOTE Confidence: 0.98048365

00:09:33.340 --> 00:09:35.482 they can either be made in this  
NOTE Confidence: 0.98048365

00:09:35.482 --> 00:09:37.230 stage which is at the adenoma stage,  
NOTE Confidence: 0.98048365

00:09:37.230 --> 00:09:39.897 and it can really by doing so.  
NOTE Confidence: 0.98048365

00:09:39.900 --> 00:09:42.126 You can really prevent cancer from forming.  
NOTE Confidence: 0.98048365

00:09:42.130 --> 00:09:44.146 Or you could really intervene at this stage,  
NOTE Confidence: 0.98048365

00:09:44.150 --> 00:09:46.225 which is essentially the preclinical  
NOTE Confidence: 0.98048365

00:09:46.225 --> 00:09:49.494 stage and by doing so hopefully we found  
NOTE Confidence: 0.98048365

00:09:49.494 --> 00:09:52.280 this cancer at a more treatable stage.  
NOTE Confidence: 0.98048365

00:09:52.280 --> 00:09:53.852 So the incidence of mortality of  
NOTE Confidence: 0.98048365

00:09:53.852 --> 00:09:55.509 colorectal cancer in the United States



NOTE Confidence: 0.98048365  
00:09:55.509 --> 00:09:57.195 has decreased over the past decade.  
NOTE Confidence: 0.98048365  
00:09:57.200 --> 00:09:59.128 About 30% or so,  
NOTE Confidence: 0.98048365  
00:09:59.128 --> 00:10:02.779 and screening is most very clearly a  
NOTE Confidence: 0.98048365  
00:10:02.779 --> 00:10:05.644 very important contributor to this.  
NOTE Confidence: 0.98048365  
00:10:05.650 --> 00:10:06.950 So based on all this,  
NOTE Confidence: 0.98048365  
00:10:06.950 --> 00:10:09.998 the USPSTF gives a grade a  
NOTE Confidence: 0.98048365  
00:10:09.998 --> 00:10:11.522 recommendation for screening,  
NOTE Confidence: 0.98048365  
00:10:11.530 --> 00:10:14.026 and it says that the net benefit is  
NOTE Confidence: 0.98048365  
00:10:14.026 --> 00:10:15.914 substantial for patients if they  
NOTE Confidence: 0.98048365  
00:10:15.914 --> 00:10:17.904 get screened for colorectal cancer.  
NOTE Confidence: 0.98048365  
00:10:17.910 --> 00:10:20.016 So some other facts that are  
NOTE Confidence: 0.98048365  
00:10:20.016 --> 00:10:21.824 interesting is that even though  
NOTE Confidence: 0.98048365  
00:10:21.824 --> 00:10:23.694 this has been highly recommended,  
NOTE Confidence: 0.98048365  
00:10:23.694 --> 00:10:25.879 the national adherence to screening  
NOTE Confidence: 0.98048365  
00:10:25.879 --> 00:10:27.190 is not perfect,  
NOTE Confidence: 0.98048365

00:10:27.190 --> 00:10:29.025 so approximately 26% of patients  
NOTE Confidence: 0.98048365

00:10:29.025 --> 00:10:30.860 who are eligible for screening  
NOTE Confidence: 0.98048365

00:10:30.919 --> 00:10:32.547 don't actually get screened.  
NOTE Confidence: 0.98048365

00:10:32.550 --> 00:10:34.598 And as of 2018,  
NOTE Confidence: 0.98048365

00:10:34.598 --> 00:10:36.898 about 31% of patients have not kept  
NOTE Confidence: 0.98048365

00:10:36.898 --> 00:10:39.219 up to date with their screening.  
NOTE Confidence: 0.98048365

00:10:39.220 --> 00:10:42.520 Now there's many factors that  
NOTE Confidence: 0.98048365

00:10:42.520 --> 00:10:44.424 probably affect these estimates.  
NOTE Confidence: 0.98048365

00:10:44.424 --> 00:10:44.900 Essentially,  
NOTE Confidence: 0.98048365

00:10:44.900 --> 00:10:47.452 and ultimately probably provide  
NOTE Confidence: 0.98048365

00:10:47.452 --> 00:10:49.366 barriers to screening,  
NOTE Confidence: 0.98048365

00:10:49.370 --> 00:10:51.092 and we all know that there is  
NOTE Confidence: 0.98048365

00:10:51.092 --> 00:10:52.730 sort of exacerbated in minorities  
NOTE Confidence: 0.98048365

00:10:52.730 --> 00:10:53.996 and underserved populations,  
NOTE Confidence: 0.98048365

00:10:54.000 --> 00:10:55.740 but there are issues related to  
NOTE Confidence: 0.98048365

00:10:55.740 --> 00:10:57.650 access and how patients utilize this.

NOTE Confidence: 0.98048365

00:10:57.650 --> 00:11:00.170 These tests that have substantial effect

NOTE Confidence: 0.98048365

00:11:00.170 --> 00:11:03.039 on whether they get screened or not.

NOTE Confidence: 0.98048365

00:11:03.040 --> 00:11:04.256 Financial barriers are real,

NOTE Confidence: 0.98048365

00:11:04.256 --> 00:11:06.080 and luckily there has been a

NOTE Confidence: 0.98048365

00:11:06.140 --> 00:11:07.897 lot of movement in this and such

NOTE Confidence: 0.98048365

00:11:07.897 --> 00:11:09.399 that they have been removed.

NOTE Confidence: 0.98048365

00:11:09.400 --> 00:11:11.560 We're mostly removed for patients so

NOTE Confidence: 0.98048365

00:11:11.560 --> 00:11:14.110 that they really can't access screening.

NOTE Confidence: 0.98048365

00:11:14.110 --> 00:11:14.413 Ultimately,

NOTE Confidence: 0.98048365

00:11:14.413 --> 00:11:15.625 if your recommendation comes

NOTE Confidence: 0.98048365

00:11:15.625 --> 00:11:16.837 from your own doctor,

NOTE Confidence: 0.98048365

00:11:16.840 --> 00:11:18.118 it carries a lot of weight,

NOTE Confidence: 0.98048365

00:11:18.120 --> 00:11:20.145 and if there's some informed

NOTE Confidence: 0.98048365

00:11:20.145 --> 00:11:21.360 choices made alongside,

NOTE Confidence: 0.98048365

00:11:21.360 --> 00:11:23.536 it really can affect our rates of screening.

NOTE Confidence: 0.793777945

00:11:25.970 --> 00:11:28.434 So a few things, what do you need to  
NOTE Confidence: 0.793777945

00:11:28.434 --> 00:11:30.476 know if you want to be screened as a  
NOTE Confidence: 0.793777945

00:11:30.476 --> 00:11:32.195 few things related to your wrist level,  
NOTE Confidence: 0.793777945

00:11:32.195 --> 00:11:34.302 what your own history is something about  
NOTE Confidence: 0.793777945

00:11:34.302 --> 00:11:37.249 age a little bit about what you're kind of,  
NOTE Confidence: 0.793777945

00:11:37.250 --> 00:11:38.690 medical conditions you have,  
NOTE Confidence: 0.793777945

00:11:38.690 --> 00:11:40.130 and what your preferences.  
NOTE Confidence: 0.793777945

00:11:40.130 --> 00:11:41.726 So when it comes to risk,  
NOTE Confidence: 0.793777945

00:11:41.730 --> 00:11:43.473 we like to sort of divide patients  
NOTE Confidence: 0.793777945

00:11:43.473 --> 00:11:45.278 up and say your average risk.  
NOTE Confidence: 0.793777945

00:11:45.280 --> 00:11:47.401 Basically, if you have no signs of  
NOTE Confidence: 0.793777945

00:11:47.401 --> 00:11:48.690 symptoms suggestive colorectal cancer.  
NOTE Confidence: 0.793777945

00:11:48.690 --> 00:11:50.480 So basically no rectal bleeding,  
NOTE Confidence: 0.793777945

00:11:50.480 --> 00:11:51.610 no pain in the belly,  
NOTE Confidence: 0.793777945

00:11:51.610 --> 00:11:53.230 no change in your bowel habits,  
NOTE Confidence: 0.793777945

00:11:53.230 --> 00:11:55.138 and if you basically don't have any of the.

NOTE Confidence: 0.793777945

00:11:55.140 --> 00:11:56.802 Risk factors that I'm going to

NOTE Confidence: 0.793777945

00:11:56.802 --> 00:11:58.960 just sort of talk about real quick.

NOTE Confidence: 0.793777945

00:11:58.960 --> 00:12:01.520 So if your increased risk,

NOTE Confidence: 0.793777945

00:12:01.520 --> 00:12:03.410 we really think that that's the kind

NOTE Confidence: 0.793777945

00:12:03.410 --> 00:12:05.585 of patient that has a first degree

NOTE Confidence: 0.793777945

00:12:05.585 --> 00:12:06.893 relative with colorectal cancer

NOTE Confidence: 0.793777945

00:12:06.893 --> 00:12:08.488 or basically high risk polyps.

NOTE Confidence: 0.793777945

00:12:08.490 --> 00:12:10.044 If you have two second degree

NOTE Confidence: 0.793777945

00:12:10.044 --> 00:12:11.080 relatives with the same,

NOTE Confidence: 0.793777945

00:12:11.080 --> 00:12:13.376 you would be considered an increased risk,

NOTE Confidence: 0.793777945

00:12:13.380 --> 00:12:15.438 and if you had a personal history

NOTE Confidence: 0.793777945

00:12:15.438 --> 00:12:16.980 of colon cancer or polyps,

NOTE Confidence: 0.793777945

00:12:16.980 --> 00:12:18.426 that would also be considered to

NOTE Confidence: 0.793777945

00:12:18.426 --> 00:12:19.800 be an increased risk patient.

NOTE Confidence: 0.793777945

00:12:19.800 --> 00:12:21.424 A high risk patient is anyone who has

NOTE Confidence: 0.793777945

00:12:21.424 --> 00:12:23.200 all sort of colitis or Crohn's disease,  
NOTE Confidence: 0.793777945

00:12:23.200 --> 00:12:25.684 and this is simply related to the fact that.  
NOTE Confidence: 0.793777945

00:12:25.690 --> 00:12:28.050 Chronic inflammation can give  
NOTE Confidence: 0.793777945

00:12:28.050 --> 00:12:30.410 rise to colon cancer.  
NOTE Confidence: 0.793777945

00:12:30.410 --> 00:12:32.084 And the highest risk patients are  
NOTE Confidence: 0.793777945

00:12:32.084 --> 00:12:33.810 those who have confirmed or suspected  
NOTE Confidence: 0.793777945

00:12:33.810 --> 00:12:35.215 genetic syndromes such as F,  
NOTE Confidence: 0.793777945

00:12:35.220 --> 00:12:36.840 AP, or Lynch syndrome.  
NOTE Confidence: 0.793777945

00:12:36.840 --> 00:12:38.055 There's many others,  
NOTE Confidence: 0.793777945

00:12:38.060 --> 00:12:39.794 but those Lynch syndrome is probably  
NOTE Confidence: 0.793777945

00:12:39.794 --> 00:12:41.880 the most common one that's inherited.  
NOTE Confidence: 0.793777945

00:12:41.880 --> 00:12:44.687 I just wanted to mention that most  
NOTE Confidence: 0.793777945

00:12:44.687 --> 00:12:46.363 cancers most colorectal cancer  
NOTE Confidence: 0.793777945

00:12:46.363 --> 00:12:48.378 is not an inherited cancers,  
NOTE Confidence: 0.793777945

00:12:48.380 --> 00:12:51.740 it's it's quite a small percentage overall.  
NOTE Confidence: 0.793777945

00:12:51.740 --> 00:12:53.924 But when when you do have one

NOTE Confidence: 0.793777945

00:12:53.924 --> 00:12:55.248 of these inherited syndromes,

NOTE Confidence: 0.793777945

00:12:55.248 --> 00:12:56.993 it it's pretty important that

NOTE Confidence: 0.793777945

00:12:56.993 --> 00:12:59.155 we look at you fairly carefully

NOTE Confidence: 0.793777945

00:12:59.155 --> 00:13:00.910 and follow you very closely.

NOTE Confidence: 0.906767962857143

00:13:03.150 --> 00:13:07.315 So what tests are available for screening?

NOTE Confidence: 0.906767962857143

00:13:07.320 --> 00:13:09.560 The answer is a lot all right,

NOTE Confidence: 0.906767962857143

00:13:09.560 --> 00:13:11.228 so there's about 7 tests that

NOTE Confidence: 0.906767962857143

00:13:11.228 --> 00:13:12.340 are available for screening,

NOTE Confidence: 0.906767962857143

00:13:12.340 --> 00:13:14.020 and while this is great,

NOTE Confidence: 0.906767962857143

00:13:14.020 --> 00:13:16.138 it's also fairly confusing for patients

NOTE Confidence: 0.906767962857143

00:13:16.138 --> 00:13:18.899 to figure out what test they should use.

NOTE Confidence: 0.906767962857143

00:13:18.900 --> 00:13:21.567 So the bottom line here is that

NOTE Confidence: 0.906767962857143

00:13:21.567 --> 00:13:23.860 there's while there's multiple tests,

NOTE Confidence: 0.906767962857143

00:13:23.860 --> 00:13:25.625 they all have varying evidence

NOTE Confidence: 0.906767962857143

00:13:25.625 --> 00:13:27.037 that support their effectiveness,

NOTE Confidence: 0.906767962857143

00:13:27.040 --> 00:13:29.231 and there's really no head-to-head trial that

NOTE Confidence: 0.906767962857143

00:13:29.231 --> 00:13:31.466 suggests one test is better than the other,

NOTE Confidence: 0.906767962857143

00:13:31.470 --> 00:13:33.996 but they all have advantages and

NOTE Confidence: 0.906767962857143

00:13:33.996 --> 00:13:35.145 disadvantages now. Ultimately,

NOTE Confidence: 0.906767962857143

00:13:35.145 --> 00:13:37.585 the USPSTF has not ranked any of these.

NOTE Confidence: 0.906767962857143

00:13:37.590 --> 00:13:39.906 Tests so the bottom line here

NOTE Confidence: 0.906767962857143

00:13:39.906 --> 00:13:42.948 is the goal is to get screened,

NOTE Confidence: 0.906767962857143

00:13:42.950 --> 00:13:44.805 so any test is better than note,

NOTE Confidence: 0.906767962857143

00:13:44.810 --> 00:13:46.655 test to and ultimately whichever

NOTE Confidence: 0.906767962857143

00:13:46.655 --> 00:13:49.157 test you're going to do is the

NOTE Confidence: 0.906767962857143

00:13:49.157 --> 00:13:50.617 one that's best for you.

NOTE Confidence: 0.9055866425

00:13:54.910 --> 00:13:56.734 Alright, so just a little bit

NOTE Confidence: 0.9055866425

00:13:56.734 --> 00:13:59.080 about some of the tests that where

NOTE Confidence: 0.9055866425

00:13:59.080 --> 00:14:00.942 we talking about the first one.

NOTE Confidence: 0.9055866425

00:14:00.942 --> 00:14:02.790 Actually, I just want to go back.

NOTE Confidence: 0.9055866425

00:14:02.790 --> 00:14:03.759 Sorry about that.



NOTE Confidence: 0.919350723

00:14:11.370 --> 00:14:13.029 Alright, so the very first group of

NOTE Confidence: 0.919350723

00:14:13.029 --> 00:14:15.197 tests that I want to talk about is

NOTE Confidence: 0.919350723

00:14:15.197 --> 00:14:16.602 something called stool based tests,

NOTE Confidence: 0.919350723

00:14:16.610 --> 00:14:19.310 so they sort of come up.

NOTE Confidence: 0.919350723

00:14:19.310 --> 00:14:20.846 There's three of them that you

NOTE Confidence: 0.919350723

00:14:20.846 --> 00:14:21.870 should probably know about,

NOTE Confidence: 0.919350723

00:14:21.870 --> 00:14:23.345 but ultimately the important thing

NOTE Confidence: 0.919350723

00:14:23.345 --> 00:14:25.869 to know here is that they need to be

NOTE Confidence: 0.919350723

00:14:25.869 --> 00:14:27.730 done every year or every three years,

NOTE Confidence: 0.919350723

00:14:27.730 --> 00:14:30.070 and I'll go over each one just to see

NOTE Confidence: 0.919350723

00:14:30.070 --> 00:14:32.624 which one is easiest for the patient to do.

NOTE Confidence: 0.919350723

00:14:32.630 --> 00:14:34.900 But in order to derive

NOTE Confidence: 0.919350723

00:14:34.900 --> 00:14:36.716 benefit from these tests,

NOTE Confidence: 0.919350723

00:14:36.720 --> 00:14:39.208 one needs to do them year after year

NOTE Confidence: 0.919350723

00:14:39.208 --> 00:14:41.638 in order for them to be effective.

NOTE Confidence: 0.919350723

00:14:41.640 --> 00:14:43.386 So in terms of the FOBT,  
NOTE Confidence: 0.919350723

00:14:43.390 --> 00:14:45.366 which is a very common test that people  
NOTE Confidence: 0.919350723

00:14:45.366 --> 00:14:47.960 used to do, and often at the office,  
NOTE Confidence: 0.919350723

00:14:47.960 --> 00:14:50.300 although it's contrary to popular belief,  
NOTE Confidence: 0.919350723

00:14:50.300 --> 00:14:52.099 is really not an office based test.  
NOTE Confidence: 0.919350723

00:14:52.100 --> 00:14:53.962 You really do have to submit three  
NOTE Confidence: 0.919350723

00:14:53.962 --> 00:14:56.066 separate samples and you have to have some  
NOTE Confidence: 0.919350723

00:14:56.066 --> 00:14:57.892 sort of dietary restriction in order to  
NOTE Confidence: 0.919350723

00:14:57.892 --> 00:14:59.698 prevent a false positive for this test,  
NOTE Confidence: 0.919350723

00:14:59.700 --> 00:15:00.880 but it's an old test.  
NOTE Confidence: 0.919350723

00:15:00.880 --> 00:15:02.854 It's a little bit out of vogue,  
NOTE Confidence: 0.919350723

00:15:02.860 --> 00:15:03.553 but it is.  
NOTE Confidence: 0.919350723

00:15:03.553 --> 00:15:05.170 It has been shown to be fairly  
NOTE Confidence: 0.919350723

00:15:05.232 --> 00:15:07.168 effective in decreasing colorectal  
NOTE Confidence: 0.919350723

00:15:07.168 --> 00:15:08.620 cancer related mortality.  
NOTE Confidence: 0.919350723

00:15:08.620 --> 00:15:10.132 You don't need a bowel prep or any sort

NOTE Confidence: 0.919350723

00:15:10.132 --> 00:15:12.100 of sedation for this. It's fairly.

NOTE Confidence: 0.919350723

00:15:12.100 --> 00:15:14.700 Easy to use and inexpensive.

NOTE Confidence: 0.919350723

00:15:14.700 --> 00:15:16.412 The other test that most people may have

NOTE Confidence: 0.919350723

00:15:16.412 --> 00:15:18.250 heard about is something called the Fit test,

NOTE Confidence: 0.919350723

00:15:18.250 --> 00:15:20.938 which is a fecal immuno histochemical test.

NOTE Confidence: 0.919350723

00:15:20.940 --> 00:15:22.696 It's basically detecting intact

NOTE Confidence: 0.919350723

00:15:22.696 --> 00:15:24.891 human hemoglobin in stool and

NOTE Confidence: 0.919350723

00:15:24.891 --> 00:15:26.527 it's very easy to use.

NOTE Confidence: 0.919350723

00:15:26.530 --> 00:15:27.860 You really just only have

NOTE Confidence: 0.919350723

00:15:27.860 --> 00:15:29.190 to submit a single specimen.

NOTE Confidence: 0.919350723

00:15:29.190 --> 00:15:31.910 It's pretty inexpensive as well.

NOTE Confidence: 0.919350723

00:15:31.910 --> 00:15:32.191 Now,

NOTE Confidence: 0.919350723

00:15:32.191 --> 00:15:33.877 some people may have heard about

NOTE Confidence: 0.919350723

00:15:33.877 --> 00:15:35.310 something called the Cola Guard,

NOTE Confidence: 0.919350723

00:15:35.310 --> 00:15:37.246 which is a fit DNA test and what

NOTE Confidence: 0.919350723

00:15:37.246 --> 00:15:39.389 it does is it takes the fit test  
NOTE Confidence: 0.919350723

00:15:39.389 --> 00:15:41.208 which is looking at the human  
NOTE Confidence: 0.919350723

00:15:41.208 --> 00:15:43.278 hemoglobin and it combines it with  
NOTE Confidence: 0.919350723

00:15:43.278 --> 00:15:45.674 another test that looks for altered  
NOTE Confidence: 0.919350723

00:15:45.674 --> 00:15:48.230 DNA biomarkers and cells that shed  
NOTE Confidence: 0.919350723

00:15:48.310 --> 00:15:50.627 that are shed in this in stool.  
NOTE Confidence: 0.919350723

00:15:50.630 --> 00:15:52.485 It's probably more sensitive than  
NOTE Confidence: 0.919350723

00:15:52.485 --> 00:15:55.121 the fit test in itself in detecting  
NOTE Confidence: 0.919350723

00:15:55.121 --> 00:15:57.257 colon cancer if it's used for,  
NOTE Confidence: 0.919350723

00:15:57.260 --> 00:15:59.148 you know every one test that you do,  
NOTE Confidence: 0.919350723

00:15:59.150 --> 00:16:02.440 but it also is gives rise to a lot of false.  
NOTE Confidence: 0.919350723

00:16:02.440 --> 00:16:04.470 Positives and every time there is a  
NOTE Confidence: 0.919350723

00:16:04.470 --> 00:16:06.719 false positive it results in another test,  
NOTE Confidence: 0.919350723

00:16:06.720 --> 00:16:07.932 often a colonoscopy,  
NOTE Confidence: 0.919350723

00:16:07.932 --> 00:16:10.760 and so that is something to keep  
NOTE Confidence: 0.919350723

00:16:10.839 --> 00:16:12.059 in mind as well.

NOTE Confidence: 0.919350723

00:16:12.060 --> 00:16:13.680 It is a single sample test,

NOTE Confidence: 0.919350723

00:16:13.680 --> 00:16:15.626 but usually you have to submit an

NOTE Confidence: 0.919350723

00:16:15.626 --> 00:16:17.431 entire bowel movement for this and it

NOTE Confidence: 0.919350723

00:16:17.431 --> 00:16:19.460 does not require a bowel prep or sedation.

NOTE Confidence: 0.919350723

00:16:19.460 --> 00:16:23.020 It is fairly expensive though.

NOTE Confidence: 0.919350723

00:16:23.020 --> 00:16:25.522 The other set of tests that are used are

NOTE Confidence: 0.919350723

00:16:25.522 --> 00:16:27.310 something called visualization test,

NOTE Confidence: 0.919350723

00:16:27.310 --> 00:16:28.801 so you know you have the stool

NOTE Confidence: 0.919350723

00:16:28.801 --> 00:16:30.329 based tests and they do all kinds

NOTE Confidence: 0.919350723

00:16:30.329 --> 00:16:31.799 of things to see if there's any

NOTE Confidence: 0.919350723

00:16:31.799 --> 00:16:33.420 sort of markers for colon cancer,

NOTE Confidence: 0.919350723

00:16:33.420 --> 00:16:35.020 but these are visual tests.

NOTE Confidence: 0.919350723

00:16:35.020 --> 00:16:36.706 We're really looking with our eyes

NOTE Confidence: 0.919350723

00:16:36.706 --> 00:16:38.823 to see if there's anything wrong or

NOTE Confidence: 0.919350723

00:16:38.823 --> 00:16:40.695 anything that we can intervene on,

NOTE Confidence: 0.919350723

00:16:40.700 --> 00:16:42.793 so the first one that I'll talk  
NOTE Confidence: 0.919350723

00:16:42.793 --> 00:16:45.137 about is called a city colon ography  
NOTE Confidence: 0.919350723

00:16:45.137 --> 00:16:46.867 as the name source suggests,  
NOTE Confidence: 0.837082473333333

00:16:46.870 --> 00:16:49.579 it's sort of a CT scan of a patient,  
NOTE Confidence: 0.837082473333333

00:16:49.580 --> 00:16:51.494 and what they're really doing is  
NOTE Confidence: 0.837082473333333

00:16:51.494 --> 00:16:53.150 they're looking inside the colon.  
NOTE Confidence: 0.837082473333333

00:16:53.150 --> 00:16:55.562 Of a patient where they pump a little bit  
NOTE Confidence: 0.837082473333333

00:16:55.562 --> 00:16:58.030 of air and they look for either cancer  
NOTE Confidence: 0.837082473333333

00:16:58.030 --> 00:17:00.566 or really some polyps or adenomas which  
NOTE Confidence: 0.837082473333333

00:17:00.566 --> 00:17:02.906 are precursor lesions for colon cancer.  
NOTE Confidence: 0.837082473333333

00:17:02.910 --> 00:17:05.142 So this test does require a bowel prep  
NOTE Confidence: 0.837082473333333

00:17:05.142 --> 00:17:07.692 but it doesn't require any anesthesia and  
NOTE Confidence: 0.837082473333333

00:17:07.692 --> 00:17:10.003 one of the disadvantages or advantages  
NOTE Confidence: 0.837082473333333

00:17:10.003 --> 00:17:12.910 whichever way you want to look at this is  
NOTE Confidence: 0.837082473333333

00:17:12.910 --> 00:17:14.597 that you can sometimes find things that  
NOTE Confidence: 0.837082473333333

00:17:14.597 --> 00:17:16.670 you may or may not want to know about.

NOTE Confidence: 0.837082473333333

00:17:16.670 --> 00:17:18.952 So sometimes it's useful if you find

NOTE Confidence: 0.837082473333333

00:17:18.952 --> 00:17:21.088 something that's not that that that

NOTE Confidence: 0.837082473333333

00:17:21.088 --> 00:17:23.018 could be life threatening like.

NOTE Confidence: 0.837082473333333

00:17:23.020 --> 00:17:24.540 Aneurysm or something like that.

NOTE Confidence: 0.837082473333333

00:17:24.540 --> 00:17:26.234 But sometimes you find things that you

NOTE Confidence: 0.837082473333333

00:17:26.234 --> 00:17:27.850 really don't probably need to intervene on,

NOTE Confidence: 0.837082473333333

00:17:27.850 --> 00:17:29.922 and probably needs to

NOTE Confidence: 0.837082473333333

00:17:29.922 --> 00:17:31.271 unnecessary testing there.

NOTE Confidence: 0.837082473333333

00:17:31.271 --> 00:17:32.515 Is this concern about

NOTE Confidence: 0.837082473333333

00:17:32.515 --> 00:17:33.759 radiation exposure as well,

NOTE Confidence: 0.837082473333333

00:17:33.760 --> 00:17:36.056 but it's really related to repeated exams,

NOTE Confidence: 0.837082473333333

00:17:36.060 --> 00:17:36.864 if anything.

NOTE Confidence: 0.837082473333333

00:17:36.864 --> 00:17:40.080 So typically what will happen is this is

NOTE Confidence: 0.837082473333333

00:17:40.163 --> 00:17:43.430 your colon and see there's a polyp in here.

NOTE Confidence: 0.837082473333333

00:17:43.430 --> 00:17:45.166 One would insert a rubber tube and

NOTE Confidence: 0.837082473333333

00:17:45.166 --> 00:17:47.229 put some air in there so that this  
NOTE Confidence: 0.8370824733333333

00:17:47.229 --> 00:17:48.845 could be clearly seen when the  
NOTE Confidence: 0.8370824733333333

00:17:48.845 --> 00:17:50.609 patient goes through a cat scanner.  
NOTE Confidence: 0.841918388125

00:17:53.030 --> 00:17:55.676 Now colonoscopy, this is a far and  
NOTE Confidence: 0.841918388125

00:17:55.676 --> 00:17:58.622 away the most popular test in the  
NOTE Confidence: 0.841918388125

00:17:58.622 --> 00:18:01.860 United States and it what it really  
NOTE Confidence: 0.841918388125

00:18:01.860 --> 00:18:03.920 involves is this flexible tube with a  
NOTE Confidence: 0.841918388125

00:18:03.920 --> 00:18:06.111 camera at the end of it to be inserted  
NOTE Confidence: 0.841918388125

00:18:06.111 --> 00:18:07.744 through your \*\*\*\*\* and it kind of  
NOTE Confidence: 0.841918388125

00:18:07.744 --> 00:18:09.339 goes all the way through your colon  
NOTE Confidence: 0.841918388125

00:18:09.339 --> 00:18:11.267 and this sort of this picture kind of  
NOTE Confidence: 0.841918388125

00:18:11.267 --> 00:18:13.086 shows what a normal colon looks like.  
NOTE Confidence: 0.841918388125

00:18:13.090 --> 00:18:14.932 A very careful withdrawal is done  
NOTE Confidence: 0.841918388125

00:18:14.932 --> 00:18:17.166 in which all all the parts of  
NOTE Confidence: 0.841918388125

00:18:17.166 --> 00:18:19.050 your colon I looked at carefully,  
NOTE Confidence: 0.841918388125

00:18:19.050 --> 00:18:21.975 and if there was a growth like a polyp,



NOTE Confidence: 0.841918388125

00:18:21.980 --> 00:18:24.236 the good thing about this test is that.

NOTE Confidence: 0.841918388125

00:18:24.240 --> 00:18:26.459 We're we're able to intervene right then

NOTE Confidence: 0.841918388125

00:18:26.459 --> 00:18:28.936 and there and sort of remove this polo.

NOTE Confidence: 0.841918388125

00:18:28.940 --> 00:18:31.052 They can see sort of a lasso being

NOTE Confidence: 0.841918388125

00:18:31.052 --> 00:18:32.823 put around this polyp so that

NOTE Confidence: 0.841918388125

00:18:32.823 --> 00:18:33.999 it can be transacted.

NOTE Confidence: 0.841918388125

00:18:34.000 --> 00:18:35.380 So in some ways,

NOTE Confidence: 0.841918388125

00:18:35.380 --> 00:18:37.105 while this looks for cancer

NOTE Confidence: 0.841918388125

00:18:37.105 --> 00:18:39.107 and it's a screening test,

NOTE Confidence: 0.841918388125

00:18:39.110 --> 00:18:41.940 it also prevents cancer by

NOTE Confidence: 0.841918388125

00:18:41.940 --> 00:18:43.638 removing precursor lesions.

NOTE Confidence: 0.841918388125

00:18:43.640 --> 00:18:46.346 And sometimes it can also be

NOTE Confidence: 0.841918388125

00:18:46.346 --> 00:18:48.980 used to remove early cancers,

NOTE Confidence: 0.841918388125

00:18:48.980 --> 00:18:51.808 and it prevents the need for surgery.

NOTE Confidence: 0.881134866666667

00:18:54.640 --> 00:18:56.700 So again, colonoscopy is probably

NOTE Confidence: 0.881134866666667

00:18:56.700 --> 00:18:59.690 the only test that really helps with  
NOTE Confidence: 0.881134866666667

00:18:59.690 --> 00:19:02.258 prevention as well as early detection.  
NOTE Confidence: 0.881134866666667

00:19:02.260 --> 00:19:04.438 And it is associated with less  
NOTE Confidence: 0.881134866666667

00:19:04.438 --> 00:19:05.527 frequent screening intervals.  
NOTE Confidence: 0.881134866666667

00:19:05.530 --> 00:19:07.314 It's somewhere in the order of 10 years.  
NOTE Confidence: 0.881134866666667

00:19:07.320 --> 00:19:09.399 If you really don't have anything in  
NOTE Confidence: 0.881134866666667

00:19:09.399 --> 00:19:11.758 your colon and that requires follow up,  
NOTE Confidence: 0.881134866666667

00:19:11.760 --> 00:19:14.266 although it does require a bowel preparation,  
NOTE Confidence: 0.881134866666667

00:19:14.270 --> 00:19:16.316 there's subsidization involved in you know,  
NOTE Confidence: 0.881134866666667

00:19:16.320 --> 00:19:18.404 inconveniences like being transported  
NOTE Confidence: 0.881134866666667

00:19:18.404 --> 00:19:22.020 to and forth from the Endo unit.  
NOTE Confidence: 0.881134866666667

00:19:22.020 --> 00:19:23.610 The last one is something called  
NOTE Confidence: 0.881134866666667

00:19:23.610 --> 00:19:24.820 a flexible sigmoid osca P,  
NOTE Confidence: 0.881134866666667

00:19:24.820 --> 00:19:26.360 which basically is just evaluating  
NOTE Confidence: 0.881134866666667

00:19:26.360 --> 00:19:28.300 the left side of the colon,  
NOTE Confidence: 0.881134866666667

00:19:28.300 --> 00:19:30.765 and modeling suggests that its

NOTE Confidence: 0.881134866666667

00:19:30.765 --> 00:19:33.230 benefit it's probably less beneficial

NOTE Confidence: 0.881134866666667

00:19:33.306 --> 00:19:36.148 if used alone when compared to the

NOTE Confidence: 0.881134866666667

00:19:36.148 --> 00:19:38.240 other screening scrap strategies,

NOTE Confidence: 0.881134866666667

00:19:38.240 --> 00:19:40.104 except if you combine it with a fit

NOTE Confidence: 0.881134866666667

00:19:40.104 --> 00:19:41.936 test which has to be done every year.

NOTE Confidence: 0.881134866666667

00:19:41.940 --> 00:19:44.194 And ultimately this test is just a

NOTE Confidence: 0.881134866666667

00:19:44.194 --> 00:19:46.228 little less popular in the United

NOTE Confidence: 0.881134866666667

00:19:46.228 --> 00:19:48.232 States and probably not used as

NOTE Confidence: 0.881134866666667

00:19:48.232 --> 00:19:49.730 frequently as colonoscopies and

NOTE Confidence: 0.881134866666667

00:19:49.730 --> 00:19:51.560 other stool based tests are.

NOTE Confidence: 0.881134866666667

00:19:51.560 --> 00:19:53.246 I just wanted to show everyone.

NOTE Confidence: 0.881134866666667

00:19:53.250 --> 00:19:55.791 What it means to sort of screen

NOTE Confidence: 0.881134866666667

00:19:55.791 --> 00:19:58.168 and what benefit this really has?

NOTE Confidence: 0.881134866666667

00:19:58.170 --> 00:20:00.108 So this really shows us what,

NOTE Confidence: 0.881134866666667

00:20:00.110 --> 00:20:03.314 how many life years are gained if one is

NOTE Confidence: 0.881134866666667

00:20:03.314 --> 00:20:06.169 to engage in any sort of screening strategy.

NOTE Confidence: 0.881134866666667

00:20:06.170 --> 00:20:07.703 So this kind of lists all the

NOTE Confidence: 0.881134866666667

00:20:07.703 --> 00:20:08.890 different tests that you can do,

NOTE Confidence: 0.881134866666667

00:20:08.890 --> 00:20:10.342 and this kind of shows how

NOTE Confidence: 0.881134866666667

00:20:10.342 --> 00:20:11.830 well it performs for patients.

NOTE Confidence: 0.881134866666667

00:20:11.830 --> 00:20:13.814 So this is a life years gained per

NOTE Confidence: 0.881134866666667

00:20:13.814 --> 00:20:15.179 thousand patients who are screened,

NOTE Confidence: 0.881134866666667

00:20:15.180 --> 00:20:17.420 and you can see that more or

NOTE Confidence: 0.881134866666667

00:20:17.420 --> 00:20:20.510 less they perform the same.

NOTE Confidence: 0.881134866666667

00:20:20.510 --> 00:20:23.779 This is about how many cancer deaths

NOTE Confidence: 0.881134866666667

00:20:23.779 --> 00:20:27.259 diverted for 1000 patients were screened.

NOTE Confidence: 0.881134866666667

00:20:27.260 --> 00:20:28.835 And then this kind of shows harms,

NOTE Confidence: 0.881134866666667

00:20:28.840 --> 00:20:30.470 and obviously the harms are

NOTE Confidence: 0.881134866666667

00:20:30.470 --> 00:20:32.100 mostly related to a colonoscopy,

NOTE Confidence: 0.881134866666667

00:20:32.100 --> 00:20:33.936 because that's that's pretty much the

NOTE Confidence: 0.881134866666667

00:20:33.936 --> 00:20:36.054 only one that involves a procedure and

NOTE Confidence: 0.881134866666667

00:20:36.054 --> 00:20:37.734 any sort of harm that's associated

NOTE Confidence: 0.881134866666667

00:20:37.734 --> 00:20:39.752 with the stool based test is usually

NOTE Confidence: 0.881134866666667

00:20:39.752 --> 00:20:41.858 when they turn positive and they end

NOTE Confidence: 0.881134866666667

00:20:41.858 --> 00:20:43.488 up having to require colonoscopy,

NOTE Confidence: 0.881134866666667

00:20:43.490 --> 00:20:44.942 but relatively speaking,

NOTE Confidence: 0.881134866666667

00:20:44.942 --> 00:20:47.900 if you look at the numbers of how many years,

NOTE Confidence: 0.881134866666667

00:20:47.900 --> 00:20:50.546 how many deaths you revert versus

NOTE Confidence: 0.881134866666667

00:20:50.546 --> 00:20:53.221 how many patients you cause harm

NOTE Confidence: 0.881134866666667

00:20:53.221 --> 00:20:54.877 for is fairly small.

NOTE Confidence: 0.881134866666667

00:20:54.880 --> 00:20:56.938 So the question here is for an

NOTE Confidence: 0.881134866666667

00:20:56.938 --> 00:20:58.500 average risk patient when you

NOTE Confidence: 0.881134866666667

00:20:58.500 --> 00:21:00.360 start and when you stop screening.

NOTE Confidence: 0.881134866666667

00:21:00.360 --> 00:21:03.104 So it's fairly clear from all the

NOTE Confidence: 0.881134866666667

00:21:03.104 --> 00:21:05.310 evidence that's available over the years

NOTE Confidence: 0.881134866666667

00:21:05.310 --> 00:21:08.080 that if you're between ages of 50 and 75,

NOTE Confidence: 0.881134866666667

00:21:08.080 --> 00:21:10.654 there's a clear reduction in death  
NOTE Confidence: 0.881134866666667

00:21:10.654 --> 00:21:13.559 related to colon cancer if your screen.  
NOTE Confidence: 0.881134866666667

00:21:13.560 --> 00:21:15.660 If you're over age 75,  
NOTE Confidence: 0.881134866666667

00:21:15.660 --> 00:21:17.320 though, that's this.  
NOTE Confidence: 0.881134866666667

00:21:17.320 --> 00:21:20.160 This benefit is is declined.  
NOTE Confidence: 0.881134866666667

00:21:20.160 --> 00:21:21.796 It's not terribly declined,  
NOTE Confidence: 0.881134866666667

00:21:21.796 --> 00:21:24.675 but it's really probably not as useful  
NOTE Confidence: 0.881134866666667

00:21:24.675 --> 00:21:27.210 as when you're between 50 to 75.  
NOTE Confidence: 0.9136116566666666

00:21:29.340 --> 00:21:31.062 I do want to emphasize that if  
NOTE Confidence: 0.9136116566666666

00:21:31.062 --> 00:21:32.720 you've not been screened before,  
NOTE Confidence: 0.9136116566666666

00:21:32.720 --> 00:21:35.678 it's probably best applicable to you.  
NOTE Confidence: 0.9136116566666666

00:21:35.680 --> 00:21:38.616 So if you have had colonoscopies age 50,  
NOTE Confidence: 0.9136116566666666

00:21:38.620 --> 00:21:40.839 age 60, and then again it's 70,  
NOTE Confidence: 0.9136116566666666

00:21:40.840 --> 00:21:42.702 it probably is not very beneficial to  
NOTE Confidence: 0.9136116566666666

00:21:42.702 --> 00:21:44.700 keep doing it from there on forward.  
NOTE Confidence: 0.9136116566666666

00:21:44.700 --> 00:21:46.716 However, if you've never had any

NOTE Confidence: 0.9136116566666666  
00:21:46.716 --> 00:21:48.966 sort of test before, this is probably  
NOTE Confidence: 0.9136116566666666  
00:21:48.966 --> 00:21:50.174 a worthwhile testing gauging,  
NOTE Confidence: 0.9136116566666666  
00:21:50.180 --> 00:21:52.900 provided you're in good health.  
NOTE Confidence: 0.9136116566666666  
00:21:52.900 --> 00:21:55.000 And then for age 86 and over,  
NOTE Confidence: 0.9136116566666666  
00:21:55.000 --> 00:21:56.520 it's a pretty clear no,  
NOTE Confidence: 0.9136116566666666  
00:21:56.520 --> 00:21:58.775 because the benefit is very  
NOTE Confidence: 0.9136116566666666  
00:21:58.775 --> 00:22:00.579 minimal at that point.  
NOTE Confidence: 0.9136116566666666  
00:22:00.580 --> 00:22:02.655 Presumably you have other diseases  
NOTE Confidence: 0.9136116566666666  
00:22:02.655 --> 00:22:05.202 that may be taking center stage  
NOTE Confidence: 0.9136116566666666  
00:22:05.202 --> 00:22:07.806 in your life at that point.  
NOTE Confidence: 0.9136116566666666  
00:22:07.810 --> 00:22:10.058 Now some of the harms that  
NOTE Confidence: 0.9136116566666666  
00:22:10.058 --> 00:22:11.243 we need to talk about,  
NOTE Confidence: 0.9136116566666666  
00:22:11.250 --> 00:22:12.948 because whenever we think about screening,  
NOTE Confidence: 0.9136116566666666  
00:22:12.950 --> 00:22:14.606 we think about risks and then  
NOTE Confidence: 0.9136116566666666  
00:22:14.606 --> 00:22:15.710 we think about benefits.  
NOTE Confidence: 0.9136116566666666

00:22:15.710 --> 00:22:17.326 So we just talked about the benefits part.  
NOTE Confidence: 0.9136116566666666

00:22:17.330 --> 00:22:19.626 But what are the risks really like?  
NOTE Confidence: 0.9136116566666666

00:22:19.630 --> 00:22:20.794 I mentioned before,  
NOTE Confidence: 0.9136116566666666

00:22:20.794 --> 00:22:23.122 they're largely related to the colonoscopy,  
NOTE Confidence: 0.9136116566666666

00:22:23.130 --> 00:22:25.020 and it's either when you do the  
NOTE Confidence: 0.9136116566666666

00:22:25.020 --> 00:22:27.273 primary exam or when you follow up a  
NOTE Confidence: 0.9136116566666666

00:22:27.273 --> 00:22:29.365 stool based test or another test that  
NOTE Confidence: 0.9136116566666666

00:22:29.365 --> 00:22:31.564 shows a positive finding and what we  
NOTE Confidence: 0.9136116566666666

00:22:31.564 --> 00:22:34.369 know is that if you're between age 50 and 75,  
NOTE Confidence: 0.9136116566666666

00:22:34.370 --> 00:22:36.050 the risk is rather small.  
NOTE Confidence: 0.9136116566666666

00:22:36.050 --> 00:22:37.860 And as you keep aging.  
NOTE Confidence: 0.9136116566666666

00:22:37.860 --> 00:22:38.470 The risk,  
NOTE Confidence: 0.9136116566666666

00:22:38.470 --> 00:22:40.300 while it's small to moderate it,  
NOTE Confidence: 0.9136116566666666

00:22:40.300 --> 00:22:43.528 does increase ultimately.  
NOTE Confidence: 0.9136116566666666

00:22:43.530 --> 00:22:46.994 So this is ultimately what the USPSTF said.  
NOTE Confidence: 0.9136116566666666

00:22:47.000 --> 00:22:49.368 As of 2016 they were like for everybody,



NOTE Confidence: 0.9136116566666666  
00:22:49.370 --> 00:22:50.390 50 to 75.  
NOTE Confidence: 0.9136116566666666  
00:22:50.390 --> 00:22:53.966 Go ahead and screen them for 76 to 85.  
NOTE Confidence: 0.9136116566666666  
00:22:53.966 --> 00:22:54.990 Be selective.  
NOTE Confidence: 0.9136116566666666  
00:22:54.990 --> 00:22:56.922 How about discuss with your doctor  
NOTE Confidence: 0.9136116566666666  
00:22:56.922 --> 00:22:59.049 and decide whether this is worthwhile,  
NOTE Confidence: 0.9136116566666666  
00:22:59.050 --> 00:23:00.786 and then if you're 86 and over,  
NOTE Confidence: 0.9136116566666666  
00:23:00.790 --> 00:23:02.026 the idea is not to screen.  
NOTE Confidence: 0.9136116566666666  
00:23:02.030 --> 00:23:04.630 It's a great day recommendation.  
NOTE Confidence: 0.9136116566666666  
00:23:04.630 --> 00:23:07.689 So between 2016 and 2021 really the  
NOTE Confidence: 0.9136116566666666  
00:23:07.689 --> 00:23:10.466 question that was raised was whether  
NOTE Confidence: 0.9136116566666666  
00:23:10.466 --> 00:23:13.693 we should screen earlier than age 50.  
NOTE Confidence: 0.9136116566666666  
00:23:13.700 --> 00:23:15.650 And this basically came about  
NOTE Confidence: 0.9136116566666666  
00:23:15.650 --> 00:23:18.102 because we realized that colon cancer  
NOTE Confidence: 0.9136116566666666  
00:23:18.102 --> 00:23:20.277 incidence and mortality was decreasing  
NOTE Confidence: 0.9136116566666666  
00:23:20.277 --> 00:23:22.870 for patients who were 50 and over.  
NOTE Confidence: 0.9136116566666666

00:23:22.870 --> 00:23:25.018 But it was increasing for patients  
NOTE Confidence: 0.9136116566666666

00:23:25.018 --> 00:23:26.720 who were less than 50.  
NOTE Confidence: 0.9136116566666666

00:23:26.720 --> 00:23:30.568 And really where it was most substantial  
NOTE Confidence: 0.9136116566666666

00:23:30.568 --> 00:23:35.260 was in the age group between 40 to 49.  
NOTE Confidence: 0.9136116566666666

00:23:35.260 --> 00:23:36.384 Why this increase occurred?  
NOTE Confidence: 0.9136116566666666

00:23:36.384 --> 00:23:38.760 I'm not sure we can fully answer this.  
NOTE Confidence: 0.9136116566666666

00:23:38.760 --> 00:23:40.530 I mean whether it's related to  
NOTE Confidence: 0.9136116566666666

00:23:40.530 --> 00:23:42.871 your diet or a like body, habitus,  
NOTE Confidence: 0.9136116566666666

00:23:42.871 --> 00:23:43.733 smoking status.  
NOTE Confidence: 0.9136116566666666

00:23:43.733 --> 00:23:46.319 It's not entirely clear what has  
NOTE Confidence: 0.9136116566666666

00:23:46.319 --> 00:23:48.587 LED up to this sort of trend.  
NOTE Confidence: 0.9136116566666666

00:23:48.590 --> 00:23:49.634 But ultimately,  
NOTE Confidence: 0.9136116566666666

00:23:49.634 --> 00:23:52.766 after all the information was collated,  
NOTE Confidence: 0.9136116566666666

00:23:52.770 --> 00:23:53.978 initially started with the  
NOTE Confidence: 0.9136116566666666

00:23:53.978 --> 00:23:54.884 American Cancer Society,  
NOTE Confidence: 0.9136116566666666

00:23:54.890 --> 00:23:57.179 but eventually with the USPS TF it

NOTE Confidence: 0.9136116566666666

00:23:57.179 --> 00:23:59.590 has been made fairly clear that for

NOTE Confidence: 0.9136116566666666

00:23:59.590 --> 00:24:01.910 patients who were aged 45 to 49,

NOTE Confidence: 0.9136116566666666

00:24:01.910 --> 00:24:03.884 we should be screening them using

NOTE Confidence: 0.9136116566666666

00:24:03.884 --> 00:24:05.200 the straight steam strategies

NOTE Confidence: 0.9136116566666666

00:24:05.259 --> 00:24:06.407 that I just mentioned.

NOTE Confidence: 0.9136116566666666

00:24:06.410 --> 00:24:08.130 And while this is a Grade B recommendation,

NOTE Confidence: 0.9136116566666666

00:24:08.130 --> 00:24:10.898 still pretty solid recommendation

NOTE Confidence: 0.9136116566666666

00:24:10.898 --> 00:24:12.974 to carry forward.

NOTE Confidence: 0.9136116566666666

00:24:12.980 --> 00:24:14.985 Now how do they come to this conclusion?

NOTE Confidence: 0.9136116566666666

00:24:14.990 --> 00:24:16.658 I won't burden anybody with this,

NOTE Confidence: 0.9136116566666666

00:24:16.660 --> 00:24:19.015 but ultimately it's because they

NOTE Confidence: 0.9136116566666666

00:24:19.015 --> 00:24:20.899 updated the predictive modeling

NOTE Confidence: 0.9136116566666666

00:24:20.899 --> 00:24:23.100 that is involved in trying to come

NOTE Confidence: 0.9136116566666666

00:24:23.100 --> 00:24:24.316 up with these recommendations.

NOTE Confidence: 0.9136116566666666

00:24:24.320 --> 00:24:26.896 It's also clear that if you if you

NOTE Confidence: 0.9136116566666666

00:24:26.896 --> 00:24:28.819 save patients at age 45 forward,  
NOTE Confidence: 0.875478576

00:24:28.820 --> 00:24:31.731 there's a lot of years that you're saving  
NOTE Confidence: 0.875478576

00:24:31.731 --> 00:24:33.393 for this patient in their lifetime,  
NOTE Confidence: 0.875478576

00:24:33.400 --> 00:24:36.512 so it really does have a huge  
NOTE Confidence: 0.875478576

00:24:36.512 --> 00:24:37.956 benefit to that patient.  
NOTE Confidence: 0.875478576

00:24:37.960 --> 00:24:39.736 So we do know that if you're younger,  
NOTE Confidence: 0.875478576

00:24:39.740 --> 00:24:41.700 you have a heavy burden of disease,  
NOTE Confidence: 0.875478576

00:24:41.700 --> 00:24:42.870 and we do know that this.  
NOTE Confidence: 0.875478576

00:24:42.870 --> 00:24:44.730 This rise that's occurring in  
NOTE Confidence: 0.875478576

00:24:44.730 --> 00:24:46.590 colorectal cancer is not artifactual,  
NOTE Confidence: 0.875478576

00:24:46.590 --> 00:24:47.904 it's actually real.  
NOTE Confidence: 0.875478576

00:24:47.904 --> 00:24:51.310 And so if you start screening at 45,  
NOTE Confidence: 0.875478576

00:24:51.310 --> 00:24:53.332 hopefully you will benefit all those  
NOTE Confidence: 0.875478576

00:24:53.332 --> 00:24:55.488 patients who are between age 50 and  
NOTE Confidence: 0.875478576

00:24:55.488 --> 00:24:57.231 54 because we all know that nobody  
NOTE Confidence: 0.875478576

00:24:57.287 --> 00:24:59.383 usually starts right at 50 on the dot,

NOTE Confidence: 0.875478576

00:24:59.390 --> 00:25:01.910 so it gives them a little bit of leeway

NOTE Confidence: 0.875478576

00:25:01.910 --> 00:25:04.469 to make sure that they come on time,

NOTE Confidence: 0.875478576

00:25:04.470 --> 00:25:06.647 and then we already know that certain

NOTE Confidence: 0.875478576

00:25:06.647 --> 00:25:07.926 certain populations were already

NOTE Confidence: 0.875478576

00:25:07.926 --> 00:25:09.949 suggested to start a little bit early,

NOTE Confidence: 0.875478576

00:25:09.950 --> 00:25:12.590 like the African Americans in particular.

NOTE Confidence: 0.875478576

00:25:12.590 --> 00:25:13.582 So this.

NOTE Confidence: 0.875478576

00:25:13.582 --> 00:25:16.062 Age starting at 45 encompasses

NOTE Confidence: 0.875478576

00:25:16.062 --> 00:25:18.559 nearly everybody at this point.

NOTE Confidence: 0.875478576

00:25:18.560 --> 00:25:20.285 So according to the American

NOTE Confidence: 0.875478576

00:25:20.285 --> 00:25:22.010 Cancer Society and the USPSTF,

NOTE Confidence: 0.875478576

00:25:22.010 --> 00:25:24.642 we have a green light to go ahead

NOTE Confidence: 0.875478576

00:25:24.642 --> 00:25:26.907 and start screening at age 45.

NOTE Confidence: 0.880156458

00:25:29.200 --> 00:25:31.120 Now this just sort of.

NOTE Confidence: 0.880156458

00:25:31.120 --> 00:25:33.832 I just wanted to sort of talk a

NOTE Confidence: 0.880156458

00:25:33.832 --> 00:25:36.084 little bit about patients who may  
NOTE Confidence: 0.880156458

00:25:36.084 --> 00:25:39.468 not be as well as somebody who comes  
NOTE Confidence: 0.880156458

00:25:39.468 --> 00:25:42.797 into your office and say they have  
NOTE Confidence: 0.880156458

00:25:42.797 --> 00:25:44.776 a pretty devastating disease like  
NOTE Confidence: 0.880156458

00:25:44.776 --> 00:25:46.736 cirrhosis in which they're fair.  
NOTE Confidence: 0.880156458

00:25:46.740 --> 00:25:48.080 They're not doing very well,  
NOTE Confidence: 0.880156458

00:25:48.080 --> 00:25:50.439 and then the question here would be,  
NOTE Confidence: 0.880156458

00:25:50.440 --> 00:25:52.528 would you screen this patient and  
NOTE Confidence: 0.880156458

00:25:52.528 --> 00:25:54.570 would would one recommend that the  
NOTE Confidence: 0.880156458

00:25:54.570 --> 00:25:56.340 question really is the answer here  
NOTE Confidence: 0.880156458

00:25:56.340 --> 00:25:59.012 is not really so if you have a life  
NOTE Confidence: 0.880156458

00:25:59.012 --> 00:26:00.636 expectancy less than five years.  
NOTE Confidence: 0.880156458

00:26:00.636 --> 00:26:02.526 It's probably not worthwhile to  
NOTE Confidence: 0.880156458

00:26:02.526 --> 00:26:04.345 undergo screening so that just  
NOTE Confidence: 0.880156458

00:26:04.345 --> 00:26:06.205 comes with a small caveat there.  
NOTE Confidence: 0.880156458

00:26:06.210 --> 00:26:08.107 While we encourage everybody to get screened,

NOTE Confidence: 0.880156458

00:26:08.110 --> 00:26:10.609 it really should be an individual decision.

NOTE Confidence: 0.880156458

00:26:10.610 --> 00:26:12.354 If these sorts of things are at play.

NOTE Confidence: 0.934285246363637

00:26:14.760 --> 00:26:16.932 I just wanted to mention that

NOTE Confidence: 0.934285246363637

00:26:16.932 --> 00:26:18.710 patients were at increased risk

NOTE Confidence: 0.934285246363637

00:26:18.710 --> 00:26:21.699 which we defined as you know your

NOTE Confidence: 0.934285246363637

00:26:21.699 --> 00:26:23.658 family history for colon cancer.

NOTE Confidence: 0.934285246363637

00:26:23.658 --> 00:26:25.854 How do we screen these patients?

NOTE Confidence: 0.934285246363637

00:26:25.860 --> 00:26:27.076 So like I mentioned,

NOTE Confidence: 0.934285246363637

00:26:27.076 --> 00:26:29.288 if you have a first degree relative

NOTE Confidence: 0.934285246363637

00:26:29.288 --> 00:26:31.500 who has an age that's over 60,

NOTE Confidence: 0.934285246363637

00:26:31.500 --> 00:26:33.600 you can really use any screening modality,

NOTE Confidence: 0.934285246363637

00:26:33.600 --> 00:26:36.021 but you must start at age 40 and you

NOTE Confidence: 0.934285246363637

00:26:36.021 --> 00:26:38.567 would follow the intervals as per whatever

NOTE Confidence: 0.934285246363637

00:26:38.567 --> 00:26:41.206 your test each test suggests to do so,

NOTE Confidence: 0.934285246363637

00:26:41.210 --> 00:26:42.094 like for a fit.

NOTE Confidence: 0.934285246363637

00:26:42.094 --> 00:26:43.420 It would be every year for  
NOTE Confidence: 0.934285246363637

00:26:43.481 --> 00:26:44.588 colonoscopy 10 years.  
NOTE Confidence: 0.934285246363637

00:26:44.590 --> 00:26:47.566 Depends on what the findings are.  
NOTE Confidence: 0.934285246363637

00:26:47.570 --> 00:26:49.530 If you have two second degree relatives,  
NOTE Confidence: 0.934285246363637

00:26:49.530 --> 00:26:51.626 you sort of follow the same thing again,  
NOTE Confidence: 0.934285246363637

00:26:51.630 --> 00:26:53.877 but if you have a first degree  
NOTE Confidence: 0.934285246363637

00:26:53.877 --> 00:26:56.306 relative whose age is less than 60,  
NOTE Confidence: 0.934285246363637

00:26:56.310 --> 00:26:57.990 really the only test recommended  
NOTE Confidence: 0.934285246363637

00:26:57.990 --> 00:27:00.386 here is a colonoscopy and it's just  
NOTE Confidence: 0.934285246363637

00:27:00.386 --> 00:27:01.686 because you're you're considered  
NOTE Confidence: 0.934285246363637

00:27:01.686 --> 00:27:04.181 to be a truly high risk and you  
NOTE Confidence: 0.934285246363637

00:27:04.181 --> 00:27:05.885 probably should start at age 40  
NOTE Confidence: 0.934285246363637

00:27:05.890 --> 00:27:07.666 or 10 years before the youngest  
NOTE Confidence: 0.934285246363637

00:27:07.666 --> 00:27:09.579 case was diagnosed in your family.  
NOTE Confidence: 0.934285246363637

00:27:09.580 --> 00:27:11.841 You and you should be repeating this  
NOTE Confidence: 0.934285246363637

00:27:11.841 --> 00:27:14.006 test every five years just to define



NOTE Confidence: 0.934285246363637

00:27:14.006 --> 00:27:15.638 what a first degree relative is.

NOTE Confidence: 0.934285246363637

00:27:15.640 --> 00:27:19.078 That's your mom and your dad,

NOTE Confidence: 0.934285246363637

00:27:19.080 --> 00:27:20.760 your brother, your sister, your kids.

NOTE Confidence: 0.934285246363637

00:27:20.760 --> 00:27:22.560 Your second degree is Grandma,

NOTE Confidence: 0.934285246363637

00:27:22.560 --> 00:27:24.150 Grandpa cousins, aunts,

NOTE Confidence: 0.8782801525

00:27:24.160 --> 00:27:24.840 that kind of stuff.

NOTE Confidence: 0.944207467692308

00:27:27.610 --> 00:27:29.220 Now what do you do with patients

NOTE Confidence: 0.944207467692308

00:27:29.220 --> 00:27:30.828 who are high and highest risk?

NOTE Confidence: 0.944207467692308

00:27:30.830 --> 00:27:32.475 Well, these are the patients

NOTE Confidence: 0.944207467692308

00:27:32.475 --> 00:27:34.120 who have genetic syndromes and

NOTE Confidence: 0.944207467692308

00:27:34.177 --> 00:27:35.849 or inflammatory bowel disease.

NOTE Confidence: 0.944207467692308

00:27:35.850 --> 00:27:37.338 And really the answer probably here

NOTE Confidence: 0.944207467692308

00:27:37.338 --> 00:27:39.128 is to they should probably be going

NOTE Confidence: 0.944207467692308

00:27:39.128 --> 00:27:40.864 to and a center that has experience

NOTE Confidence: 0.944207467692308

00:27:40.919 --> 00:27:42.514 with managing these patients because

NOTE Confidence: 0.944207467692308

00:27:42.514 --> 00:27:43.790 they're probably best served  
NOTE Confidence: 0.944207467692308

00:27:43.790 --> 00:27:46.598 in these sorts of institutions.  
NOTE Confidence: 0.944207467692308

00:27:46.600 --> 00:27:48.874 So in summary, the mortality from  
NOTE Confidence: 0.944207467692308

00:27:48.874 --> 00:27:51.180 colon cancer can be prevented.  
NOTE Confidence: 0.944207467692308

00:27:51.180 --> 00:27:52.765 There's not enough patients who  
NOTE Confidence: 0.944207467692308

00:27:52.765 --> 00:27:54.033 are getting screened currently.  
NOTE Confidence: 0.944207467692308

00:27:54.040 --> 00:27:56.455 There are many strategies that are available,  
NOTE Confidence: 0.944207467692308

00:27:56.460 --> 00:27:58.476 and the goal ultimately is to screen  
NOTE Confidence: 0.944207467692308

00:27:58.476 --> 00:28:00.840 them by any method that they prefer.  
NOTE Confidence: 0.944207467692308

00:28:00.840 --> 00:28:03.376 So any test is better than no test,  
NOTE Confidence: 0.944207467692308

00:28:03.380 --> 00:28:07.094 and colonoscopy does carry that extra  
NOTE Confidence: 0.944207467692308

00:28:07.094 --> 00:28:10.863 benefit of being preventative in as as  
NOTE Confidence: 0.944207467692308

00:28:10.863 --> 00:28:13.880 well as trying to find early cancer,  
NOTE Confidence: 0.944207467692308

00:28:13.880 --> 00:28:16.168 and that's what I have for you today.  
NOTE Confidence: 0.9213518275

00:28:18.320 --> 00:28:19.316 Thank you so much.  
NOTE Confidence: 0.9213518275

00:28:19.316 --> 00:28:21.288 I mean that was a great presentation

NOTE Confidence: 0.9213518275

00:28:21.288 --> 00:28:23.363 really emphasizing the all the

NOTE Confidence: 0.9213518275

00:28:23.363 --> 00:28:25.446 different options that are available

NOTE Confidence: 0.9213518275

00:28:25.446 --> 00:28:27.582 to get the colon cancer screening

NOTE Confidence: 0.9213518275

00:28:27.582 --> 00:28:31.160 done to not seeing any questions

NOTE Confidence: 0.9213518275

00:28:31.160 --> 00:28:33.112 in the chat and to try to keep

NOTE Confidence: 0.9213518275

00:28:33.112 --> 00:28:34.976 us on a reasonable schedule,

NOTE Confidence: 0.9213518275

00:28:34.976 --> 00:28:38.474 let's we'll move on to the the next talks,

NOTE Confidence: 0.9213518275

00:28:38.474 --> 00:28:40.622 which is a combined effort between

NOTE Confidence: 0.9213518275

00:28:40.622 --> 00:28:43.116 Doctor and Manju and doctor Amit Khanna.

NOTE Confidence: 0.9213518275

00:28:43.120 --> 00:28:46.228 So Doctor Manju will let you start.

NOTE Confidence: 0.94056662

00:28:47.570 --> 00:28:49.433 Alright, let me go ahead and share my screen.

NOTE Confidence: 0.896750265

00:28:59.080 --> 00:29:01.180 Alright, hi, good evening my name

NOTE Confidence: 0.896750265

00:29:01.180 --> 00:29:03.630 is Anne Manju and I'm an assistant

NOTE Confidence: 0.896750265

00:29:03.630 --> 00:29:05.680 professor of surgery at Yale,

NOTE Confidence: 0.896750265

00:29:05.680 --> 00:29:06.505 New Haven Hospital,

NOTE Confidence: 0.896750265

00:29:06.505 --> 00:29:08.880 and I specialize in colon and rectal surgery.

NOTE Confidence: 0.896750265

00:29:08.880 --> 00:29:09.822 And tonight, myself,

NOTE Confidence: 0.896750265

00:29:09.822 --> 00:29:11.078 along with Doctor Connor,

NOTE Confidence: 0.896750265

00:29:11.080 --> 00:29:13.930 gonna speak to briefly about some

NOTE Confidence: 0.896750265

00:29:13.930 --> 00:29:16.900 advances and innovations in the surgical

NOTE Confidence: 0.896750265

00:29:16.900 --> 00:29:19.876 management of colon and rectal cancer.

NOTE Confidence: 0.896750265

00:29:19.880 --> 00:29:21.380 I like to work with pictures,

NOTE Confidence: 0.896750265

00:29:21.380 --> 00:29:23.804 so the first thing people ask about when

NOTE Confidence: 0.896750265

00:29:23.804 --> 00:29:26.388 they are diagnosed with the new colorectal

NOTE Confidence: 0.896750265

00:29:26.388 --> 00:29:29.358 cancer is about what surgery are we gonna do?

NOTE Confidence: 0.896750265

00:29:29.360 --> 00:29:31.860 How much colon are we going to take out and

NOTE Confidence: 0.896750265

00:29:31.926 --> 00:29:34.194 and how are we going to actually do it?

NOTE Confidence: 0.896750265

00:29:34.200 --> 00:29:35.940 So to answer that question,

NOTE Confidence: 0.896750265

00:29:35.940 --> 00:29:37.812 sort of requires knowing maybe where

NOTE Confidence: 0.896750265

00:29:37.812 --> 00:29:40.159 the cancer is and then additionally,

NOTE Confidence: 0.896750265

00:29:40.160 --> 00:29:41.470 as we just talked about.

NOTE Confidence: 0.896750265

00:29:41.470 --> 00:29:42.910 Maybe if there's an underlying

NOTE Confidence: 0.896750265

00:29:42.910 --> 00:29:44.350 genetic disorder that might actually

NOTE Confidence: 0.896750265

00:29:44.393 --> 00:29:45.635 put the entire colon at risk,

NOTE Confidence: 0.896750265

00:29:45.640 --> 00:29:46.991 we may not just take one portion

NOTE Confidence: 0.896750265

00:29:46.991 --> 00:29:48.298 of the colon with the cancer,

NOTE Confidence: 0.896750265

00:29:48.300 --> 00:29:50.478 but we may have to take more to prevent

NOTE Confidence: 0.896750265

00:29:50.478 --> 00:29:52.465 the risk of future cancers and so.

NOTE Confidence: 0.896750265

00:29:52.470 --> 00:29:54.262 Here we see that the surgery to

NOTE Confidence: 0.896750265

00:29:54.262 --> 00:29:55.839 remove colon cancer has a bunch

NOTE Confidence: 0.896750265

00:29:55.839 --> 00:29:57.345 of different names and those are

NOTE Confidence: 0.896750265

00:29:57.345 --> 00:29:59.156 names that the specialist might say,

NOTE Confidence: 0.896750265

00:29:59.160 --> 00:30:00.847 but those just really mean that we're

NOTE Confidence: 0.896750265

00:30:00.847 --> 00:30:02.946 going to take out the portion of your

NOTE Confidence: 0.896750265

00:30:02.946 --> 00:30:04.650 colon that actually contains the lesion,

NOTE Confidence: 0.896750265

00:30:04.650 --> 00:30:05.958 and in doing so,

NOTE Confidence: 0.896750265

00:30:05.958 --> 00:30:07.920 we want to take good healthy  
NOTE Confidence: 0.896750265

00:30:07.998 --> 00:30:09.888 colon on both sides of it.  
NOTE Confidence: 0.896750265

00:30:09.890 --> 00:30:11.504 We also take the blood vessels  
NOTE Confidence: 0.896750265

00:30:11.504 --> 00:30:13.308 that supply that part of the colon,  
NOTE Confidence: 0.896750265

00:30:13.310 --> 00:30:15.305 and with that comes the fat and  
NOTE Confidence: 0.896750265

00:30:15.305 --> 00:30:16.610 all the lymph nodes.  
NOTE Confidence: 0.896750265

00:30:16.610 --> 00:30:18.640 That combination of tissue basically  
NOTE Confidence: 0.896750265

00:30:18.640 --> 00:30:20.670 allows the pathologists to really  
NOTE Confidence: 0.896750265

00:30:20.733 --> 00:30:22.648 get all the detailed information.  
NOTE Confidence: 0.896750265

00:30:22.650 --> 00:30:23.846 That they need to know about  
NOTE Confidence: 0.896750265

00:30:23.846 --> 00:30:24.919 what your tumor was.  
NOTE Confidence: 0.896750265

00:30:24.919 --> 00:30:26.533 If it has spread anywhere else  
NOTE Confidence: 0.896750265

00:30:26.533 --> 00:30:28.391 into the lymph nodes and you know  
NOTE Confidence: 0.896750265

00:30:28.391 --> 00:30:30.337 allow us to know that we've gotten  
NOTE Confidence: 0.896750265

00:30:30.337 --> 00:30:31.549 everything out cleanly.  
NOTE Confidence: 0.896750265

00:30:31.550 --> 00:30:33.782 And so how much we takes at the pen,

NOTE Confidence: 0.896750265

00:30:33.790 --> 00:30:35.766 how much we take out in the operating

NOTE Confidence: 0.896750265

00:30:35.766 --> 00:30:37.845 room really depends on the exact location

NOTE Confidence: 0.896750265

00:30:37.845 --> 00:30:39.990 and what blood vessel territory is serving.

NOTE Confidence: 0.896750265

00:30:39.990 --> 00:30:40.950 That portion of the colon,

NOTE Confidence: 0.896750265

00:30:40.950 --> 00:30:43.170 and these are just some illustrations.

NOTE Confidence: 0.896750265

00:30:43.170 --> 00:30:43.495 Historically,

NOTE Confidence: 0.896750265

00:30:43.495 --> 00:30:45.120 when we think about surgery,

NOTE Confidence: 0.896750265

00:30:45.120 --> 00:30:46.956 we think about we call traditional

NOTE Confidence: 0.896750265

00:30:46.956 --> 00:30:48.495 open surgery that surgery whereby

NOTE Confidence: 0.896750265

00:30:48.495 --> 00:30:50.067 we go to the operating room.

NOTE Confidence: 0.896750265

00:30:50.070 --> 00:30:52.065 We make a vertical up and down

NOTE Confidence: 0.896750265

00:30:52.065 --> 00:30:53.470 incision in your abdomen.

NOTE Confidence: 0.896750265

00:30:53.470 --> 00:30:54.358 We open the abdomen,

NOTE Confidence: 0.896750265

00:30:54.358 --> 00:30:55.936 we take out the area that we

NOTE Confidence: 0.896750265

00:30:55.936 --> 00:30:56.708 need to take out.

NOTE Confidence: 0.896750265

00:30:56.710 --> 00:30:58.494 We put the two ends of the colon  
NOTE Confidence: 0.896750265

00:30:58.494 --> 00:31:00.047 back together and then we close  
NOTE Confidence: 0.896750265

00:31:00.047 --> 00:31:01.367 the abdomen of either stitches.  
NOTE Confidence: 0.896750265

00:31:01.370 --> 00:31:03.445 Or sometimes you may have  
NOTE Confidence: 0.896750265

00:31:03.445 --> 00:31:04.690 seen surgical staples.  
NOTE Confidence: 0.896750265

00:31:04.690 --> 00:31:05.485 It's very effective,  
NOTE Confidence: 0.896750265

00:31:05.485 --> 00:31:07.340 but the recovery from that can be  
NOTE Confidence: 0.896750265

00:31:07.393 --> 00:31:09.038 a little bit painful because you do  
NOTE Confidence: 0.896750265

00:31:09.038 --> 00:31:10.762 have a large incision that runs up  
NOTE Confidence: 0.896750265

00:31:10.762 --> 00:31:12.553 and down the middle of your abdomen.  
NOTE Confidence: 0.896750265

00:31:12.553 --> 00:31:14.954 And also there's a risk of forming  
NOTE Confidence: 0.896750265

00:31:14.954 --> 00:31:17.245 a hernia afterwards and that the  
NOTE Confidence: 0.896750265

00:31:17.245 --> 00:31:19.543 pain can often slow peoples return  
NOTE Confidence: 0.896750265

00:31:19.613 --> 00:31:21.328 back to their normal activities  
NOTE Confidence: 0.896750265

00:31:21.328 --> 00:31:23.043 and in ways of life.  
NOTE Confidence: 0.896750265

00:31:23.050 --> 00:31:27.176 So moving on in the early to mid 1980s,



NOTE Confidence: 0.896750265

00:31:27.176 --> 00:31:28.806 the field of general surgery

NOTE Confidence: 0.896750265

00:31:28.806 --> 00:31:30.110 from which colon rectal

NOTE Confidence: 0.884961229230769

00:31:30.169 --> 00:31:31.692 surgery is apart, started taking

NOTE Confidence: 0.884961229230769

00:31:31.692 --> 00:31:33.438 cues from our colleagues in the

NOTE Confidence: 0.884961229230769

00:31:33.438 --> 00:31:35.268 fields of urology and gynecology,

NOTE Confidence: 0.884961229230769

00:31:35.270 --> 00:31:37.070 which had started this new keyhole

NOTE Confidence: 0.884961229230769

00:31:37.070 --> 00:31:39.310 or minimally invasive surgery.

NOTE Confidence: 0.884961229230769

00:31:39.310 --> 00:31:41.902 We refer to that now more

NOTE Confidence: 0.884961229230769

00:31:41.902 --> 00:31:43.630 often as laparoscopic surgery.

NOTE Confidence: 0.884961229230769

00:31:43.630 --> 00:31:45.830 Laparoscopic surgery allows us to

NOTE Confidence: 0.884961229230769

00:31:45.830 --> 00:31:48.690 make small incisions in the abdomen,

NOTE Confidence: 0.884961229230769

00:31:48.690 --> 00:31:50.754 put some, get some gas into the abdomen.

NOTE Confidence: 0.884961229230769

00:31:50.760 --> 00:31:52.940 We usually use carbon dioxide.

NOTE Confidence: 0.884961229230769

00:31:52.940 --> 00:31:55.046 Blow it up and then use a very tiny

NOTE Confidence: 0.884961229230769

00:31:55.046 --> 00:31:56.677 precise camera as well as long

NOTE Confidence: 0.884961229230769

00:31:56.677 --> 00:31:58.343 instruments which are on a straight  
NOTE Confidence: 0.884961229230769

00:31:58.343 --> 00:32:00.519 stick and we can now do that same  
NOTE Confidence: 0.884961229230769

00:32:00.519 --> 00:32:02.516 surgery that we had to perform previously  
NOTE Confidence: 0.884961229230769

00:32:02.516 --> 00:32:04.245 through a large incision through a  
NOTE Confidence: 0.884961229230769

00:32:04.245 --> 00:32:05.841 bunch of small incisions which are  
NOTE Confidence: 0.884961229230769

00:32:05.841 --> 00:32:07.513 about the size of my thumbnail or  
NOTE Confidence: 0.884961229230769

00:32:07.513 --> 00:32:10.690 a little less than a centimeter.  
NOTE Confidence: 0.884961229230769

00:32:10.690 --> 00:32:12.190 Usually to make that connection we  
NOTE Confidence: 0.884961229230769

00:32:12.190 --> 00:32:13.934 would still have to make a small  
NOTE Confidence: 0.884961229230769

00:32:13.934 --> 00:32:15.551 incision in the middle of the abdomen  
NOTE Confidence: 0.884961229230769

00:32:15.606 --> 00:32:17.310 to pull out the intestine and put the  
NOTE Confidence: 0.884961229230769

00:32:17.310 --> 00:32:19.030 two ends back together and take out  
NOTE Confidence: 0.884961229230769

00:32:19.030 --> 00:32:20.968 that last portion once we freed it up.  
NOTE Confidence: 0.884961229230769

00:32:20.970 --> 00:32:23.316 But this is really a really  
NOTE Confidence: 0.884961229230769

00:32:23.316 --> 00:32:24.489 much smaller incision.  
NOTE Confidence: 0.884961229230769

00:32:24.490 --> 00:32:26.368 People started to use this first

NOTE Confidence: 0.884961229230769

00:32:26.368 --> 00:32:28.286 for gallbladder surgery and then for

NOTE Confidence: 0.884961229230769

00:32:28.286 --> 00:32:29.821 appendix surgery and eventually the

NOTE Confidence: 0.884961229230769

00:32:29.821 --> 00:32:31.864 field of colon and rectal surgery

NOTE Confidence: 0.884961229230769

00:32:31.864 --> 00:32:33.634 moved heavily into minimally invasive

NOTE Confidence: 0.884961229230769

00:32:33.634 --> 00:32:36.158 surgery and this really sort of

NOTE Confidence: 0.884961229230769

00:32:36.158 --> 00:32:37.942 revolutionized people's recovery from

NOTE Confidence: 0.884961229230769

00:32:37.942 --> 00:32:41.050 having a portion of their colon removed.

NOTE Confidence: 0.884961229230769

00:32:41.050 --> 00:32:43.288 Just like our iPhones continue to

NOTE Confidence: 0.884961229230769

00:32:43.288 --> 00:32:46.260 get more and more advanced with each

NOTE Confidence: 0.884961229230769

00:32:46.260 --> 00:32:48.600 iteration of surgery continues to

NOTE Confidence: 0.884961229230769

00:32:48.600 --> 00:32:51.624 advance and you may have seen ads

NOTE Confidence: 0.884961229230769

00:32:51.624 --> 00:32:53.634 or pictures about robotic surgery

NOTE Confidence: 0.884961229230769

00:32:53.640 --> 00:32:56.784 and so robotic surgery is really

NOTE Confidence: 0.884961229230769

00:32:56.784 --> 00:32:59.250 just a further refinement of.

NOTE Confidence: 0.884961229230769

00:32:59.250 --> 00:33:00.026 Laparoscopic surgery.

NOTE Confidence: 0.884961229230769

00:33:00.026 --> 00:33:01.578 The robot doesn't actually  
NOTE Confidence: 0.884961229230769

00:33:01.578 --> 00:33:03.649 do any operating on its own,  
NOTE Confidence: 0.884961229230769

00:33:03.650 --> 00:33:05.722 but what we see here on the left  
NOTE Confidence: 0.884961229230769

00:33:05.722 --> 00:33:08.420 hand side of the screen is the the  
NOTE Confidence: 0.884961229230769

00:33:08.420 --> 00:33:10.221 Davinci Intuitive Surgical robot and  
NOTE Confidence: 0.884961229230769

00:33:10.221 --> 00:33:12.837 what it does is it actually holds the  
NOTE Confidence: 0.884961229230769

00:33:12.837 --> 00:33:14.766 instruments and in doing so you have  
NOTE Confidence: 0.884961229230769

00:33:14.766 --> 00:33:17.129 now 4 operative arms for a single surgeon,  
NOTE Confidence: 0.884961229230769

00:33:17.130 --> 00:33:19.110 whereas if I.  
NOTE Confidence: 0.884961229230769

00:33:19.110 --> 00:33:20.268 Go back to the prior slide.  
NOTE Confidence: 0.884961229230769

00:33:20.270 --> 00:33:21.550 You can see that each surgeon we have,  
NOTE Confidence: 0.884961229230769

00:33:21.550 --> 00:33:22.414 we've got two hands.  
NOTE Confidence: 0.884961229230769

00:33:22.414 --> 00:33:24.324 At most you can hold two instruments where  
NOTE Confidence: 0.884961229230769

00:33:24.324 --> 00:33:26.588 you could hold a camera on an instrument.  
NOTE Confidence: 0.884961229230769

00:33:26.590 --> 00:33:29.382 So one person you really need two people  
NOTE Confidence: 0.884961229230769

00:33:29.382 --> 00:33:32.476 in any operation to do a colon operation.

NOTE Confidence: 0.884961229230769  
00:33:32.476 --> 00:33:35.820 Now when we talk about the surgical robot,  
NOTE Confidence: 0.884961229230769  
00:33:35.820 --> 00:33:37.518 we there's actually four arms and  
NOTE Confidence: 0.884961229230769  
00:33:37.518 --> 00:33:38.940 a single surgeon controls them.  
NOTE Confidence: 0.884961229230769  
00:33:38.940 --> 00:33:40.515 The way the surgeon controls the robot  
NOTE Confidence: 0.884961229230769  
00:33:40.515 --> 00:33:41.983 is you actually go about 10 feet  
NOTE Confidence: 0.884961229230769  
00:33:41.983 --> 00:33:43.780 away from the patient in the operating room,  
NOTE Confidence: 0.884961229230769  
00:33:43.780 --> 00:33:45.761 and you sit down at this surgical  
NOTE Confidence: 0.884961229230769  
00:33:45.761 --> 00:33:47.712 console that you see here on the  
NOTE Confidence: 0.884961229230769  
00:33:47.712 --> 00:33:49.272 right hand side of the screen,  
NOTE Confidence: 0.884961229230769  
00:33:49.280 --> 00:33:51.184 the console is sort of very ergonomic  
NOTE Confidence: 0.884961229230769  
00:33:51.184 --> 00:33:53.438 and adjust to each surgeon and saves it,  
NOTE Confidence: 0.884961229230769  
00:33:53.440 --> 00:33:55.211 just like your car might save your  
NOTE Confidence: 0.884961229230769  
00:33:55.211 --> 00:33:56.539 seat positions when you get in,  
NOTE Confidence: 0.884961229230769  
00:33:56.540 --> 00:33:57.632 and when you sit down,  
NOTE Confidence: 0.884961229230769  
00:33:57.632 --> 00:33:58.900 you're looking into this console that  
NOTE Confidence: 0.884961229230769

00:33:58.900 --> 00:34:00.760 you see here on the right is actually  
NOTE Confidence: 0.884961229230769

00:34:00.760 --> 00:34:02.600 a pair of goggles that you look into,  
NOTE Confidence: 0.884961229230769

00:34:02.600 --> 00:34:05.050 and now you have a 10X magnification.  
NOTE Confidence: 0.884961229230769

00:34:05.050 --> 00:34:07.858 Of your operating field and not only that,  
NOTE Confidence: 0.884961229230769

00:34:07.860 --> 00:34:09.265 it's in three dimensions because  
NOTE Confidence: 0.884961229230769

00:34:09.265 --> 00:34:10.670 the camera that the robot  
NOTE Confidence: 0.892056424285714

00:34:10.728 --> 00:34:12.088 uses actually has two parallel  
NOTE Confidence: 0.892056424285714

00:34:12.088 --> 00:34:13.790 cameras in line with each other,  
NOTE Confidence: 0.892056424285714

00:34:13.790 --> 00:34:15.428 so that gives you what we call a depth  
NOTE Confidence: 0.892056424285714

00:34:15.428 --> 00:34:17.026 of field or allows you to see him.  
NOTE Confidence: 0.892056424285714

00:34:17.030 --> 00:34:19.193 What looks like 3 dimensions without actually  
NOTE Confidence: 0.892056424285714

00:34:19.193 --> 00:34:21.149 wearing any three dimensional goggles.  
NOTE Confidence: 0.892056424285714

00:34:21.150 --> 00:34:23.290 The view is incredibly  
NOTE Confidence: 0.892056424285714

00:34:23.290 --> 00:34:25.430 sharp and incredibly bright,  
NOTE Confidence: 0.892056424285714

00:34:25.430 --> 00:34:27.103 so that's one advantage here is that  
NOTE Confidence: 0.892056424285714

00:34:27.103 --> 00:34:28.882 we now have an incredibly stable

NOTE Confidence: 0.892056424285714  
00:34:28.882 --> 00:34:30.904 platform that doesn't have any rotation,  
NOTE Confidence: 0.892056424285714  
00:34:30.910 --> 00:34:32.150 or you're not dealing with  
NOTE Confidence: 0.892056424285714  
00:34:32.150 --> 00:34:33.142 a human holding instrument.  
NOTE Confidence: 0.892056424285714  
00:34:33.150 --> 00:34:35.425 You're dealing with a very precise robot.  
NOTE Confidence: 0.892056424285714  
00:34:35.430 --> 00:34:36.970 The second thing that's really  
NOTE Confidence: 0.892056424285714  
00:34:36.970 --> 00:34:38.510 neat are the actual instruments.  
NOTE Confidence: 0.892056424285714  
00:34:38.510 --> 00:34:41.667 These instruments that the robot is holding.  
NOTE Confidence: 0.892056424285714  
00:34:41.670 --> 00:34:43.362 They are actually far more advanced  
NOTE Confidence: 0.892056424285714  
00:34:43.362 --> 00:34:45.100 than even our most advanced  
NOTE Confidence: 0.892056424285714  
00:34:45.100 --> 00:34:46.750 current laparoscopic instruments,  
NOTE Confidence: 0.892056424285714  
00:34:46.750 --> 00:34:48.902 and the reason for that is that they  
NOTE Confidence: 0.892056424285714  
00:34:48.902 --> 00:34:50.789 have wrists just like a human hand,  
NOTE Confidence: 0.892056424285714  
00:34:50.790 --> 00:34:52.812 and so they can actually articulate  
NOTE Confidence: 0.892056424285714  
00:34:52.812 --> 00:34:54.580 with more degrees of freedom  
NOTE Confidence: 0.892056424285714  
00:34:54.580 --> 00:34:56.698 than the human hand actually can.  
NOTE Confidence: 0.892056424285714

00:34:56.700 --> 00:34:58.596 This allows them to get into  
NOTE Confidence: 0.892056424285714

00:34:58.596 --> 00:34:59.544 very small places,  
NOTE Confidence: 0.892056424285714

00:34:59.550 --> 00:35:01.374 and also you can manually scale  
NOTE Confidence: 0.892056424285714

00:35:01.374 --> 00:35:03.428 how precise the movement is so that  
NOTE Confidence: 0.892056424285714

00:35:03.428 --> 00:35:04.982 you can actually make very tiny,  
NOTE Confidence: 0.892056424285714

00:35:04.990 --> 00:35:06.145 very precise movements.  
NOTE Confidence: 0.892056424285714

00:35:06.145 --> 00:35:07.685 In very tight areas,  
NOTE Confidence: 0.892056424285714

00:35:07.690 --> 00:35:09.552 and this allows us to do things  
NOTE Confidence: 0.892056424285714

00:35:09.552 --> 00:35:10.984 like very carefully peel tumors  
NOTE Confidence: 0.892056424285714

00:35:10.984 --> 00:35:12.434 off of large blood vessels,  
NOTE Confidence: 0.892056424285714

00:35:12.440 --> 00:35:13.810 something that might have required  
NOTE Confidence: 0.892056424285714

00:35:13.810 --> 00:35:15.503 you know that might have been  
NOTE Confidence: 0.892056424285714

00:35:15.503 --> 00:35:17.393 a little bit more tedious in a  
NOTE Confidence: 0.892056424285714

00:35:17.393 --> 00:35:18.250 laparoscopic situation somewhere  
NOTE Confidence: 0.892056424285714

00:35:18.250 --> 00:35:19.870 where we have much better control  
NOTE Confidence: 0.892056424285714

00:35:19.870 --> 00:35:21.658 because of our superior visualization.



NOTE Confidence: 0.892056424285714

00:35:21.658 --> 00:35:24.103 This is particularly helpful when

NOTE Confidence: 0.892056424285714

00:35:24.103 --> 00:35:26.819 we talk about rectal cancer surgery

NOTE Confidence: 0.892056424285714

00:35:26.819 --> 00:35:29.563 because the ability to go deep into

NOTE Confidence: 0.892056424285714

00:35:29.640 --> 00:35:32.342 the pelvis to find low rectal cancer

NOTE Confidence: 0.892056424285714

00:35:32.342 --> 00:35:34.204 tumors and actually spare your

NOTE Confidence: 0.892056424285714

00:35:34.204 --> 00:35:36.316 sphincter complex, which is you know,

NOTE Confidence: 0.892056424285714

00:35:36.320 --> 00:35:36.992 means that.

NOTE Confidence: 0.892056424285714

00:35:36.992 --> 00:35:39.344 We can eventually render you without any

NOTE Confidence: 0.892056424285714

00:35:39.344 --> 00:35:41.986 sort of colostomy bag is a wonderful thing.

NOTE Confidence: 0.892056424285714

00:35:41.990 --> 00:35:43.278 Previously low rectal cancers,

NOTE Confidence: 0.892056424285714

00:35:43.278 --> 00:35:45.988 a lot of people ended up with a

NOTE Confidence: 0.892056424285714

00:35:45.988 --> 00:35:47.773 permanent colostomy bag because of

NOTE Confidence: 0.892056424285714

00:35:47.773 --> 00:35:49.482 robotic surgery and our ability

NOTE Confidence: 0.892056424285714

00:35:49.482 --> 00:35:51.484 to get very low into the pelvis.

NOTE Confidence: 0.892056424285714

00:35:51.490 --> 00:35:54.460 We're actually able to restore people to

NOTE Confidence: 0.892056424285714

00:35:54.460 --> 00:35:57.670 complete continence much more regularly now.

NOTE Confidence: 0.892056424285714

00:35:57.670 --> 00:35:58.150 And that's,

NOTE Confidence: 0.892056424285714

00:35:58.150 --> 00:36:00.380 I think one of the huge benefits of this.

NOTE Confidence: 0.892056424285714

00:36:00.380 --> 00:36:03.350 A third benefit is really in a small detail,

NOTE Confidence: 0.892056424285714

00:36:03.350 --> 00:36:04.748 but it's the fact that we're

NOTE Confidence: 0.892056424285714

00:36:04.748 --> 00:36:06.439 actually able to put the two ends

NOTE Confidence: 0.892056424285714

00:36:06.439 --> 00:36:07.624 of the colon back together.

NOTE Confidence: 0.892056424285714

00:36:07.630 --> 00:36:09.544 Inside of your body without having

NOTE Confidence: 0.892056424285714

00:36:09.544 --> 00:36:11.646 to pull anything out and why that

NOTE Confidence: 0.892056424285714

00:36:11.646 --> 00:36:13.431 is good and useful is that then

NOTE Confidence: 0.892056424285714

00:36:13.494 --> 00:36:15.486 allows us to take out the part of

NOTE Confidence: 0.892056424285714

00:36:15.486 --> 00:36:17.345 the colon that had the cancer through

NOTE Confidence: 0.892056424285714

00:36:17.345 --> 00:36:19.107 an incision like a low C-section

NOTE Confidence: 0.892056424285714

00:36:19.107 --> 00:36:21.571 incision or what we call a Pfannenstiel

NOTE Confidence: 0.892056424285714

00:36:21.571 --> 00:36:23.847 incision that's actually in the bikini area.

NOTE Confidence: 0.892056424285714

00:36:23.850 --> 00:36:25.810 This is not only good from a

NOTE Confidence: 0.892056424285714  
00:36:25.810 --> 00:36:26.370 cosmetic standpoint,  
NOTE Confidence: 0.892056424285714  
00:36:26.370 --> 00:36:28.134 but it's really good because these  
NOTE Confidence: 0.892056424285714  
00:36:28.134 --> 00:36:29.770 incisions are much less painful.  
NOTE Confidence: 0.892056424285714  
00:36:29.770 --> 00:36:31.570 People recover from them much  
NOTE Confidence: 0.892056424285714  
00:36:31.570 --> 00:36:34.140 more quickly and they have a much  
NOTE Confidence: 0.892056424285714  
00:36:34.140 --> 00:36:35.885 lower risk of hernia formation.  
NOTE Confidence: 0.892056424285714  
00:36:35.890 --> 00:36:37.297 The next two slides I'm going to  
NOTE Confidence: 0.892056424285714  
00:36:37.297 --> 00:36:38.937 show you are just one other really.  
NOTE Confidence: 0.892056424285714  
00:36:38.940 --> 00:36:41.228 Neat feature a safety feature of the robot.  
NOTE Confidence: 0.892056424285714  
00:36:41.230 --> 00:36:43.255 That's something that's great that  
NOTE Confidence: 0.892056424285714  
00:36:43.255 --> 00:36:45.741 has really also adjusting the way  
NOTE Confidence: 0.892056424285714  
00:36:45.741 --> 00:36:48.129 we think about certain parts of  
NOTE Confidence: 0.892056424285714  
00:36:48.129 --> 00:36:49.323 robotic colorectal surgery.  
NOTE Confidence: 0.892056424285714  
00:36:49.330 --> 00:36:50.550 In the 1950s,  
NOTE Confidence: 0.892056424285714  
00:36:50.550 --> 00:36:52.550 a fluorescent dye called in  
NOTE Confidence: 0.892056424285714

00:36:52.550 --> 00:36:54.150 designing green was identified  
NOTE Confidence: 0.789909336052632

00:36:54.213 --> 00:36:55.888 and it was actually used  
NOTE Confidence: 0.789909336052632

00:36:55.888 --> 00:36:57.228 in some cardiac studies.  
NOTE Confidence: 0.789909336052632

00:36:57.230 --> 00:37:00.068 It's a non toxic dye that  
NOTE Confidence: 0.789909336052632

00:37:00.070 --> 00:37:02.650 fluoresce is green when exposed  
NOTE Confidence: 0.789909336052632

00:37:02.650 --> 00:37:05.230 to infrared wavelengths of light,  
NOTE Confidence: 0.789909336052632

00:37:05.230 --> 00:37:07.378 and so intuitive thinking that this  
NOTE Confidence: 0.789909336052632

00:37:07.378 --> 00:37:09.538 was the the surgical company think  
NOTE Confidence: 0.789909336052632

00:37:09.538 --> 00:37:11.862 that this was actually could be a  
NOTE Confidence: 0.789909336052632

00:37:11.862 --> 00:37:13.702 very useful Diane was being used  
NOTE Confidence: 0.789909336052632

00:37:13.702 --> 00:37:14.948 in different areas of surgeries.  
NOTE Confidence: 0.789909336052632

00:37:14.948 --> 00:37:16.810 People were starting to look at perfusion,  
NOTE Confidence: 0.789909336052632

00:37:16.810 --> 00:37:18.210 this die lights up,  
NOTE Confidence: 0.789909336052632

00:37:18.210 --> 00:37:19.610 blood vessels actually incorporated  
NOTE Confidence: 0.789909336052632

00:37:19.610 --> 00:37:20.820 infrared technology into the  
NOTE Confidence: 0.789909336052632

00:37:20.820 --> 00:37:22.194 robotic camera so that with the

NOTE Confidence: 0.789909336052632  
00:37:22.194 --> 00:37:23.818 touch of your finger you can act.  
NOTE Confidence: 0.789909336052632  
00:37:23.820 --> 00:37:25.340 Actually toggle the screen that  
NOTE Confidence: 0.789909336052632  
00:37:25.340 --> 00:37:27.560 you look at in your head piece  
NOTE Confidence: 0.789909336052632  
00:37:27.560 --> 00:37:29.140 to see this infrared view.  
NOTE Confidence: 0.789909336052632  
00:37:29.140 --> 00:37:30.706 So this actually comes in handy  
NOTE Confidence: 0.789909336052632  
00:37:30.706 --> 00:37:32.409 in two really critical parts of  
NOTE Confidence: 0.789909336052632  
00:37:32.409 --> 00:37:33.929 colon and rectal surgery operation.  
NOTE Confidence: 0.789909336052632  
00:37:33.930 --> 00:37:35.522 So I'm gonna tell you a little bit  
NOTE Confidence: 0.789909336052632  
00:37:35.522 --> 00:37:37.210 about this picture we see here on the  
NOTE Confidence: 0.789909336052632  
00:37:37.210 --> 00:37:38.810 right hand side of the screen we see  
NOTE Confidence: 0.789909336052632  
00:37:38.859 --> 00:37:40.581 the colon in one of our operating  
NOTE Confidence: 0.789909336052632  
00:37:40.581 --> 00:37:41.840 instruments here on the right,  
NOTE Confidence: 0.789909336052632  
00:37:41.840 --> 00:37:43.232 and the colon is we're looking  
NOTE Confidence: 0.789909336052632  
00:37:43.232 --> 00:37:44.945 at where are we going to divide  
NOTE Confidence: 0.789909336052632  
00:37:44.945 --> 00:37:46.639 it to make our division point to  
NOTE Confidence: 0.789909336052632

00:37:46.699 --> 00:37:48.414 take out the part with the cancer?  
NOTE Confidence: 0.789909336052632

00:37:48.420 --> 00:37:49.700 The part with the cancer is off to  
NOTE Confidence: 0.789909336052632

00:37:49.700 --> 00:37:50.938 the right hand side of the screen.  
NOTE Confidence: 0.789909336052632

00:37:50.940 --> 00:37:51.860 We don't see the marking.  
NOTE Confidence: 0.789909336052632

00:37:51.860 --> 00:37:54.298 It's a little further off if we're looking.  
NOTE Confidence: 0.789909336052632

00:37:54.300 --> 00:37:55.520 Here at the screen itself,  
NOTE Confidence: 0.789909336052632

00:37:55.520 --> 00:37:57.410 right beyond the tip of the instrument,  
NOTE Confidence: 0.789909336052632

00:37:57.410 --> 00:37:57.796 we'll see.  
NOTE Confidence: 0.789909336052632

00:37:57.796 --> 00:37:59.062 Maybe there's a faint difference  
NOTE Confidence: 0.789909336052632

00:37:59.062 --> 00:38:00.274 in the color of the colon.  
NOTE Confidence: 0.789909336052632

00:38:00.280 --> 00:38:02.144 Maybe it's not quite as pink as the  
NOTE Confidence: 0.789909336052632

00:38:02.144 --> 00:38:04.072 colon is right here, but you know,  
NOTE Confidence: 0.789909336052632

00:38:04.072 --> 00:38:05.780 we would be looking at it to try this side.  
NOTE Confidence: 0.789909336052632

00:38:05.780 --> 00:38:07.502 Is this area 'cause we've already taken  
NOTE Confidence: 0.789909336052632

00:38:07.502 --> 00:38:09.439 the blood supply to this part of the colon,  
NOTE Confidence: 0.789909336052632

00:38:09.440 --> 00:38:11.336 and we want to make a healthy connection

NOTE Confidence: 0.789909336052632  
00:38:11.336 --> 00:38:13.198 between the two remaining parts of the colon  
NOTE Confidence: 0.789909336052632  
00:38:13.198 --> 00:38:15.239 once we take out the part with the tumor.  
NOTE Confidence: 0.789909336052632  
00:38:15.240 --> 00:38:17.492 So when we inject the dye and we  
NOTE Confidence: 0.789909336052632  
00:38:17.492 --> 00:38:18.876 flipped our infrared imaging,  
NOTE Confidence: 0.789909336052632  
00:38:18.880 --> 00:38:20.192 it actually glows bright,  
NOTE Confidence: 0.789909336052632  
00:38:20.192 --> 00:38:20.520 clean,  
NOTE Confidence: 0.789909336052632  
00:38:20.520 --> 00:38:22.368 and so right here you can see  
NOTE Confidence: 0.789909336052632  
00:38:22.368 --> 00:38:24.359 a line where the colon is very,  
NOTE Confidence: 0.789909336052632  
00:38:24.360 --> 00:38:24.940 very green.  
NOTE Confidence: 0.789909336052632  
00:38:24.940 --> 00:38:26.390 All the tissues are candy,  
NOTE Confidence: 0.789909336052632  
00:38:26.390 --> 00:38:28.161 apple green and then the other side  
NOTE Confidence: 0.789909336052632  
00:38:28.161 --> 00:38:30.443 of it is very dim and this actually  
NOTE Confidence: 0.789909336052632  
00:38:30.443 --> 00:38:32.659 allows us to very safely and accurately  
NOTE Confidence: 0.789909336052632  
00:38:32.659 --> 00:38:34.729 divide the colon inside the body.  
NOTE Confidence: 0.789909336052632  
00:38:34.730 --> 00:38:36.806 With our surgical staplers and know  
NOTE Confidence: 0.789909336052632

00:38:36.806 --> 00:38:39.066 that we are dividing at a point  
NOTE Confidence: 0.789909336052632

00:38:39.066 --> 00:38:40.818 which is very healthy and it's  
NOTE Confidence: 0.789909336052632

00:38:40.818 --> 00:38:43.085 going to help us to put the two  
NOTE Confidence: 0.789909336052632

00:38:43.085 --> 00:38:44.779 ends back together in a Safeway.  
NOTE Confidence: 0.789909336052632

00:38:44.780 --> 00:38:46.660 One other way that we use it and  
NOTE Confidence: 0.789909336052632

00:38:46.660 --> 00:38:48.544 this is just a brief one again on  
NOTE Confidence: 0.789909336052632

00:38:48.544 --> 00:38:50.160 the right hand side is the view that  
NOTE Confidence: 0.789909336052632

00:38:50.205 --> 00:38:51.682 the surgeon would see if you were  
NOTE Confidence: 0.789909336052632

00:38:51.682 --> 00:38:52.836 doing open or laparoscopic surgery  
NOTE Confidence: 0.789909336052632

00:38:52.836 --> 00:38:54.740 and on the left hand view we see  
NOTE Confidence: 0.789909336052632

00:38:54.740 --> 00:38:56.075 a structure that's highlighted in  
NOTE Confidence: 0.789909336052632

00:38:56.075 --> 00:38:57.696 green here that you can't really  
NOTE Confidence: 0.789909336052632

00:38:57.696 --> 00:38:59.341 even appreciate at all on the right  
NOTE Confidence: 0.789909336052632

00:38:59.341 --> 00:39:00.498 hand side of the screen.  
NOTE Confidence: 0.789909336052632

00:39:00.500 --> 00:39:01.760 This little tube that's been lit  
NOTE Confidence: 0.789909336052632

00:39:01.760 --> 00:39:03.582 up here on the left hand side of



NOTE Confidence: 0.789909336052632  
00:39:03.582 --> 00:39:04.980 the screen is actually the ureter.  
NOTE Confidence: 0.789909336052632  
00:39:04.980 --> 00:39:07.098 That's a little tiny straw light  
NOTE Confidence: 0.789909336052632  
00:39:07.098 --> 00:39:08.896 structure that connects your kidneys  
NOTE Confidence: 0.789909336052632  
00:39:08.896 --> 00:39:11.520 which make urine down to your bladder well.  
NOTE Confidence: 0.893908861  
00:39:11.520 --> 00:39:12.976 The ureter runs underneath  
NOTE Confidence: 0.893908861  
00:39:12.976 --> 00:39:15.160 the colon and so it's often.  
NOTE Confidence: 0.893908861  
00:39:15.160 --> 00:39:16.696 In the field of our operations,  
NOTE Confidence: 0.893908861  
00:39:16.700 --> 00:39:18.770 especially if someone had radiation treatment  
NOTE Confidence: 0.893908861  
00:39:18.770 --> 00:39:21.319 or has had prior abdominal surgeries,  
NOTE Confidence: 0.893908861  
00:39:21.320 --> 00:39:23.568 it could get pulled into our operative field,  
NOTE Confidence: 0.893908861  
00:39:23.570 --> 00:39:25.378 and that's something that we'd like to avoid.  
NOTE Confidence: 0.893908861  
00:39:25.380 --> 00:39:27.536 So we're actually able to inject the  
NOTE Confidence: 0.893908861  
00:39:27.536 --> 00:39:29.450 ureter with this fluorescent dye.  
NOTE Confidence: 0.893908861  
00:39:29.450 --> 00:39:31.364 It stays and glows bright green  
NOTE Confidence: 0.893908861  
00:39:31.364 --> 00:39:32.640 throughout our entire operation.  
NOTE Confidence: 0.893908861

00:39:32.640 --> 00:39:34.952 Sort of like I call it like a  
NOTE Confidence: 0.893908861

00:39:34.952 --> 00:39:36.304 landing strip at the airport,  
NOTE Confidence: 0.893908861

00:39:36.304 --> 00:39:38.150 and shows us, hey, this is down here,  
NOTE Confidence: 0.893908861

00:39:38.150 --> 00:39:39.122 and it allows us to not  
NOTE Confidence: 0.893908861

00:39:39.122 --> 00:39:40.239 to act to even expose it.  
NOTE Confidence: 0.893908861

00:39:40.240 --> 00:39:42.024 We can actually just push it down with  
NOTE Confidence: 0.893908861

00:39:42.024 --> 00:39:43.700 its normal tissue layers of covering.  
NOTE Confidence: 0.893908861

00:39:43.700 --> 00:39:45.282 Normally in past we would have to  
NOTE Confidence: 0.893908861

00:39:45.282 --> 00:39:46.514 actually dissect out the year to  
NOTE Confidence: 0.893908861

00:39:46.514 --> 00:39:48.010 make sure we had it before we fired.  
NOTE Confidence: 0.893908861

00:39:48.010 --> 00:39:48.913 Any staples now?  
NOTE Confidence: 0.893908861

00:39:48.913 --> 00:39:50.719 We can actually see it through  
NOTE Confidence: 0.893908861

00:39:50.719 --> 00:39:52.333 tissue and know that it's safe  
NOTE Confidence: 0.893908861

00:39:52.333 --> 00:39:54.090 and secure and out of our way.  
NOTE Confidence: 0.893908861

00:39:54.090 --> 00:39:56.826 So those are some of the advances in  
NOTE Confidence: 0.893908861

00:39:56.826 --> 00:39:58.609 actual technical side of surgery,

NOTE Confidence: 0.893908861

00:39:58.610 --> 00:40:00.624 and doctor Connor is going to go on and

NOTE Confidence: 0.893908861

00:40:00.624 --> 00:40:02.983 mint talk more about our care pathways,

NOTE Confidence: 0.893908861

00:40:02.990 --> 00:40:04.614 but something I want to talk about

NOTE Confidence: 0.893908861

00:40:04.614 --> 00:40:06.298 briefly that you might have heard of

NOTE Confidence: 0.893908861

00:40:06.298 --> 00:40:08.630 is enhanced recovery after surgery.

NOTE Confidence: 0.893908861

00:40:08.630 --> 00:40:12.234 So we've made surgery less invasive.

NOTE Confidence: 0.893908861

00:40:12.234 --> 00:40:13.258 But how

NOTE Confidence: 0.916197352857143

00:40:13.270 --> 00:40:16.364 can we get people home more quickly

NOTE Confidence: 0.916197352857143

00:40:16.370 --> 00:40:18.838 and get people back to baseline sooner

NOTE Confidence: 0.89826931

00:40:18.850 --> 00:40:21.682 after you've had a colon surgery and so.

NOTE Confidence: 0.89826931

00:40:21.682 --> 00:40:23.812 The pathway that involves everyone

NOTE Confidence: 0.89826931

00:40:23.812 --> 00:40:26.534 from our pre operative team in

NOTE Confidence: 0.89826931

00:40:26.534 --> 00:40:28.809 the clinic to our anesthesia.

NOTE Confidence: 0.89826931

00:40:28.810 --> 00:40:30.502 Colleagues in nurses in the operating

NOTE Confidence: 0.89826931

00:40:30.502 --> 00:40:32.610 room as well as the surgeons as

NOTE Confidence: 0.89826931

00:40:32.610 --> 00:40:34.612 well as our nurses on the floor  
NOTE Confidence: 0.89826931

00:40:34.612 --> 00:40:36.376 after surgery is what this is.  
NOTE Confidence: 0.89826931

00:40:36.380 --> 00:40:39.089 This eras pathway and what it is is the  
NOTE Confidence: 0.89826931

00:40:39.089 --> 00:40:41.927 goal is to set your body back to its  
NOTE Confidence: 0.89826931

00:40:41.927 --> 00:40:44.190 normal status as quickly as possible.  
NOTE Confidence: 0.89826931

00:40:44.190 --> 00:40:46.090 One of the ways we do this is by letting  
NOTE Confidence: 0.89826931

00:40:46.140 --> 00:40:47.932 people drink clear liquids all the way  
NOTE Confidence: 0.89826931

00:40:47.932 --> 00:40:49.669 up almost until the time of surgery  
NOTE Confidence: 0.89826931

00:40:49.669 --> 00:40:51.315 before we said you'd have to fast  
NOTE Confidence: 0.89826931

00:40:51.315 --> 00:40:52.965 for hours and hours before surgery.  
NOTE Confidence: 0.89826931

00:40:52.970 --> 00:40:53.900 Now we know that you can.  
NOTE Confidence: 0.89826931

00:40:53.900 --> 00:40:55.444 Actually drink high carbohydrate  
NOTE Confidence: 0.89826931

00:40:55.444 --> 00:40:57.760 drinks even four hours before surgery,  
NOTE Confidence: 0.89826931

00:40:57.760 --> 00:40:59.342 which means your body has less stress  
NOTE Confidence: 0.89826931

00:40:59.342 --> 00:41:00.899 when you're in the operating room.  
NOTE Confidence: 0.89826931

00:41:00.900 --> 00:41:03.428 By having less stress in the operating room,

NOTE Confidence: 0.89826931

00:41:03.430 --> 00:41:06.182 your body is actually able to start valve

NOTE Confidence: 0.89826931

00:41:06.182 --> 00:41:08.437 function back up sooner after surgery.

NOTE Confidence: 0.89826931

00:41:08.440 --> 00:41:10.060 When we're in the operating room,

NOTE Confidence: 0.89826931

00:41:10.060 --> 00:41:12.216 we now work with our anesthesia colleagues.

NOTE Confidence: 0.89826931

00:41:12.220 --> 00:41:14.894 They work on multi modality pain control,

NOTE Confidence: 0.89826931

00:41:14.900 --> 00:41:17.620 which means we try to avoid opiate pain

NOTE Confidence: 0.89826931

00:41:17.620 --> 00:41:19.907 medication both in the operating room

NOTE Confidence: 0.89826931

00:41:19.907 --> 00:41:22.211 and afterwards by minimizing opiates the

NOTE Confidence: 0.89826931

00:41:22.275 --> 00:41:24.935 intestines wake up faster from surgery and.

NOTE Confidence: 0.89826931

00:41:24.940 --> 00:41:26.040 When they wake up faster,

NOTE Confidence: 0.89826931

00:41:26.040 --> 00:41:27.992 we get you out of the hospital faster

NOTE Confidence: 0.89826931

00:41:27.992 --> 00:41:30.117 and so our colleagues in the operating

NOTE Confidence: 0.89826931

00:41:30.117 --> 00:41:32.374 room use less opiates and they also

NOTE Confidence: 0.89826931

00:41:32.374 --> 00:41:34.398 minimize the amount of fluids and then

NOTE Confidence: 0.89826931

00:41:34.398 --> 00:41:36.615 we get to after surgery and what we like

NOTE Confidence: 0.89826931

00:41:36.615 --> 00:41:38.820 to do is we start you eating right away.  
NOTE Confidence: 0.89826931

00:41:38.820 --> 00:41:40.260 Sometimes people still come and say oh so  
NOTE Confidence: 0.89826931

00:41:40.260 --> 00:41:41.875 I'm not gonna be eating for several days.  
NOTE Confidence: 0.89826931

00:41:41.880 --> 00:41:43.994 I'm like, no, you're going to start  
NOTE Confidence: 0.89826931

00:41:43.994 --> 00:41:46.297 drinking liquids a few hours after surgery.  
NOTE Confidence: 0.89826931

00:41:46.300 --> 00:41:47.690 We'd like to stimulate the  
NOTE Confidence: 0.89826931

00:41:47.690 --> 00:41:49.080 GI tract again to function.  
NOTE Confidence: 0.89826931

00:41:49.080 --> 00:41:51.933 We like to take out excess Ivs and drains.  
NOTE Confidence: 0.89826931

00:41:51.940 --> 00:41:52.780 As soon as we can.  
NOTE Confidence: 0.89826931

00:41:52.780 --> 00:41:53.262 After surgery,  
NOTE Confidence: 0.89826931

00:41:53.262 --> 00:41:54.949 we'd like to take the Foley out.  
NOTE Confidence: 0.89826931

00:41:54.950 --> 00:41:55.452 You know,  
NOTE Confidence: 0.89826931

00:41:55.452 --> 00:41:57.209 if not the night of the day,  
NOTE Confidence: 0.89826931

00:41:57.210 --> 00:41:59.070 the morning after most surgeries that  
NOTE Confidence: 0.89826931

00:41:59.070 --> 00:42:01.350 people get on their feet more quickly,  
NOTE Confidence: 0.89826931

00:42:01.350 --> 00:42:02.974 we have nurses that are ready to

NOTE Confidence: 0.89826931

00:42:02.974 --> 00:42:04.455 help patients walk in the halls

NOTE Confidence: 0.89826931

00:42:04.455 --> 00:42:05.680 of the hospital after surgery.

NOTE Confidence: 0.89826931

00:42:05.680 --> 00:42:07.723 Even sit in a chair the night of surgery.

NOTE Confidence: 0.89826931

00:42:07.730 --> 00:42:10.966 All of these things serve to bring our

NOTE Confidence: 0.89826931

00:42:10.966 --> 00:42:13.598 body systems back to normal more quickly,

NOTE Confidence: 0.89826931

00:42:13.600 --> 00:42:14.746 and the sooner the body feels

NOTE Confidence: 0.89826931

00:42:14.746 --> 00:42:15.830 like we're back to normal,

NOTE Confidence: 0.89826931

00:42:15.830 --> 00:42:18.302 the sooner that we feel back to normal

NOTE Confidence: 0.89826931

00:42:18.302 --> 00:42:20.933 and have return of function and get back

NOTE Confidence: 0.89826931

00:42:20.933 --> 00:42:23.937 home and get back on with living our lives.

NOTE Confidence: 0.89826931

00:42:23.940 --> 00:42:25.319 So it's just a little bit about

NOTE Confidence: 0.89826931

00:42:25.319 --> 00:42:26.700 more of the mechanical side,

NOTE Confidence: 0.89826931

00:42:26.700 --> 00:42:27.848 and now I'm going to turn it

NOTE Confidence: 0.89826931

00:42:27.848 --> 00:42:28.939 over to my colleague Dr.

NOTE Confidence: 0.89826931

00:42:28.940 --> 00:42:30.613 Khanna to talk to you about some

NOTE Confidence: 0.89826931

00:42:30.613 --> 00:42:32.522 of the bigger picture sides of of  
NOTE Confidence: 0.89826931

00:42:32.522 --> 00:42:34.232 how we integrate within the system.  
NOTE Confidence: 0.6224858

00:42:36.620 --> 00:42:38.510 Just stop sharing.  
NOTE Confidence: 0.83206785

00:42:43.550 --> 00:42:43.940 Alright.  
NOTE Confidence: 0.8910730375

00:42:48.780 --> 00:42:50.316 Doctor Connor, do you wanna go  
NOTE Confidence: 0.8910730375

00:42:50.316 --> 00:42:51.869 right to your talk and then?  
NOTE Confidence: 0.691003054285714

00:42:52.680 --> 00:42:53.935 We can address any that'd  
NOTE Confidence: 0.691003054285714

00:42:53.935 --> 00:42:56.372 be greatly after that. Sure,  
NOTE Confidence: 0.691003054285714

00:42:56.372 --> 00:42:59.348 I'm gonna try to share my screen here.  
NOTE Confidence: 0.5219008

00:43:02.360 --> 00:43:04.700 Let's see if we can get this to work.  
NOTE Confidence: 0.616645

00:43:12.590 --> 00:43:13.860 Chedoke  
NOTE Confidence: 0.84009855125

00:43:26.670 --> 00:43:29.398 alright, I hope everybody can see that now.  
NOTE Confidence: 0.84009855125

00:43:29.400 --> 00:43:31.416 It'll help me know that everybody  
NOTE Confidence: 0.84009855125

00:43:31.416 --> 00:43:33.220 can see the screen there.  
NOTE Confidence: 0.84009855125

00:43:33.220 --> 00:43:37.713 You guys think great so  
NOTE Confidence: 0.84009855125

00:43:37.713 --> 00:43:39.778 my name is Amit Khanna.



NOTE Confidence: 0.84009855125

00:43:39.780 --> 00:43:41.596 I'm one of the colorectal surgeons at Yale.

NOTE Confidence: 0.84009855125

00:43:41.600 --> 00:43:44.575 I'm mainly based out of the Bridgeport,

NOTE Confidence: 0.84009855125

00:43:44.580 --> 00:43:47.212 Fairfield region and really a pleasure to

NOTE Confidence: 0.84009855125

00:43:47.212 --> 00:43:50.046 be here with everyone tonight and thanks

NOTE Confidence: 0.84009855125

00:43:50.046 --> 00:43:54.868 so much to everyone for coming online

NOTE Confidence: 0.84009855125

00:43:54.868 --> 00:43:58.956 for for a talk about colorectal cancer.

NOTE Confidence: 0.84009855125

00:43:58.960 --> 00:44:01.125 So I think Doctor Manji

NOTE Confidence: 0.84009855125

00:44:01.125 --> 00:44:03.290 did an incredible job of.

NOTE Confidence: 0.84009855125

00:44:03.290 --> 00:44:05.845 Showing some of the incredible

NOTE Confidence: 0.84009855125

00:44:05.845 --> 00:44:08.550 innovations that we have in

NOTE Confidence: 0.84009855125

00:44:08.550 --> 00:44:13.720 colorectal cancer surgery today and.

NOTE Confidence: 0.84009855125

00:44:13.720 --> 00:44:16.770 What we can do now?

NOTE Confidence: 0.84009855125

00:44:16.770 --> 00:44:19.465 Is use robots as and pointed out

NOTE Confidence: 0.84009855125

00:44:19.465 --> 00:44:22.497 and now our hands are attached to

NOTE Confidence: 0.84009855125

00:44:22.497 --> 00:44:25.707 to robots and we guide robots with

NOTE Confidence: 0.84009855125

00:44:25.707 --> 00:44:28.773 precision in a way that we really  
NOTE Confidence: 0.84009855125

00:44:28.773 --> 00:44:31.495 couldn't do years ago and I think  
NOTE Confidence: 0.84009855125

00:44:31.495 --> 00:44:34.002 Doctor Manji did a great job of  
NOTE Confidence: 0.84009855125

00:44:34.002 --> 00:44:37.978 that and so you know this is just a.  
NOTE Confidence: 0.84009855125

00:44:37.980 --> 00:44:40.724 A the tip of what we're doing in  
NOTE Confidence: 0.84009855125

00:44:40.724 --> 00:44:43.634 in terms of technology and how  
NOTE Confidence: 0.84009855125

00:44:43.634 --> 00:44:46.248 technology has really changed the  
NOTE Confidence: 0.84009855125

00:44:46.248 --> 00:44:48.644 way our patients recover and the  
NOTE Confidence: 0.84009855125

00:44:48.644 --> 00:44:50.338 outcomes that we get for our patients.  
NOTE Confidence: 0.84009855125

00:44:50.340 --> 00:44:54.168 For colorectal cancer surgery.  
NOTE Confidence: 0.84009855125

00:44:54.170 --> 00:44:56.370 And and what we see has changed and  
NOTE Confidence: 0.84009855125

00:44:56.370 --> 00:44:58.493 and and I think Doctor Munger really  
NOTE Confidence: 0.84009855125

00:44:58.493 --> 00:45:00.830 did a great job at showing you,  
NOTE Confidence: 0.84009855125

00:45:00.830 --> 00:45:01.578 you know,  
NOTE Confidence: 0.84009855125

00:45:01.578 --> 00:45:03.074 some different applications of  
NOTE Confidence: 0.84009855125

00:45:03.074 --> 00:45:05.206 technology about how we see the

NOTE Confidence: 0.84009855125

00:45:05.206 --> 00:45:07.116 disease and how we're able to

NOTE Confidence: 0.84009855125

00:45:07.116 --> 00:45:10.032 do better by seeing better using

NOTE Confidence: 0.84009855125

00:45:10.032 --> 00:45:11.490 these technological advances.

NOTE Confidence: 0.84009855125

00:45:11.490 --> 00:45:14.082 But I thought I would talk a little

NOTE Confidence: 0.84009855125

00:45:14.082 --> 00:45:16.457 bit about not only our view of

NOTE Confidence: 0.84009855125

00:45:16.457 --> 00:45:18.762 the technology and how we improve

NOTE Confidence: 0.84009855125

00:45:18.762 --> 00:45:20.490 each individual patient,

NOTE Confidence: 0.84009855125

00:45:20.490 --> 00:45:22.898 but how we improve the care of our

NOTE Confidence: 0.84009855125

00:45:22.898 --> 00:45:24.818 patients as a whole as a group.

NOTE Confidence: 0.84009855125

00:45:24.820 --> 00:45:29.975 And I think you know when I was a resident,

NOTE Confidence: 0.84009855125

00:45:29.975 --> 00:45:33.245 one of the common sayings was

NOTE Confidence: 0.84009855125

00:45:33.245 --> 00:45:34.880 from my mentors.

NOTE Confidence: 0.84009855125

00:45:34.880 --> 00:45:36.932 Was you know the surgeon is

NOTE Confidence: 0.84009855125

00:45:36.932 --> 00:45:38.750 the captain of the ship?

NOTE Confidence: 0.84009855125

00:45:38.750 --> 00:45:40.702 And you know that was sort of the

NOTE Confidence: 0.84009855125

00:45:40.702 --> 00:45:42.750 the mantra that that that you know we

NOTE Confidence: 0.84009855125

00:45:42.750 --> 00:45:44.782 were to guide that the care of the

NOTE Confidence: 0.84009855125

00:45:44.782 --> 00:45:46.870 patient and that we were the captain.

NOTE Confidence: 0.84009855125

00:45:46.870 --> 00:45:49.954 And I think Viewpoint has has

NOTE Confidence: 0.84009855125

00:45:49.954 --> 00:45:51.586 largely changed about that,

NOTE Confidence: 0.84009855125

00:45:51.590 --> 00:45:55.678 and that I think now we really

NOTE Confidence: 0.84009855125

00:45:55.678 --> 00:46:00.286 view what we do as a team effort.

NOTE Confidence: 0.84009855125

00:46:00.290 --> 00:46:03.202 And so instead of you know how

NOTE Confidence: 0.84009855125

00:46:03.202 --> 00:46:05.966 do surgeons care about care for

NOTE Confidence: 0.84009855125

00:46:05.966 --> 00:46:07.430 colorectal cancer patients.

NOTE Confidence: 0.84009855125

00:46:07.430 --> 00:46:08.876 It's largely become.

NOTE Confidence: 0.84009855125

00:46:08.876 --> 00:46:12.980 How do we care with the emphasis on we?

NOTE Confidence: 0.84009855125

00:46:12.980 --> 00:46:15.932 It's a team based approach to

NOTE Confidence: 0.84009855125

00:46:15.932 --> 00:46:17.408 colorectal cancer care,

NOTE Confidence: 0.84009855125

00:46:17.410 --> 00:46:20.250 and I think that's really to me the

NOTE Confidence: 0.84009855125

00:46:20.250 --> 00:46:22.330 greatest innovation over the last.

NOTE Confidence: 0.84009855125

00:46:22.330 --> 00:46:23.108 You know,

NOTE Confidence: 0.84009855125

00:46:23.108 --> 00:46:25.442 many years is how integrated the

NOTE Confidence: 0.84009855125

00:46:25.442 --> 00:46:28.610 delivery of our care is for cancer patients,

NOTE Confidence: 0.84009855125

00:46:28.610 --> 00:46:31.122 and it's a journey.

NOTE Confidence: 0.84009855125

00:46:31.122 --> 00:46:34.890 That has many team members impacting

NOTE Confidence: 0.84009855125

00:46:34.890 --> 00:46:37.900 the care journey along the way and

NOTE Confidence: 0.84009855125

00:46:37.900 --> 00:46:41.388 and it becomes an integrated pathway

NOTE Confidence: 0.84009855125

00:46:41.388 --> 00:46:44.196 of multiple different specialties.

NOTE Confidence: 0.84009855125

00:46:44.200 --> 00:46:46.590 And also non clinical support.

NOTE Confidence: 0.95076888

00:46:48.820 --> 00:46:49.888 And you know,

NOTE Confidence: 0.95076888

00:46:49.888 --> 00:46:52.380 I love this quote from Michael Jordan.

NOTE Confidence: 0.95076888

00:46:52.380 --> 00:46:55.458 And you know, talent wins games.

NOTE Confidence: 0.95076888

00:46:55.460 --> 00:46:57.432 But teamwork and intelligence

NOTE Confidence: 0.95076888

00:46:57.432 --> 00:46:58.418 wins championships.

NOTE Confidence: 0.95076888

00:46:58.420 --> 00:47:01.316 And that's the same idea when we talk

NOTE Confidence: 0.95076888

00:47:01.316 --> 00:47:03.410 about taking care of rectal cancer  
NOTE Confidence: 0.95076888

00:47:03.410 --> 00:47:05.780 and colon cancer and anal cancer.  
NOTE Confidence: 0.95076888

00:47:05.780 --> 00:47:07.588 Is that, you know,  
NOTE Confidence: 0.95076888

00:47:07.588 --> 00:47:09.396 individual outcomes are wonderful.  
NOTE Confidence: 0.95076888

00:47:09.400 --> 00:47:11.036 Individual talent is great.  
NOTE Confidence: 0.95076888

00:47:11.036 --> 00:47:13.081 We have incredibly talented surgeons  
NOTE Confidence: 0.95076888

00:47:13.081 --> 00:47:15.221 and oncologists and radiation  
NOTE Confidence: 0.95076888

00:47:15.221 --> 00:47:18.810 oncologists and other caregivers.  
NOTE Confidence: 0.95076888

00:47:18.810 --> 00:47:20.454 That bring incredible specialty  
NOTE Confidence: 0.95076888

00:47:20.454 --> 00:47:22.098 experience to the table,  
NOTE Confidence: 0.95076888

00:47:22.100 --> 00:47:23.745 but we do so much better when  
NOTE Confidence: 0.95076888

00:47:23.745 --> 00:47:25.046 we integrate all that care  
NOTE Confidence: 0.95076888

00:47:25.046 --> 00:47:26.396 into a team based approach.  
NOTE Confidence: 0.942718992857143

00:47:30.020 --> 00:47:33.430 And so how do we do that in real  
NOTE Confidence: 0.942718992857143

00:47:33.430 --> 00:47:35.230 time with individual patients?  
NOTE Confidence: 0.942718992857143

00:47:35.230 --> 00:47:38.386 Well, we have brought together incredible

NOTE Confidence: 0.942718992857143  
00:47:38.386 --> 00:47:40.999 talent in terms of our specialists  
NOTE Confidence: 0.942718992857143  
00:47:41.000 --> 00:47:43.779 and we work to coordinate that care.  
NOTE Confidence: 0.942718992857143  
00:47:43.780 --> 00:47:45.880 We use digital platforms so that we  
NOTE Confidence: 0.942718992857143  
00:47:45.880 --> 00:47:47.685 can not only communicate between  
NOTE Confidence: 0.942718992857143  
00:47:47.685 --> 00:47:49.780 providers but also with patients  
NOTE Confidence: 0.942718992857143  
00:47:49.780 --> 00:47:52.321 so that access is an incredibly  
NOTE Confidence: 0.942718992857143  
00:47:52.321 --> 00:47:54.490 important thing that our patients have.  
NOTE Confidence: 0.942718992857143  
00:47:54.490 --> 00:47:57.058 And they're not leaving a message.  
NOTE Confidence: 0.942718992857143  
00:47:57.060 --> 00:47:59.652 And not getting calls back on all those  
NOTE Confidence: 0.942718992857143  
00:47:59.652 --> 00:48:02.357 calls are documented and we have support  
NOTE Confidence: 0.942718992857143  
00:48:02.357 --> 00:48:04.876 education that we can provide those  
NOTE Confidence: 0.942718992857143  
00:48:04.876 --> 00:48:06.702 patients using Internet platforms,  
NOTE Confidence: 0.942718992857143  
00:48:06.702 --> 00:48:09.880 whether that's through the EMR like EPIC,  
NOTE Confidence: 0.942718992857143  
00:48:09.880 --> 00:48:11.560 which we use here at Yale,  
NOTE Confidence: 0.942718992857143  
00:48:11.560 --> 00:48:14.824 but also other platforms we've employed  
NOTE Confidence: 0.942718992857143

00:48:14.824 --> 00:48:19.324 a lot of advanced clinical support staff

NOTE Confidence: 0.942718992857143

00:48:19.324 --> 00:48:23.024 and that includes physician assistants,

NOTE Confidence: 0.942718992857143

00:48:23.030 --> 00:48:25.478 highly specialized nurse practitioners

NOTE Confidence: 0.942718992857143

00:48:25.478 --> 00:48:27.926 and other support staff.

NOTE Confidence: 0.942718992857143

00:48:27.930 --> 00:48:29.808 That really provide a ton of

NOTE Confidence: 0.942718992857143

00:48:29.808 --> 00:48:31.873 clinical support to our patients as

NOTE Confidence: 0.942718992857143

00:48:31.873 --> 00:48:33.738 they're growing through a really

NOTE Confidence: 0.942718992857143

00:48:33.738 --> 00:48:35.650 difficult time in their lives.

NOTE Confidence: 0.942718992857143

00:48:35.650 --> 00:48:37.570 We also then focus on,

NOTE Confidence: 0.942718992857143

00:48:37.570 --> 00:48:38.110 you know,

NOTE Confidence: 0.942718992857143

00:48:38.110 --> 00:48:40.270 trying to bring all the care to be

NOTE Confidence: 0.942718992857143

00:48:40.339 --> 00:48:42.554 centered around patients rather than

NOTE Confidence: 0.942718992857143

00:48:42.554 --> 00:48:44.769 patients running to different sites

NOTE Confidence: 0.942718992857143

00:48:44.832 --> 00:48:46.740 for tests and labs and imaging.

NOTE Confidence: 0.942718992857143

00:48:46.740 --> 00:48:48.724 We try to bring all of that to

NOTE Confidence: 0.942718992857143

00:48:48.724 --> 00:48:50.288 the patient at a single site,



NOTE Confidence: 0.942718992857143

00:48:50.290 --> 00:48:52.555 and that includes genetic counseling

NOTE Confidence: 0.942718992857143

00:48:52.555 --> 00:48:54.367 that includes support groups

NOTE Confidence: 0.942718992857143

00:48:54.367 --> 00:48:56.857 that also includes an incredible

NOTE Confidence: 0.942718992857143

00:48:56.857 --> 00:48:59.480 integrated patient centered.

NOTE Confidence: 0.942718992857143

00:48:59.480 --> 00:49:02.600 Support system that includes massage therapy,

NOTE Confidence: 0.942718992857143

00:49:02.600 --> 00:49:04.223 Tai chi, acupuncture,

NOTE Confidence: 0.942718992857143

00:49:04.223 --> 00:49:07.469 all centered at the Trumbull location

NOTE Confidence: 0.942718992857143

00:49:07.470 --> 00:49:09.430 and I think you know all of those

NOTE Confidence: 0.942718992857143

00:49:09.430 --> 00:49:10.792 things together in including the

NOTE Confidence: 0.942718992857143

00:49:10.792 --> 00:49:12.418 meditation garden that we have in

NOTE Confidence: 0.942718992857143

00:49:12.418 --> 00:49:14.070 the center of our trouble location

NOTE Confidence: 0.942718992857143

00:49:14.070 --> 00:49:15.400 which I have to admit.

NOTE Confidence: 0.942718992857143

00:49:15.400 --> 00:49:17.376 I've I've sat in front of that I'll

NOTE Confidence: 0.942718992857143

00:49:17.376 --> 00:49:19.139 waterfall a couple times on a couple

NOTE Confidence: 0.942718992857143

00:49:19.139 --> 00:49:22.042 hard days so I can tell you I've found

NOTE Confidence: 0.942718992857143

00:49:22.042 --> 00:49:25.170 peace there and I I know that many  
NOTE Confidence: 0.942718992857143

00:49:25.170 --> 00:49:28.548 of our patients really enjoy that part of.  
NOTE Confidence: 0.942718992857143

00:49:28.550 --> 00:49:31.618 Of their care journey that that it's a.  
NOTE Confidence: 0.942718992857143

00:49:31.618 --> 00:49:33.628 It's a place of support  
NOTE Confidence: 0.942718992857143

00:49:33.630 --> 00:49:34.670 and then we talk about.  
NOTE Confidence: 0.942718992857143

00:49:34.670 --> 00:49:34.973 Well,  
NOTE Confidence: 0.942718992857143

00:49:34.973 --> 00:49:37.094 how do we improve quality and how  
NOTE Confidence: 0.942718992857143

00:49:37.094 --> 00:49:39.328 do we drive improvements in the  
NOTE Confidence: 0.942718992857143

00:49:39.328 --> 00:49:41.668 delivery of what we're doing and  
NOTE Confidence: 0.942718992857143

00:49:41.741 --> 00:49:43.997 and I can tell you that it happens  
NOTE Confidence: 0.942718992857143

00:49:43.997 --> 00:49:46.540 both at the hospital level and it  
NOTE Confidence: 0.942718992857143

00:49:46.540 --> 00:49:49.130 also happens as an entire system.  
NOTE Confidence: 0.942718992857143

00:49:49.130 --> 00:49:50.330 So when we talk about,  
NOTE Confidence: 0.942718992857143

00:49:50.330 --> 00:49:50.728 say,  
NOTE Confidence: 0.942718992857143

00:49:50.728 --> 00:49:52.718 Bridgeport hospital in New Haven  
NOTE Confidence: 0.942718992857143

00:49:52.718 --> 00:49:54.310 Hospital or Greenwich Hospital,

NOTE Confidence: 0.942718992857143  
00:49:54.310 --> 00:49:57.282 we're looking at the data to see  
NOTE Confidence: 0.942718992857143  
00:49:57.282 --> 00:49:58.560 how we're doing.  
NOTE Confidence: 0.942718992857143  
00:49:58.560 --> 00:50:01.052 And we're taking that data and then  
NOTE Confidence: 0.942718992857143  
00:50:01.052 --> 00:50:03.043 comparing that to the standards  
NOTE Confidence: 0.942718992857143  
00:50:03.043 --> 00:50:05.158 that are being set nationally,  
NOTE Confidence: 0.942718992857143  
00:50:05.160 --> 00:50:09.314 and also that our internal standards to  
NOTE Confidence: 0.942718992857143  
00:50:09.314 --> 00:50:12.972 try to achieve as a health system to  
NOTE Confidence: 0.942718992857143  
00:50:12.972 --> 00:50:17.660 truly be world class, which is our goal.  
NOTE Confidence: 0.942718992857143  
00:50:17.660 --> 00:50:19.592 We have lots of groups where  
NOTE Confidence: 0.942718992857143  
00:50:19.592 --> 00:50:20.558 we work together.  
NOTE Confidence: 0.942718992857143  
00:50:20.560 --> 00:50:21.196 We actually,  
NOTE Confidence: 0.942718992857143  
00:50:21.196 --> 00:50:23.104 you know colon and rectal surgeons,  
NOTE Confidence: 0.942718992857143  
00:50:23.110 --> 00:50:25.259 oral surgeons who do colon and rectal  
NOTE Confidence: 0.942718992857143  
00:50:25.259 --> 00:50:27.231 surgery come together and we kind of  
NOTE Confidence: 0.942718992857143  
00:50:27.231 --> 00:50:28.725 talk about our best practices and  
NOTE Confidence: 0.942718992857143

00:50:28.786 --> 00:50:30.658 how we can improve and we coach each

NOTE Confidence: 0.942718992857143

00:50:30.658 --> 00:50:32.994 other in a very collegial manner.

NOTE Confidence: 0.942718992857143

00:50:32.994 --> 00:50:34.858 We use tumor boards.

NOTE Confidence: 0.942718992857143

00:50:34.860 --> 00:50:36.660 We focus on building standardized

NOTE Confidence: 0.942718992857143

00:50:36.660 --> 00:50:39.201 systems that will apply to all of

NOTE Confidence: 0.942718992857143

00:50:39.201 --> 00:50:40.881 our hospitals in every patient

NOTE Confidence: 0.942718992857143

00:50:40.881 --> 00:50:42.620 that comes through our system.

NOTE Confidence: 0.93855963

00:50:42.620 --> 00:50:44.052 To maximize their outcomes,

NOTE Confidence: 0.93855963

00:50:44.052 --> 00:50:45.842 we also use different innovative

NOTE Confidence: 0.93855963

00:50:45.842 --> 00:50:47.563 approaches that are being done at

NOTE Confidence: 0.93855963

00:50:47.563 --> 00:50:49.280 different parts of our health system.

NOTE Confidence: 0.93855963

00:50:49.280 --> 00:50:50.484 And then we integrate.

NOTE Confidence: 0.93855963

00:50:50.484 --> 00:50:51.989 Get into the practice at

NOTE Confidence: 0.93855963

00:50:51.989 --> 00:50:53.340 various delivery networks,

NOTE Confidence: 0.93855963

00:50:53.340 --> 00:50:54.828 whether that's in the Bridgeport region,

NOTE Confidence: 0.93855963

00:50:54.830 --> 00:50:56.000 the Fairfield Region,

NOTE Confidence: 0.93855963

00:50:56.000 --> 00:50:57.695 New Haven, or other markets,

NOTE Confidence: 0.93855963

00:50:57.695 --> 00:50:59.830 and I think the other thing that's

NOTE Confidence: 0.93855963

00:50:59.892 --> 00:51:01.797 really wonderful about having a

NOTE Confidence: 0.93855963

00:51:01.797 --> 00:51:03.702 team based approach to colorectal

NOTE Confidence: 0.93855963

00:51:03.767 --> 00:51:05.879 cancer is that we can approach

NOTE Confidence: 0.93855963

00:51:05.879 --> 00:51:07.287 challenging low volume cases,

NOTE Confidence: 0.93855963

00:51:07.290 --> 00:51:09.310 so that's recurrent colon cancer.

NOTE Confidence: 0.93855963

00:51:09.310 --> 00:51:12.280 Recurrent rectal cancer.

NOTE Confidence: 0.93855963

00:51:12.280 --> 00:51:13.872 Specialized recurrent anal cancer,

NOTE Confidence: 0.93855963

00:51:13.872 --> 00:51:16.260 so we're able to manage very

NOTE Confidence: 0.93855963

00:51:16.323 --> 00:51:17.687 complex situations because we

NOTE Confidence: 0.93855963

00:51:17.687 --> 00:51:20.649 just have a big team and a lot of

NOTE Confidence: 0.93855963

00:51:20.649 --> 00:51:22.353 infrastructure and a lot of depth

NOTE Confidence: 0.93855963

00:51:22.353 --> 00:51:24.380 to the talent and the types of

NOTE Confidence: 0.93855963

00:51:24.380 --> 00:51:26.338 technology that we have here at Yale.

NOTE Confidence: 0.93855963

00:51:26.340 --> 00:51:28.440 We're very lucky that we can serve  
NOTE Confidence: 0.93855963

00:51:28.440 --> 00:51:30.370 that population of patients and then  
NOTE Confidence: 0.93855963

00:51:30.370 --> 00:51:32.410 the last thing I would say is that.  
NOTE Confidence: 0.93855963

00:51:32.410 --> 00:51:33.518 You know,  
NOTE Confidence: 0.93855963

00:51:33.518 --> 00:51:36.924 we've tried to build programs out into  
NOTE Confidence: 0.93855963

00:51:36.924 --> 00:51:39.143 the communities of where our patients live,  
NOTE Confidence: 0.93855963

00:51:39.150 --> 00:51:40.990 and so that we're more  
NOTE Confidence: 0.93855963

00:51:40.990 --> 00:51:42.462 accessible to our patients,  
NOTE Confidence: 0.93855963

00:51:42.470 --> 00:51:46.300 and certainly patients that travel.  
NOTE Confidence: 0.93855963

00:51:46.300 --> 00:51:47.528 During their cancer care,  
NOTE Confidence: 0.93855963

00:51:47.528 --> 00:51:48.756 it's a major barrier,  
NOTE Confidence: 0.93855963

00:51:48.760 --> 00:51:51.136 and so we want to lower those barriers  
NOTE Confidence: 0.93855963

00:51:51.136 --> 00:51:53.568 to as low as possible so that we  
NOTE Confidence: 0.93855963

00:51:53.568 --> 00:51:55.471 can make directed appointments and  
NOTE Confidence: 0.93855963

00:51:55.471 --> 00:51:58.093 where patients live and in their  
NOTE Confidence: 0.93855963

00:51:58.093 --> 00:52:00.023 communities and also bring specialists

NOTE Confidence: 0.93855963

00:52:00.023 --> 00:52:02.412 all around the patient so that we

NOTE Confidence: 0.93855963

00:52:02.412 --> 00:52:03.884 can deliver multidisciplinary care,

NOTE Confidence: 0.93855963

00:52:03.884 --> 00:52:05.596 not just your surgeon,

NOTE Confidence: 0.93855963

00:52:05.600 --> 00:52:06.932 but your oncologist,

NOTE Confidence: 0.93855963

00:52:06.932 --> 00:52:07.820 your radiologist,

NOTE Confidence: 0.93855963

00:52:07.820 --> 00:52:08.562 your pathologist,

NOTE Confidence: 0.93855963

00:52:08.562 --> 00:52:10.788 all coming to you around the

NOTE Confidence: 0.93855963

00:52:10.788 --> 00:52:12.931 same center and you're going to

NOTE Confidence: 0.93855963

00:52:12.931 --> 00:52:14.596 meet Doctor Prisco and Doctor

NOTE Confidence: 0.93855963

00:52:14.596 --> 00:52:16.847 Do who I work very closely with.

NOTE Confidence: 0.93855963

00:52:16.850 --> 00:52:19.178 And then obviously I'm keeping in

NOTE Confidence: 0.93855963

00:52:19.178 --> 00:52:20.730 communication with our patients

NOTE Confidence: 0.93855963

00:52:20.795 --> 00:52:22.049 primary care doctors,

NOTE Confidence: 0.93855963

00:52:22.050 --> 00:52:22.930 their gastroenterologists,

NOTE Confidence: 0.93855963

00:52:22.930 --> 00:52:25.570 and making sure that they are

NOTE Confidence: 0.93855963

00:52:25.570 --> 00:52:27.849 looped in on what we're doing.  
NOTE Confidence: 0.93855963

00:52:27.850 --> 00:52:29.101 And most importantly,  
NOTE Confidence: 0.93855963

00:52:29.101 --> 00:52:31.603 I think that the biggest innovation,  
NOTE Confidence: 0.93855963

00:52:31.610 --> 00:52:32.278 I think,  
NOTE Confidence: 0.93855963

00:52:32.278 --> 00:52:34.282 has been our ability to come  
NOTE Confidence: 0.93855963

00:52:34.282 --> 00:52:36.895 together as a team of providers to  
NOTE Confidence: 0.93855963

00:52:36.895 --> 00:52:38.770 be centered around our patients.  
NOTE Confidence: 0.93855963

00:52:38.770 --> 00:52:40.755 Whether it's our rectal cancer  
NOTE Confidence: 0.93855963

00:52:40.755 --> 00:52:41.549 multidisciplinary program,  
NOTE Confidence: 0.93855963

00:52:41.550 --> 00:52:42.654 which you'll hear about,  
NOTE Confidence: 0.93855963

00:52:42.654 --> 00:52:44.945 which is one of the only ones in  
NOTE Confidence: 0.93855963

00:52:44.945 --> 00:52:46.673 the Yale New Haven Health system.  
NOTE Confidence: 0.93855963

00:52:46.680 --> 00:52:49.506 And we're extremely excited to be  
NOTE Confidence: 0.93855963

00:52:49.506 --> 00:52:52.136 able to offer these types of services  
NOTE Confidence: 0.93855963

00:52:52.136 --> 00:52:53.960 to our patients in the Community.  
NOTE Confidence: 0.93855963

00:52:53.960 --> 00:52:57.528 And that's really all I have to say.



NOTE Confidence: 0.93855963

00:52:57.530 --> 00:52:59.066 And thank you again for the

NOTE Confidence: 0.93855963

00:52:59.066 --> 00:53:00.677 opportunity to be here tonight and

NOTE Confidence: 0.93855963

00:53:00.677 --> 00:53:02.539 I'm just very privileged to be around

NOTE Confidence: 0.93855963

00:53:02.539 --> 00:53:04.347 so many great providers tonight.

NOTE Confidence: 0.93855963

00:53:04.350 --> 00:53:05.280 So thank you so much.

NOTE Confidence: 0.820490382

00:53:08.530 --> 00:53:11.242 Thank you Amit. Thank you and

NOTE Confidence: 0.820490382

00:53:11.242 --> 00:53:14.840 those were both fantastic talks.

NOTE Confidence: 0.820490382

00:53:14.840 --> 00:53:16.896 I just want to encourage if anyone in

NOTE Confidence: 0.820490382

00:53:16.896 --> 00:53:18.485 the audience has any questions that

NOTE Confidence: 0.820490382

00:53:18.485 --> 00:53:20.584 they wanted to direct to or do any

NOTE Confidence: 0.820490382

00:53:20.584 --> 00:53:22.341 of the panelists just do it either

NOTE Confidence: 0.820490382

00:53:22.341 --> 00:53:26.670 through the chat or through the the  
Q&A.

NOTE Confidence: 0.820490382

00:53:26.670 --> 00:53:29.008 I thought I would just take 2

NOTE Confidence: 0.820490382

00:53:29.008 --> 00:53:31.016 minutes just to ask a question.

NOTE Confidence: 0.820490382

00:53:31.016 --> 00:53:34.002 One of the most feared outcomes of

NOTE Confidence: 0.820490382

00:53:34.002 --> 00:53:36.658 surgery for colon or rectal cancer

NOTE Confidence: 0.820490382

00:53:36.658 --> 00:53:39.901 is the need for an ostomy and I was.

NOTE Confidence: 0.820490382

00:53:39.901 --> 00:53:42.202 I was hoping you could answer one how

NOTE Confidence: 0.820490382

00:53:42.202 --> 00:53:44.274 you make that decision of who needs

NOTE Confidence: 0.820490382

00:53:44.274 --> 00:53:46.786 one and then as importantly what is

NOTE Confidence: 0.820490382

00:53:46.786 --> 00:53:49.334 what's the support that's given to a

NOTE Confidence: 0.820490382

00:53:49.334 --> 00:53:51.386 patient who needs an ostomy during

NOTE Confidence: 0.820490382

00:53:51.386 --> 00:53:53.258 either before surgery after surgery

NOTE Confidence: 0.820490382

00:53:53.258 --> 00:53:55.876 to help reduce some of that anxiety.

NOTE Confidence: 0.86277336875

00:53:59.010 --> 00:54:00.666 I can speak a little bit to that,

NOTE Confidence: 0.86277336875

00:54:00.670 --> 00:54:03.211 and certainly discussion of a stoma really

NOTE Confidence: 0.86277336875

00:54:03.211 --> 00:54:06.328 is one of those points of high stress.

NOTE Confidence: 0.86277336875

00:54:06.330 --> 00:54:08.872 So at one of the things that we do

NOTE Confidence: 0.86277336875

00:54:08.872 --> 00:54:10.596 have or what we call wound ostomy

NOTE Confidence: 0.86277336875

00:54:10.596 --> 00:54:12.880 care nurses and was one of the really

NOTE Confidence: 0.86277336875

00:54:12.880 --> 00:54:14.644 good strengths of our entire system,  
NOTE Confidence: 0.86277336875

00:54:14.650 --> 00:54:16.490 we have pre operative coaching,  
NOTE Confidence: 0.86277336875

00:54:16.490 --> 00:54:18.038 marking counseling and attrition  
NOTE Confidence: 0.86277336875

00:54:18.038 --> 00:54:19.973 available actually through our office  
NOTE Confidence: 0.86277336875

00:54:19.973 --> 00:54:22.188 and our outpatient office at Dana too.  
NOTE Confidence: 0.86277336875

00:54:22.190 --> 00:54:24.350 And I know that there's a whole set of at  
NOTE Confidence: 0.86277336875

00:54:24.405 --> 00:54:26.090 Bridgeport again and throughout actually  
NOTE Confidence: 0.86277336875

00:54:26.090 --> 00:54:28.544 the Yale system all the hospitals have  
NOTE Confidence: 0.86277336875

00:54:28.544 --> 00:54:30.680 in and outpatient wound ostomy support.  
NOTE Confidence: 0.86277336875

00:54:30.680 --> 00:54:32.120 So they do a lot of the teaching,  
NOTE Confidence: 0.86277336875

00:54:32.120 --> 00:54:34.185 and so there's support in the hospital  
NOTE Confidence: 0.86277336875

00:54:34.185 --> 00:54:36.100 before the hospital after the hospital.  
NOTE Confidence: 0.86277336875

00:54:36.100 --> 00:54:37.535 And if we have a stoma and  
NOTE Confidence: 0.86277336875

00:54:37.535 --> 00:54:38.909 a new stove on a patient,  
NOTE Confidence: 0.86277336875

00:54:38.910 --> 00:54:40.878 we send patients home with a visiting nurse.  
NOTE Confidence: 0.86277336875

00:54:40.880 --> 00:54:43.580 So from a physical support side,

NOTE Confidence: 0.86277336875

00:54:43.580 --> 00:54:46.148 we have nursing staff and education

NOTE Confidence: 0.86277336875

00:54:46.148 --> 00:54:48.579 pre and post operatively in place.

NOTE Confidence: 0.86277336875

00:54:48.580 --> 00:54:50.380 But the real question is who

NOTE Confidence: 0.86277336875

00:54:50.380 --> 00:54:52.779 needs a stone or who gets a stoma?

NOTE Confidence: 0.86277336875

00:54:52.780 --> 00:54:54.676 And maybe more importantly,

NOTE Confidence: 0.86277336875

00:54:54.676 --> 00:54:58.510 is that stoma going to be permanent?

NOTE Confidence: 0.86277336875

00:54:58.510 --> 00:55:00.266 In this day and age, really,

NOTE Confidence: 0.86277336875

00:55:00.266 --> 00:55:02.346 there's very few cancers that

NOTE Confidence: 0.86277336875

00:55:02.346 --> 00:55:04.889 we make a permanent stoma form.

NOTE Confidence: 0.86277336875

00:55:04.890 --> 00:55:06.110 Those are sometimes rectal cancers

NOTE Confidence: 0.86277336875

00:55:06.110 --> 00:55:08.089 that are so low that they're invading

NOTE Confidence: 0.86277336875

00:55:08.090 --> 00:55:10.628 the sphincter complex,

NOTE Confidence: 0.86277336875

00:55:10.630 --> 00:55:11.114 and so,

NOTE Confidence: 0.86277336875

00:55:11.114 --> 00:55:12.808 in which case we can't actually spare

NOTE Confidence: 0.86277336875

00:55:12.808 --> 00:55:14.794 it in the stoma that we would create

NOTE Confidence: 0.86277336875

00:55:14.794 --> 00:55:16.678 would be would actually be permanent.  
NOTE Confidence: 0.86277336875

00:55:16.680 --> 00:55:17.814 That's one of the few situations  
NOTE Confidence: 0.86277336875

00:55:17.814 --> 00:55:19.118 where I can tell you up front.  
NOTE Confidence: 0.86277336875

00:55:19.120 --> 00:55:20.700 We do use a permanent stoma.  
NOTE Confidence: 0.86277336875

00:55:20.700 --> 00:55:23.500 Most of the other surgeries we do  
NOTE Confidence: 0.86277336875

00:55:23.500 --> 00:55:26.269 sometimes will require a temporary stoma,  
NOTE Confidence: 0.86277336875

00:55:26.270 --> 00:55:28.230 and that's oftentimes in rectal  
NOTE Confidence: 0.86277336875

00:55:28.230 --> 00:55:29.014 cancer surgery.  
NOTE Confidence: 0.86277336875

00:55:29.020 --> 00:55:31.612 When we're operating what we call a low  
NOTE Confidence: 0.86277336875

00:55:31.612 --> 00:55:33.600 anterior resection or lower in the pelvis,  
NOTE Confidence: 0.86277336875

00:55:33.600 --> 00:55:36.168 and in that case if someone has received  
NOTE Confidence: 0.86277336875

00:55:36.168 --> 00:55:37.599 upfront chemotherapy and radiation,  
NOTE Confidence: 0.86277336875

00:55:37.600 --> 00:55:39.224 the risk of that basically for lack  
NOTE Confidence: 0.86277336875

00:55:39.224 --> 00:55:40.774 of a better word, the plumbing.  
NOTE Confidence: 0.86277336875

00:55:40.774 --> 00:55:42.436 We put the two ends together.  
NOTE Confidence: 0.86277336875

00:55:42.440 --> 00:55:44.176 The risk of that not healing perfectly

NOTE Confidence: 0.86277336875

00:55:44.176 --> 00:55:46.146 in the face of radiation and chemotherapy

NOTE Confidence: 0.86277336875

00:55:46.146 --> 00:55:48.600 before surgery is is a little higher there,

NOTE Confidence: 0.86277336875

00:55:48.600 --> 00:55:50.952 and so oftentimes we do give patients

NOTE Confidence: 0.86277336875

00:55:50.952 --> 00:55:51.960 a temporary stoma.

NOTE Confidence: 0.86277336875

00:55:51.960 --> 00:55:53.400 And and in my practice,

NOTE Confidence: 0.86277336875

00:55:53.400 --> 00:55:55.020 temporary means four to six weeks,

NOTE Confidence: 0.86277336875

00:55:55.020 --> 00:55:56.959 usually three to four weeks after surgery.

NOTE Confidence: 0.86277336875

00:55:56.960 --> 00:55:58.647 We do a radiology study to make

NOTE Confidence: 0.86277336875

00:55:58.647 --> 00:55:59.370 sure that the.

NOTE Confidence: 0.86277336875

00:55:59.370 --> 00:56:00.370 That hookup is watertight,

NOTE Confidence: 0.86277336875

00:56:00.370 --> 00:56:02.688 at which point in time we close the stoma.

NOTE Confidence: 0.86277336875

00:56:02.690 --> 00:56:03.608 Shortly thereafter,

NOTE Confidence: 0.86277336875

00:56:03.608 --> 00:56:06.362 sometimes an emergency surgeries or in

NOTE Confidence: 0.86277336875

00:56:06.362 --> 00:56:08.948 very frail patients who are having,

NOTE Confidence: 0.86277336875

00:56:08.950 --> 00:56:09.256 you know,

NOTE Confidence: 0.86277336875

00:56:09.256 --> 00:56:11.095 have come in with an emergency  
NOTE Confidence: 0.86277336875

00:56:11.095 --> 00:56:12.443 perforation from their cancer.  
NOTE Confidence: 0.86277336875

00:56:12.450 --> 00:56:14.100 Those are cases where we might  
NOTE Confidence: 0.86277336875

00:56:14.100 --> 00:56:15.930 sometimes have to also give a stoma,  
NOTE Confidence: 0.86277336875

00:56:15.930 --> 00:56:18.345 even though it's not a rectal cancer,  
NOTE Confidence: 0.86277336875

00:56:18.350 --> 00:56:20.132 but those usually with time and  
NOTE Confidence: 0.86277336875

00:56:20.132 --> 00:56:21.990 recovery and treatment can can recover,  
NOTE Confidence: 0.86277336875

00:56:21.990 --> 00:56:24.580 and we can usually close those domains  
NOTE Confidence: 0.86277336875

00:56:24.580 --> 00:56:27.196 down the line at the appropriate time.  
NOTE Confidence: 0.86277336875

00:56:27.200 --> 00:56:27.650 Amit  
NOTE Confidence: 0.955365892666666

00:56:29.520 --> 00:56:31.464 well I think he I don't know how  
NOTE Confidence: 0.955365892666666

00:56:31.464 --> 00:56:33.550 much I can add to to that, you know,  
NOTE Confidence: 0.955365892666666

00:56:33.550 --> 00:56:34.775 I think Doctor Martin did a great  
NOTE Confidence: 0.955365892666666

00:56:34.775 --> 00:56:35.930 job of of talking about that.  
NOTE Confidence: 0.955365892666666

00:56:35.930 --> 00:56:38.121 I guess the only thing I would  
NOTE Confidence: 0.955365892666666

00:56:38.121 --> 00:56:40.243 say in support of of doctor

NOTE Confidence: 0.955365892666666

00:56:40.243 --> 00:56:42.330 Manju's comments is that you know,

NOTE Confidence: 0.955365892666666

00:56:42.330 --> 00:56:44.770 I think the way we view taking care

NOTE Confidence: 0.955365892666666

00:56:44.841 --> 00:56:46.601 of our colorectal cancer patients

NOTE Confidence: 0.955365892666666

00:56:46.601 --> 00:56:49.320 is a journey and a relationship,

NOTE Confidence: 0.955365892666666

00:56:49.320 --> 00:56:50.496 not a transaction.

NOTE Confidence: 0.955365892666666

00:56:50.496 --> 00:56:53.240 And I think that's critical so that

NOTE Confidence: 0.955365892666666

00:56:53.317 --> 00:56:55.405 we've built into the process of

NOTE Confidence: 0.955365892666666

00:56:55.405 --> 00:56:58.038 how we take care of our patients.

NOTE Confidence: 0.955365892666666

00:56:58.040 --> 00:57:00.638 That ostomy support is baked in.

NOTE Confidence: 0.955365892666666

00:57:00.640 --> 00:57:02.824 So for example, in a practical way,

NOTE Confidence: 0.955365892666666

00:57:02.830 --> 00:57:03.798 what does that mean?

NOTE Confidence: 0.955365892666666

00:57:03.798 --> 00:57:05.372 Well, if the patient comes to us

NOTE Confidence: 0.955365892666666

00:57:05.372 --> 00:57:07.248 with a very very low rectal cancer,

NOTE Confidence: 0.955365892666666

00:57:07.250 --> 00:57:09.296 which means the rectal cancer is

NOTE Confidence: 0.955365892666666

00:57:09.296 --> 00:57:11.296 invading the muscles right at the

NOTE Confidence: 0.955365892666666



00:57:11.296 --> 00:57:13.030 bottom right near the anal canal,  
NOTE Confidence: 0.955365892666666  
00:57:13.030 --> 00:57:15.032 and we know we have to make  
NOTE Confidence: 0.955365892666666  
00:57:15.032 --> 00:57:16.870 an ostomy for that patient.  
NOTE Confidence: 0.955365892666666  
00:57:16.870 --> 00:57:18.994 We're going to do a lot of things for  
NOTE Confidence: 0.955365892666666  
00:57:18.994 --> 00:57:21.218 that patient that are not just involved  
NOTE Confidence: 0.955365892666666  
00:57:21.218 --> 00:57:23.290 with doing the surgery to remove it,  
NOTE Confidence: 0.955365892666666  
00:57:23.290 --> 00:57:25.504 but rather teaching that patient when  
NOTE Confidence: 0.955365892666666  
00:57:25.504 --> 00:57:28.470 they come in before they have the surgery,  
NOTE Confidence: 0.955365892666666  
00:57:28.470 --> 00:57:30.834 helping them work with.  
NOTE Confidence: 0.955365892666666  
00:57:30.834 --> 00:57:32.762 Other patients and connecting  
NOTE Confidence: 0.955365892666666  
00:57:32.762 --> 00:57:34.988 them to other patients who've gone  
NOTE Confidence: 0.955365892666666  
00:57:34.988 --> 00:57:36.437 through similar situations to  
NOTE Confidence: 0.955365892666666  
00:57:36.437 --> 00:57:38.387 counsel them on how they're going  
NOTE Confidence: 0.955365892666666  
00:57:38.387 --> 00:57:40.490 to adjust and then support them  
NOTE Confidence: 0.955365892666666  
00:57:40.490 --> 00:57:42.230 post operatively with hooking them  
NOTE Confidence: 0.955365892666666  
00:57:42.230 --> 00:57:44.140 into various ostomy support teams.

NOTE Confidence: 0.955365892666666  
00:57:44.140 --> 00:57:46.480 And we have some of the  
NOTE Confidence: 0.955365892666666  
00:57:46.555 --> 00:57:48.326 best ostomy nurses you know.  
NOTE Confidence: 0.955365892666666  
00:57:48.326 --> 00:57:49.664 I don't know if there's an  
NOTE Confidence: 0.955365892666666  
00:57:49.664 --> 00:57:50.599 ostomy competition for ostomy,  
NOTE Confidence: 0.955365892666666  
00:57:50.600 --> 00:57:51.100 pre-op, education,  
NOTE Confidence: 0.955365892666666  
00:57:51.100 --> 00:57:51.600 and nursing,  
NOTE Confidence: 0.955365892666666  
00:57:51.600 --> 00:57:53.867 but I know we'd win or we would be  
NOTE Confidence: 0.955365892666666  
00:57:53.867 --> 00:57:55.067 super competitive 'cause we have  
NOTE Confidence: 0.955365892666666  
00:57:55.067 --> 00:57:56.709 just an incredible team and we're  
NOTE Confidence: 0.955365892666666  
00:57:56.709 --> 00:57:58.371 very lucky lucky that our patients  
NOTE Confidence: 0.955365892666666  
00:57:58.380 --> 00:58:00.466 have access to them and then also.  
NOTE Confidence: 0.955365892666666  
00:58:00.470 --> 00:58:01.830 Every patient that comes to  
NOTE Confidence: 0.955365892666666  
00:58:01.830 --> 00:58:02.646 us post-op really,  
NOTE Confidence: 0.955365892666666  
00:58:02.650 --> 00:58:04.190 whether they have a temporary  
NOTE Confidence: 0.955365892666666  
00:58:04.190 --> 00:58:05.730 ostomy or a permanent one,  
NOTE Confidence: 0.955365892666666

00:58:05.730 --> 00:58:07.346 they're gonna get refitted.  
NOTE Confidence: 0.955365892666666  
00:58:07.346 --> 00:58:09.770 So as my body no longer  
NOTE Confidence: 0.955365892666666  
00:58:09.850 --> 00:58:11.910 fits into my wedding suit,  
NOTE Confidence: 0.955365892666666  
00:58:11.910 --> 00:58:14.710 you know folks who have their ostomies,  
NOTE Confidence: 0.955365892666666  
00:58:14.710 --> 00:58:16.146 their ostomy changes overtime,  
NOTE Confidence: 0.955365892666666  
00:58:16.146 --> 00:58:18.790 and so we have to provide that  
NOTE Confidence: 0.955365892666666  
00:58:18.790 --> 00:58:20.875 support for our patients lifelong.  
NOTE Confidence: 0.950343237142857  
00:58:23.220 --> 00:58:26.538 Thank you alright. Let's in that vein,  
NOTE Confidence: 0.950343237142857  
00:58:26.540 --> 00:58:29.672 I think this is a good time to bring  
NOTE Confidence: 0.950343237142857  
00:58:29.672 --> 00:58:32.718 in a discussion about radiation and  
NOTE Confidence: 0.950343237142857  
00:58:32.718 --> 00:58:35.772 so Doctor Kevin do is hear from  
NOTE Confidence: 0.950343237142857  
00:58:35.772 --> 00:58:37.030 radiation oncology. Thank you.  
NOTE Confidence: 0.526147853333333  
00:58:40.270 --> 00:58:44.260 Yes. Myself hello.  
NOTE Confidence: 0.526147853333333  
00:58:44.260 --> 00:58:46.638 Great can folks give me a thumbs up.  
NOTE Confidence: 0.526147853333333  
00:58:46.640 --> 00:58:49.799 They can see my screen perfect so  
NOTE Confidence: 0.526147853333333  
00:58:49.799 --> 00:58:52.032 I think this is actually a really

NOTE Confidence: 0.5261478533333333  
00:58:52.032 --> 00:58:53.986 nice place to talk about radiation  
NOTE Confidence: 0.5261478533333333  
00:58:53.986 --> 00:58:56.820 as a lot of times when we talk  
NOTE Confidence: 0.5261478533333333  
00:58:56.820 --> 00:58:58.604 about radiation for colorectal  
NOTE Confidence: 0.5261478533333333  
00:58:58.604 --> 00:59:01.878 cancers we are talking about.  
NOTE Confidence: 0.5261478533333333  
00:59:01.880 --> 00:59:03.480 Working together as a team,  
NOTE Confidence: 0.5261478533333333  
00:59:03.480 --> 00:59:05.694 and especially with the surgeons and  
NOTE Confidence: 0.5261478533333333  
00:59:05.694 --> 00:59:08.379 trying to enhance the surgical outcomes.  
NOTE Confidence: 0.5261478533333333  
00:59:08.380 --> 00:59:11.012 So the thing that I really enjoy  
NOTE Confidence: 0.5261478533333333  
00:59:11.012 --> 00:59:13.984 about really about GI oncology is that  
NOTE Confidence: 0.5261478533333333  
00:59:13.984 --> 00:59:16.194 we are an inherently collaborative  
NOTE Confidence: 0.5261478533333333  
00:59:16.200 --> 00:59:18.090 effort and I think the what folks  
NOTE Confidence: 0.5261478533333333  
00:59:18.090 --> 00:59:19.708 have said about working as a  
NOTE Confidence: 0.5261478533333333  
00:59:19.708 --> 00:59:21.444 team is one of my favorite parts  
NOTE Confidence: 0.5261478533333333  
00:59:21.506 --> 00:59:22.964 about treating colorectal cancers  
NOTE Confidence: 0.5261478533333333  
00:59:22.964 --> 00:59:24.674 and taking care of patients.  
NOTE Confidence: 0.5261478533333333

00:59:24.680 --> 00:59:28.046 Together with such a phenomenal team.  
NOTE Confidence: 0.5261478533333333

00:59:28.050 --> 00:59:29.849 The first thing I think to talk  
NOTE Confidence: 0.5261478533333333

00:59:29.849 --> 00:59:31.560 about is really the question of  
NOTE Confidence: 0.5261478533333333

00:59:31.560 --> 00:59:33.035 what is radiation oncology and  
NOTE Confidence: 0.5261478533333333

00:59:33.035 --> 00:59:34.828 I think intuitively you know,  
NOTE Confidence: 0.5261478533333333

00:59:34.830 --> 00:59:38.150 most everyone will know what  
NOTE Confidence: 0.5261478533333333

00:59:38.150 --> 00:59:41.370 gastroenterologists do, what surgeons do.  
NOTE Confidence: 0.5261478533333333

00:59:41.370 --> 00:59:43.972 Even medical oncology, I think,  
NOTE Confidence: 0.5261478533333333

00:59:43.972 --> 00:59:45.752 is pretty pretty much folks  
NOTE Confidence: 0.5261478533333333

00:59:45.752 --> 00:59:47.790 will know about chemotherapy,  
NOTE Confidence: 0.5261478533333333

00:59:47.790 --> 00:59:49.629 but radiation oncology,  
NOTE Confidence: 0.5261478533333333

00:59:49.629 --> 00:59:51.468 because you know,  
NOTE Confidence: 0.5261478533333333

00:59:51.470 --> 00:59:55.178 not many colorectal cancer patients will  
NOTE Confidence: 0.5261478533333333

00:59:55.178 --> 00:59:58.660 will actually encounter radiation treatments.  
NOTE Confidence: 0.5261478533333333

00:59:58.660 --> 01:00:00.375 Is a little bit of a question,  
NOTE Confidence: 0.5261478533333333

01:00:00.380 --> 01:00:02.836 and so I thought I would take a

NOTE Confidence: 0.5261478533333333  
01:00:02.836 --> 01:00:05.516 minute to talk about what is radiation  
NOTE Confidence: 0.5261478533333333  
01:00:05.516 --> 01:00:09.215 oncology and then how do we use it in  
NOTE Confidence: 0.5261478533333333  
01:00:09.215 --> 01:00:11.255 colorectal cancers to help patients.  
NOTE Confidence: 0.5261478533333333  
01:00:11.260 --> 01:00:12.872 So let me see.  
NOTE Confidence: 0.5261478533333333  
01:00:12.872 --> 01:00:13.198 OK,  
NOTE Confidence: 0.5261478533333333  
01:00:13.200 --> 01:00:15.408 so in terms of the history  
NOTE Confidence: 0.5261478533333333  
01:00:15.408 --> 01:00:16.512 of radiation oncology,  
NOTE Confidence: 0.5261478533333333  
01:00:16.520 --> 01:00:19.055 it's it's worthwhile noting that  
NOTE Confidence: 0.5261478533333333  
01:00:19.055 --> 01:00:21.590 we've actually been using radiation  
NOTE Confidence: 0.5261478533333333  
01:00:21.674 --> 01:00:23.839 to treat cancers almost since  
NOTE Confidence: 0.5261478533333333  
01:00:23.840 --> 01:00:26.140 the phenomena of radiation was  
NOTE Confidence: 0.5261478533333333  
01:00:26.140 --> 01:00:28.440 first discovered in the 1800s.  
NOTE Confidence: 0.5261478533333333  
01:00:28.440 --> 01:00:31.233 So this is a picture of the  
NOTE Confidence: 0.5261478533333333  
01:00:31.233 --> 01:00:34.132 first X ray taken William Rankin,  
NOTE Confidence: 0.5261478533333333  
01:00:34.132 --> 01:00:37.378 who discovered the mysterious X rays,  
NOTE Confidence: 0.5261478533333333

01:00:37.380 --> 01:00:40.116 actually took a picture of his wife's hand,  
NOTE Confidence: 0.5261478533333333

01:00:40.120 --> 01:00:42.568 and this is actually her wedding band there.  
NOTE Confidence: 0.5261478533333333

01:00:42.570 --> 01:00:44.586 Very famous historical picture.  
NOTE Confidence: 0.5261478533333333

01:00:44.586 --> 01:00:46.602 This really transformed and  
NOTE Confidence: 0.5261478533333333

01:00:46.602 --> 01:00:47.990 revolutionized cancer care.  
NOTE Confidence: 0.5261478533333333

01:00:47.990 --> 01:00:49.957 Before this there was no way to  
NOTE Confidence: 0.5261478533333333

01:00:49.957 --> 01:00:52.090 see inside a patient and detect  
NOTE Confidence: 0.5261478533333333

01:00:52.090 --> 01:00:54.130 cancers other than surgery other  
NOTE Confidence: 0.5261478533333333

01:00:54.130 --> 01:00:55.850 than opening up a patient.  
NOTE Confidence: 0.5261478533333333

01:00:55.850 --> 01:00:58.391 And so this really was an incredible  
NOTE Confidence: 0.5261478533333333

01:00:58.391 --> 01:01:00.315 step forward and almost immediately  
NOTE Confidence: 0.5261478533333333

01:01:00.315 --> 01:01:02.996 not only were we able to seek  
NOTE Confidence: 0.5261478533333333

01:01:02.996 --> 01:01:04.550 answers inside patients,  
NOTE Confidence: 0.5261478533333333

01:01:04.550 --> 01:01:06.454 but within a few months of the  
NOTE Confidence: 0.5261478533333333

01:01:06.454 --> 01:01:08.670 discovery of the phenomena of radiation,  
NOTE Confidence: 0.5261478533333333

01:01:08.670 --> 01:01:10.215 we were actually using radiation

NOTE Confidence: 0.5261478533333333

01:01:10.215 --> 01:01:12.130 to treat cancer patients in the

NOTE Confidence: 0.5261478533333333

01:01:12.130 --> 01:01:13.715 first cancer patient was treated.

NOTE Confidence: 0.5261478533333333

01:01:13.720 --> 01:01:18.355 In 1896, in Chicago with who had a recurrent,

NOTE Confidence: 0.5261478533333333

01:01:18.360 --> 01:01:21.759 inoperable breast cancer?

NOTE Confidence: 0.5261478533333333

01:01:21.760 --> 01:01:24.427 The really the Golden Age of of

NOTE Confidence: 0.5261478533333333

01:01:24.427 --> 01:01:26.364 Radiation Oncology came about in

NOTE Confidence: 0.5261478533333333

01:01:26.364 --> 01:01:28.524 the 1950s at Stanford with Henry

NOTE Confidence: 0.5261478533333333

01:01:28.524 --> 01:01:30.360 Kaplan and Saul Rosenberg.

NOTE Confidence: 0.5261478533333333

01:01:30.360 --> 01:01:31.132 Using here,

NOTE Confidence: 0.5261478533333333

01:01:31.132 --> 01:01:33.834 Henry Kaplan was one of our first

NOTE Confidence: 0.5261478533333333

01:01:33.834 --> 01:01:36.655 machines that we use to deliver radiation,

NOTE Confidence: 0.5261478533333333

01:01:36.660 --> 01:01:38.226 and Saul Rosenberg,

NOTE Confidence: 0.5261478533333333

01:01:38.226 --> 01:01:40.836 really a chemotherapy giant and

NOTE Confidence: 0.5261478533333333

01:01:40.836 --> 01:01:43.005 using combination chemotherapy and

NOTE Confidence: 0.5261478533333333

01:01:43.005 --> 01:01:45.615 radiation to provide the first

NOTE Confidence: 0.5261478533333333



01:01:45.615 --> 01:01:48.019 non-surgical cures of of cancer.  
NOTE Confidence: 0.5261478533333333

01:01:48.020 --> 01:01:50.552 And this is really a phenomenal  
NOTE Confidence: 0.5261478533333333

01:01:50.552 --> 01:01:52.860 step forward and really led to.  
NOTE Confidence: 0.5261478533333333

01:01:52.860 --> 01:01:55.548 Over the next few decades from  
NOTE Confidence: 0.5261478533333333

01:01:55.548 --> 01:01:57.340 the 50s till now,  
NOTE Confidence: 0.5261478533333333

01:01:57.340 --> 01:02:00.195 an explosion of cancer treatment  
NOTE Confidence: 0.5261478533333333

01:02:00.195 --> 01:02:02.479 options and really innovations  
NOTE Confidence: 0.5261478533333333

01:02:02.479 --> 01:02:04.780 in in curing patients.  
NOTE Confidence: 0.5261478533333333

01:02:04.780 --> 01:02:07.105 So right now,  
NOTE Confidence: 0.5261478533333333

01:02:07.105 --> 01:02:10.205 modern radiation therapy moving  
NOTE Confidence: 0.5261478533333333

01:02:10.205 --> 01:02:12.795 into 2022 is really based on  
NOTE Confidence: 0.5261478533333333

01:02:12.795 --> 01:02:14.610 all the advances in physics  
NOTE Confidence: 0.9444168961111111

01:02:14.690 --> 01:02:17.898 that have happened over the past few decades.  
NOTE Confidence: 0.9444168961111111

01:02:17.900 --> 01:02:20.810 All the huge advances in biology.  
NOTE Confidence: 0.9444168961111111

01:02:20.810 --> 01:02:23.822 And understanding how radiation  
NOTE Confidence: 0.9444168961111111

01:02:23.822 --> 01:02:26.850 interacts with with with cancer and

NOTE Confidence: 0.944416896111111  
01:02:26.850 --> 01:02:30.352 then a really as I think Doctor Manju  
NOTE Confidence: 0.944416896111111  
01:02:30.352 --> 01:02:33.187 is saying something about iPhones.  
NOTE Confidence: 0.944416896111111  
01:02:33.190 --> 01:02:35.590 You know, advances in technology  
NOTE Confidence: 0.944416896111111  
01:02:35.590 --> 01:02:37.990 over the past few decades.  
NOTE Confidence: 0.944416896111111  
01:02:37.990 --> 01:02:40.038 Also all such that you know this is  
NOTE Confidence: 0.944416896111111  
01:02:40.038 --> 01:02:42.449 one of our modern radiation machines.  
NOTE Confidence: 0.944416896111111  
01:02:42.450 --> 01:02:45.074 You know, which has a lot of bells  
NOTE Confidence: 0.944416896111111  
01:02:45.074 --> 01:02:47.286 and whistles which we can use  
NOTE Confidence: 0.944416896111111  
01:02:47.286 --> 01:02:49.136 to really personalize a patient  
NOTE Confidence: 0.944416896111111  
01:02:49.136 --> 01:02:51.118 care and cancer treatments.  
NOTE Confidence: 0.944416896111111  
01:02:51.120 --> 01:02:53.838 In a very patient centric way,  
NOTE Confidence: 0.944416896111111  
01:02:53.840 --> 01:02:56.358 even though we are talking about you  
NOTE Confidence: 0.944416896111111  
01:02:56.358 --> 01:02:59.406 know this black box of radiation.  
NOTE Confidence: 0.944416896111111  
01:02:59.410 --> 01:03:01.270 So for colorectal cancers I couldn't  
NOTE Confidence: 0.944416896111111  
01:03:01.270 --> 01:03:03.706 have had a better introduction into why  
NOTE Confidence: 0.944416896111111

01:03:03.706 --> 01:03:05.980 we use radiation for colorectal cancers  
NOTE Confidence: 0.944416896111111

01:03:05.980 --> 01:03:08.367 than from Doctor Kane and Doctor Manju,  
NOTE Confidence: 0.944416896111111

01:03:08.370 --> 01:03:11.354 who have a keen appreciation of the role  
NOTE Confidence: 0.944416896111111

01:03:11.354 --> 01:03:13.788 of radiation for colorectal cancers.  
NOTE Confidence: 0.944416896111111

01:03:13.790 --> 01:03:16.382 But the the reason why we use radiation  
NOTE Confidence: 0.944416896111111

01:03:16.382 --> 01:03:18.571 in colorectal cancers is that for most  
NOTE Confidence: 0.944416896111111

01:03:18.571 --> 01:03:21.023 colon cancers we do not need to use  
NOTE Confidence: 0.944416896111111

01:03:21.023 --> 01:03:23.165 radiation and and that's a good thing.  
NOTE Confidence: 0.944416896111111

01:03:23.170 --> 01:03:26.250 But as we get further down to the  
NOTE Confidence: 0.944416896111111

01:03:26.250 --> 01:03:28.966 end of the colon, we enter this.  
NOTE Confidence: 0.944416896111111

01:03:28.966 --> 01:03:31.010 Part of the of the bowel called  
NOTE Confidence: 0.944416896111111

01:03:31.083 --> 01:03:33.248 the \*\*\*\*\* and that \*\*\*\*\* as  
NOTE Confidence: 0.944416896111111

01:03:33.248 --> 01:03:34.776 has already been discussed,  
NOTE Confidence: 0.944416896111111

01:03:34.780 --> 01:03:36.640 is right here at the bottom  
NOTE Confidence: 0.944416896111111

01:03:36.640 --> 01:03:37.880 of the pelvic bowl.  
NOTE Confidence: 0.944416896111111

01:03:37.880 --> 01:03:40.172 And as you get farther down

NOTE Confidence: 0.944416896111111  
01:03:40.172 --> 01:03:42.629 deeper into the pelvis there the  
NOTE Confidence: 0.944416896111111  
01:03:42.629 --> 01:03:44.754 the space here gets narrower.  
NOTE Confidence: 0.944416896111111  
01:03:44.760 --> 01:03:47.203 There's all these muscles here that control  
NOTE Confidence: 0.944416896111111  
01:03:47.203 --> 01:03:48.998 things like continents and you know,  
NOTE Confidence: 0.944416896111111  
01:03:49.000 --> 01:03:50.890 I think the idea of a colostomy  
NOTE Confidence: 0.944416896111111  
01:03:50.890 --> 01:03:52.380 has already been brought up.  
NOTE Confidence: 0.944416896111111  
01:03:52.380 --> 01:03:54.657 If you cut too close to these muscles or  
NOTE Confidence: 0.944416896111111  
01:03:54.657 --> 01:03:56.792 the tumors invading into those muscles  
NOTE Confidence: 0.944416896111111  
01:03:56.792 --> 01:03:59.985 and and that's really where a radiation.  
NOTE Confidence: 0.944416896111111  
01:03:59.985 --> 01:04:02.130 Can help because.  
NOTE Confidence: 0.944416896111111  
01:04:02.130 --> 01:04:05.546 That we can give radiation before surgery  
NOTE Confidence: 0.944416896111111  
01:04:05.546 --> 01:04:09.139 in order to reduce the tumor size.  
NOTE Confidence: 0.944416896111111  
01:04:09.140 --> 01:04:10.848 To get the tumor to pull away  
NOTE Confidence: 0.944416896111111  
01:04:10.848 --> 01:04:11.580 from these muscles,  
NOTE Confidence: 0.944416896111111  
01:04:11.580 --> 01:04:13.908 pull away from the pelvic sidewall.  
NOTE Confidence: 0.944416896111111

01:04:13.910 --> 01:04:16.549 And by doing this we can improve  
NOTE Confidence: 0.944416896111111

01:04:16.549 --> 01:04:18.519 surgical outcomes and decrease the  
NOTE Confidence: 0.944416896111111

01:04:18.519 --> 01:04:20.823 risk that the cancer comes back  
NOTE Confidence: 0.944416896111111

01:04:20.823 --> 01:04:23.500 even after a successful surgery.  
NOTE Confidence: 0.944416896111111

01:04:23.500 --> 01:04:24.484 In addition,  
NOTE Confidence: 0.944416896111111

01:04:24.484 --> 01:04:27.784 we can even get the cancer to  
NOTE Confidence: 0.944416896111111

01:04:27.784 --> 01:04:30.064 shrink away from these muscles  
NOTE Confidence: 0.944416896111111

01:04:30.064 --> 01:04:32.590 that control continents and.  
NOTE Confidence: 0.944416896111111

01:04:32.590 --> 01:04:37.426 Allow surgeons to to to potentially  
NOTE Confidence: 0.944416896111111

01:04:37.430 --> 01:04:40.282 preserve more of those muscles and  
NOTE Confidence: 0.944416896111111

01:04:40.282 --> 01:04:43.166 decrease the risk of having patients have  
NOTE Confidence: 0.944416896111111

01:04:43.166 --> 01:04:47.960 a permanent colostomy after surgery so.  
NOTE Confidence: 0.944416896111111

01:04:47.960 --> 01:04:48.770 In addition,  
NOTE Confidence: 0.944416896111111

01:04:48.770 --> 01:04:51.605 as I think was mentioned as well  
NOTE Confidence: 0.944416896111111

01:04:51.605 --> 01:04:54.119 in in Doctor Shahar's case,  
NOTE Confidence: 0.944416896111111

01:04:54.120 --> 01:04:56.010 you know for patients who may not

NOTE Confidence: 0.944416896111111

01:04:56.010 --> 01:04:58.606 be in the best health you know who

NOTE Confidence: 0.944416896111111

01:04:58.606 --> 01:05:00.658 may not be candidates for these

NOTE Confidence: 0.944416896111111

01:05:00.658 --> 01:05:03.492 big surgeries that we may actually

NOTE Confidence: 0.944416896111111

01:05:03.492 --> 01:05:05.424 use chemotherapy and radiation

NOTE Confidence: 0.944416896111111

01:05:05.430 --> 01:05:07.725 instead of surgery for patients

NOTE Confidence: 0.944416896111111

01:05:07.725 --> 01:05:10.781 who may not be medically medically

NOTE Confidence: 0.944416896111111

01:05:10.781 --> 01:05:14.586 able to to handle surgery.

NOTE Confidence: 0.944416896111111

01:05:14.590 --> 01:05:15.630 So,

NOTE Confidence: 0.944416896111111

01:05:15.630 --> 01:05:18.350 as I alluded to all these advances

NOTE Confidence: 0.944416896111111

01:05:18.350 --> 01:05:22.258 in technology and and in in how we

NOTE Confidence: 0.944416896111111

01:05:22.258 --> 01:05:25.690 think about using radiation for cancer

NOTE Confidence: 0.944416896111111

01:05:25.690 --> 01:05:28.270 treatments really is an early example.

NOTE Confidence: 0.944416896111111

01:05:28.270 --> 01:05:29.290 As I said,

NOTE Confidence: 0.944416896111111

01:05:29.290 --> 01:05:32.322 going back 100 years of of how we

NOTE Confidence: 0.944416896111111

01:05:32.322 --> 01:05:34.146 personalize care for patients,

NOTE Confidence: 0.944416896111111

01:05:34.150 --> 01:05:34.927 and you know,  
NOTE Confidence: 0.944416896111111

01:05:34.927 --> 01:05:36.222 nowadays we talk about a  
NOTE Confidence: 0.944416896111111

01:05:36.222 --> 01:05:37.769 lot about personalized care,  
NOTE Confidence: 0.944416896111111

01:05:37.770 --> 01:05:39.890 but in radiation we've been  
NOTE Confidence: 0.944416896111111

01:05:39.890 --> 01:05:41.586 personalizing care for many,  
NOTE Confidence: 0.86353948875

01:05:41.590 --> 01:05:44.830 many years. Now. One of the main ways.  
NOTE Confidence: 0.86353948875

01:05:44.830 --> 01:05:47.304 The way that we do is in a measured way  
NOTE Confidence: 0.86353948875

01:05:47.304 --> 01:05:50.296 that we decide what to treat with radiation.  
NOTE Confidence: 0.86353948875

01:05:50.300 --> 01:05:52.752 What we decide, how we aim, the radiation,  
NOTE Confidence: 0.86353948875

01:05:52.752 --> 01:05:55.007 and everybody is different and  
NOTE Confidence: 0.86353948875

01:05:55.010 --> 01:05:57.752 everybody's body is different and we  
NOTE Confidence: 0.86353948875

01:05:57.752 --> 01:06:00.046 can actually consciously these days  
NOTE Confidence: 0.86353948875

01:06:00.046 --> 01:06:02.290 with all the technology, figure out  
NOTE Confidence: 0.86353948875

01:06:02.290 --> 01:06:04.270 precisely how to aim the radiation.  
NOTE Confidence: 0.86353948875

01:06:04.270 --> 01:06:06.545 This is an example of a radiation  
NOTE Confidence: 0.86353948875

01:06:06.545 --> 01:06:08.629 plan where we're looking at a CT

NOTE Confidence: 0.86353948875

01:06:08.629 --> 01:06:10.500 scan through a patient body and

NOTE Confidence: 0.86353948875

01:06:10.500 --> 01:06:13.237 here you can see the leg bones here

NOTE Confidence: 0.86353948875

01:06:13.237 --> 01:06:15.182 attached to the hips, hip bones.

NOTE Confidence: 0.86353948875

01:06:15.182 --> 01:06:17.044 This is the front of the patient

NOTE Confidence: 0.86353948875

01:06:17.044 --> 01:06:19.156 is back with the patient and back.

NOTE Confidence: 0.86353948875

01:06:19.160 --> 01:06:22.076 Here is the \*\*\*\*\* the red and the blue

NOTE Confidence: 0.86353948875

01:06:22.076 --> 01:06:24.747 are the radiation doses that we're

NOTE Confidence: 0.86353948875

01:06:24.747 --> 01:06:27.824 targeting to the \*\*\*\*\* as well as to

NOTE Confidence: 0.86353948875

01:06:27.824 --> 01:06:29.720 the lymph nodes around the \*\*\*\*\*.

NOTE Confidence: 0.86353948875

01:06:29.720 --> 01:06:32.840 This is a side view where this is the spine.

NOTE Confidence: 0.86353948875

01:06:32.840 --> 01:06:35.400 The curve of the back and the tailbone.

NOTE Confidence: 0.86353948875

01:06:35.400 --> 01:06:37.563 And as we're looking to at the

NOTE Confidence: 0.86353948875

01:06:37.563 --> 01:06:39.639 patient to side and the CT scan.

NOTE Confidence: 0.86353948875

01:06:39.640 --> 01:06:41.740 And what you can see is we can

NOTE Confidence: 0.86353948875

01:06:41.740 --> 01:06:43.272 actually aim radiation at the \*\*\*\*\*

NOTE Confidence: 0.86353948875



01:06:43.272 --> 01:06:44.940 at the lymph nodes and actually  
NOTE Confidence: 0.86353948875

01:06:44.996 --> 01:06:46.865 spare this middle part where this is.  
NOTE Confidence: 0.86353948875

01:06:46.870 --> 01:06:47.179 Vowel,  
NOTE Confidence: 0.86353948875

01:06:47.179 --> 01:06:49.342 so we can actually spare non involved  
NOTE Confidence: 0.86353948875

01:06:49.342 --> 01:06:52.023 bowel and you can see that over here as well.  
NOTE Confidence: 0.86353948875

01:06:52.030 --> 01:06:54.214 In the front we can spare non involved  
NOTE Confidence: 0.86353948875

01:06:54.214 --> 01:06:55.455 battle from radiation exposure  
NOTE Confidence: 0.86353948875

01:06:55.455 --> 01:06:57.667 treating only what we need to do,  
NOTE Confidence: 0.86353948875

01:06:57.670 --> 01:07:01.576 reducing the side effects of diarrhea and  
NOTE Confidence: 0.86353948875

01:07:01.576 --> 01:07:05.848 and and things like that from radiation,  
NOTE Confidence: 0.86353948875

01:07:05.850 --> 01:07:06.938 exposure of the bowel.  
NOTE Confidence: 0.932138483076923

01:07:08.960 --> 01:07:11.696 Another very simple trick that we can use  
NOTE Confidence: 0.932138483076923

01:07:11.696 --> 01:07:13.920 during radiation treatment is positioning.  
NOTE Confidence: 0.932138483076923

01:07:13.920 --> 01:07:16.340 So everybody again is different.  
NOTE Confidence: 0.932138483076923

01:07:16.340 --> 01:07:18.338 Sometimes we can actually very simply  
NOTE Confidence: 0.932138483076923

01:07:18.338 --> 01:07:20.764 just lay a patient down on their

NOTE Confidence: 0.932138483076923

01:07:20.764 --> 01:07:22.474 stomachs on the treatment table.

NOTE Confidence: 0.932138483076923

01:07:22.480 --> 01:07:24.314 You know patients head would go here,

NOTE Confidence: 0.932138483076923

01:07:24.320 --> 01:07:27.692 and there's an opening here where

NOTE Confidence: 0.932138483076923

01:07:27.692 --> 01:07:29.688 patients stomach fall through this

NOTE Confidence: 0.932138483076923

01:07:29.688 --> 01:07:32.895 hole and you can see that on this CT

NOTE Confidence: 0.932138483076923

01:07:32.895 --> 01:07:35.198 scan where again looking at the side

NOTE Confidence: 0.932138483076923

01:07:35.275 --> 01:07:37.698 of the patient with the \*\*\*\*\* here.

NOTE Confidence: 0.932138483076923

01:07:37.698 --> 01:07:40.560 At the bell actually can fall out of the

NOTE Confidence: 0.932138483076923

01:07:40.633 --> 01:07:43.207 pelvis forward into this opening here

NOTE Confidence: 0.932138483076923

01:07:43.207 --> 01:07:46.112 and really spatially put quite a bit

NOTE Confidence: 0.932138483076923

01:07:46.112 --> 01:07:48.350 of distance between where we're aiming

NOTE Confidence: 0.932138483076923

01:07:48.350 --> 01:07:51.190 the \*\*\*\*\* and then the small bowel,

NOTE Confidence: 0.932138483076923

01:07:51.190 --> 01:07:53.486 which causes a lot of the side

NOTE Confidence: 0.932138483076923

01:07:53.486 --> 01:07:54.470 effects of radiation.

NOTE Confidence: 0.932138483076923

01:07:54.470 --> 01:07:56.612 And so again in a way

NOTE Confidence: 0.932138483076923

01:07:56.612 --> 01:07:58.910 that we can use anatomy,  
NOTE Confidence: 0.932138483076923

01:07:58.910 --> 01:08:01.265 positioning and technology to reduce  
NOTE Confidence: 0.932138483076923

01:08:01.265 --> 01:08:03.620 the side effects of radiation  
NOTE Confidence: 0.932138483076923

01:08:03.699 --> 01:08:06.424 and make radiation safer while  
NOTE Confidence: 0.932138483076923

01:08:06.424 --> 01:08:08.059 maintaining the effectiveness.  
NOTE Confidence: 0.95893531

01:08:10.330 --> 01:08:11.558 And then the final  
NOTE Confidence: 0.898593784375

01:08:11.770 --> 01:08:14.317 way that I'd like to talk about in terms  
NOTE Confidence: 0.898593784375

01:08:14.317 --> 01:08:17.050 of using radiation is really for folks,  
NOTE Confidence: 0.898593784375

01:08:17.050 --> 01:08:18.800 regardless of if they have  
NOTE Confidence: 0.898593784375

01:08:18.800 --> 01:08:20.550 colon cancers or rectal cancers.  
NOTE Confidence: 0.898593784375

01:08:20.550 --> 01:08:23.030 If if the cancer is spread to other  
NOTE Confidence: 0.898593784375

01:08:23.030 --> 01:08:27.110 parts of the body and you know I think  
NOTE Confidence: 0.898593784375

01:08:27.110 --> 01:08:30.722 this is something where there's so many  
NOTE Confidence: 0.898593784375

01:08:30.722 --> 01:08:33.449 treatment options for colorectal cancers  
NOTE Confidence: 0.898593784375

01:08:33.449 --> 01:08:37.264 these days across all stages of cancer,  
NOTE Confidence: 0.898593784375

01:08:37.270 --> 01:08:39.196 that even if. Cancers have spread

NOTE Confidence: 0.898593784375

01:08:39.196 --> 01:08:41.120 to other parts of the body.

NOTE Confidence: 0.898593784375

01:08:41.120 --> 01:08:43.504 I I do think there's still a really

NOTE Confidence: 0.898593784375

01:08:43.504 --> 01:08:45.322 good measure of hope, and many,

NOTE Confidence: 0.898593784375

01:08:45.322 --> 01:08:46.977 many treatment options for them.

NOTE Confidence: 0.898593784375

01:08:46.980 --> 01:08:49.190 And Doctor Kaminski will talk

NOTE Confidence: 0.898593784375

01:08:49.190 --> 01:08:51.657 more about that, but these days,

NOTE Confidence: 0.898593784375

01:08:51.657 --> 01:08:53.173 people are living longer

NOTE Confidence: 0.898593784375

01:08:53.173 --> 01:08:54.860 and longer with cancer.

NOTE Confidence: 0.898593784375

01:08:54.860 --> 01:08:57.386 We're curing more patients with cancer,

NOTE Confidence: 0.898593784375

01:08:57.390 --> 01:09:01.328 but for patients who have have have cancer

NOTE Confidence: 0.898593784375

01:09:01.328 --> 01:09:03.200 that spread to other parts of the body,

NOTE Confidence: 0.898593784375

01:09:03.200 --> 01:09:04.718 we can. We can actually think

NOTE Confidence: 0.898593784375

01:09:04.718 --> 01:09:06.479 that they can live for for many,

NOTE Confidence: 0.898593784375

01:09:06.480 --> 01:09:09.070 many years at this point and.

NOTE Confidence: 0.898593784375

01:09:09.070 --> 01:09:13.140 Uh, one of the tools in our in our

NOTE Confidence: 0.898593784375

01:09:13.140 --> 01:09:15.569 toolbox that we have to to treat  
NOTE Confidence: 0.898593784375

01:09:15.570 --> 01:09:17.478 metastatic deposits is radiation.  
NOTE Confidence: 0.898593784375

01:09:17.478 --> 01:09:20.340 Using radiation here again in the  
NOTE Confidence: 0.898593784375

01:09:20.413 --> 01:09:22.717 color colored lines to treat spots  
NOTE Confidence: 0.898593784375

01:09:22.717 --> 01:09:25.397 of cancer that have spread to liver  
NOTE Confidence: 0.898593784375

01:09:25.397 --> 01:09:27.889 or spots that have spread to lungs  
NOTE Confidence: 0.898593784375

01:09:27.890 --> 01:09:31.145 in order to in a noninvasive way,  
NOTE Confidence: 0.898593784375

01:09:31.150 --> 01:09:35.170 a BLT these tumors and improve  
NOTE Confidence: 0.898593784375

01:09:35.170 --> 01:09:39.410 Disease Control in these patients so.  
NOTE Confidence: 0.898593784375

01:09:39.410 --> 01:09:41.710 These are just some examples,  
NOTE Confidence: 0.898593784375

01:09:41.710 --> 01:09:44.032 again of how we use radiation  
NOTE Confidence: 0.898593784375

01:09:44.032 --> 01:09:46.862 therapy in a very tailored way and  
NOTE Confidence: 0.898593784375

01:09:46.862 --> 01:09:48.680 part of a lot of that is really in  
NOTE Confidence: 0.898593784375

01:09:48.740 --> 01:09:50.498 talking to the patients you know,  
NOTE Confidence: 0.898593784375

01:09:50.500 --> 01:09:51.760 trying to figure out what  
NOTE Confidence: 0.898593784375

01:09:51.760 --> 01:09:52.516 their priorities are,

NOTE Confidence: 0.898593784375

01:09:52.520 --> 01:09:54.176 what their hopes are you know,

NOTE Confidence: 0.898593784375

01:09:54.180 --> 01:09:55.810 and what what patients really

NOTE Confidence: 0.898593784375

01:09:55.810 --> 01:09:57.440 want out of their treatment.

NOTE Confidence: 0.898593784375

01:09:57.440 --> 01:10:00.320 And it is not a one size fit all

NOTE Confidence: 0.898593784375

01:10:00.320 --> 01:10:03.510 treatment and as Doctor Khanna has really

NOTE Confidence: 0.898593784375

01:10:03.510 --> 01:10:05.830 emphasized and described very well,

NOTE Confidence: 0.898593784375

01:10:05.830 --> 01:10:08.102 it's a team approach and it's not just

NOTE Confidence: 0.898593784375

01:10:08.102 --> 01:10:10.490 you know me as a radiation oncologist.

NOTE Confidence: 0.898593784375

01:10:10.490 --> 01:10:11.870 Sitting there talking to you.

NOTE Confidence: 0.898593784375

01:10:11.870 --> 01:10:14.830 It's all of us talking to you and

NOTE Confidence: 0.898593784375

01:10:14.830 --> 01:10:18.032 sharing our thoughts and and and and

NOTE Confidence: 0.898593784375

01:10:18.032 --> 01:10:20.412 trying to understand the patient.

NOTE Confidence: 0.898593784375

01:10:20.420 --> 01:10:24.620 So, uh, so again, so I'll I'll.

NOTE Confidence: 0.898593784375

01:10:24.620 --> 01:10:27.808 I'll finish up there and turn

NOTE Confidence: 0.898593784375

01:10:27.808 --> 01:10:29.748 it back to Doctor Krzeminski.

NOTE Confidence: 0.95906866

01:10:30.780 --> 01:10:34.830 Thank you Kevin. That was a a great talk I I

NOTE Confidence: 0.854050889285714

01:10:34.928 --> 01:10:36.800 had a a question that we

NOTE Confidence: 0.854050889285714

01:10:36.800 --> 01:10:38.000 often get asked which is why?

NOTE Confidence: 0.854050889285714

01:10:38.000 --> 01:10:40.634 Why radiation takes so long to finish

NOTE Confidence: 0.854050889285714

01:10:40.634 --> 01:10:43.410 and whether there are any options to do

NOTE Confidence: 0.661860312

01:10:43.420 --> 01:10:45.006 it in the shorter way. I thought you

NOTE Confidence: 0.661860312

01:10:45.006 --> 01:10:46.770 said to keep this talk to a short.

NOTE Confidence: 0.898651410909091

01:10:49.460 --> 01:10:53.160 So, so I think a lot of it is is historical.

NOTE Confidence: 0.898651410909091

01:10:53.160 --> 01:10:55.092 In all honesty, so at the beginning

NOTE Confidence: 0.898651410909091

01:10:55.092 --> 01:10:57.384 you remember I I said in the 1800s

NOTE Confidence: 0.898651410909091

01:10:57.384 --> 01:10:58.934 when radiation was discovered.

NOTE Confidence: 0.898651410909091

01:10:58.934 --> 01:11:01.510 You can imagine that in and when you're

NOTE Confidence: 0.898651410909091

01:11:01.571 --> 01:11:03.591 talking about unregulated sort of

NOTE Confidence: 0.898651410909091

01:11:03.591 --> 01:11:06.059 regulation radiation when you don't really

NOTE Confidence: 0.898651410909091

01:11:06.059 --> 01:11:08.375 understand too much about radiation that

NOTE Confidence: 0.898651410909091

01:11:08.375 --> 01:11:11.031 the toxicities can actually be substantial,

NOTE Confidence: 0.898651410909091

01:11:11.031 --> 01:11:14.510 and so in order to make radiation

NOTE Confidence: 0.898651410909091

01:11:14.600 --> 01:11:16.830 more tolerable in the 50s,

NOTE Confidence: 0.898651410909091

01:11:16.830 --> 01:11:19.074 Forties, 50s, this movement.

NOTE Confidence: 0.898651410909091

01:11:19.074 --> 01:11:22.080 Happened in radiation which said that we can

NOTE Confidence: 0.898651410909091

01:11:22.080 --> 01:11:24.069 actually cure the same number of patients,

NOTE Confidence: 0.898651410909091

01:11:24.070 --> 01:11:26.074 but we it makes radiation safer

NOTE Confidence: 0.898651410909091

01:11:26.074 --> 01:11:28.355 and more tolerable if we give it

NOTE Confidence: 0.898651410909091

01:11:28.355 --> 01:11:30.119 in small doses over many weeks,

NOTE Confidence: 0.898651410909091

01:11:30.120 --> 01:11:32.295 and this so called fractionation

NOTE Confidence: 0.898651410909091

01:11:32.295 --> 01:11:34.932 of radiation was really one of

NOTE Confidence: 0.898651410909091

01:11:34.932 --> 01:11:37.266 the biggest advances in the last

NOTE Confidence: 0.898651410909091

01:11:37.266 --> 01:11:38.916 century as technology has improved,

NOTE Confidence: 0.898651410909091

01:11:38.916 --> 01:11:41.096 we can actually kind of it's kind

NOTE Confidence: 0.898651410909091

01:11:41.096 --> 01:11:42.976 of a back to the future sort of

NOTE Confidence: 0.898651410909091

01:11:42.976 --> 01:11:44.824 thing where we can now because of

NOTE Confidence: 0.898651410909091



01:11:44.824 --> 01:11:46.880 the way we deliver radiation better.  
NOTE Confidence: 0.898651410909091

01:11:46.880 --> 01:11:49.430 We can actually go backwards.  
NOTE Confidence: 0.898651410909091

01:11:49.430 --> 01:11:51.238 We can actually deliver a higher doses of.  
NOTE Confidence: 0.898651410909091

01:11:51.240 --> 01:11:54.060 Radiation in shorter courses safely,  
NOTE Confidence: 0.898651410909091

01:11:54.060 --> 01:11:56.020 so we're starting starting starting  
NOTE Confidence: 0.898651410909091

01:11:56.020 --> 01:11:58.519 to gradually move back to shorter  
NOTE Confidence: 0.898651410909091

01:11:58.519 --> 01:11:59.917 courses of radiation,  
NOTE Confidence: 0.898651410909091

01:11:59.920 --> 01:12:03.043 but a lot of the history of radiation is  
NOTE Confidence: 0.898651410909091

01:12:03.043 --> 01:12:06.298 is with extended courses of radiation,  
NOTE Confidence: 0.898651410909091

01:12:06.300 --> 01:12:07.236 and you know,  
NOTE Confidence: 0.898651410909091

01:12:07.236 --> 01:12:09.420 we're we're we're we're working on it,  
NOTE Confidence: 0.898651410909091

01:12:09.420 --> 01:12:09.853 though.  
NOTE Confidence: 0.898651410909091

01:12:09.853 --> 01:12:12.018 We're trying to make radiation  
NOTE Confidence: 0.898651410909091

01:12:12.018 --> 01:12:14.325 more convenient and and and safer  
NOTE Confidence: 0.898651410909091

01:12:14.325 --> 01:12:15.330 for our patients.  
NOTE Confidence: 0.884999903076923

01:12:16.000 --> 01:12:18.891 Perfect thank you alright, and so let's

NOTE Confidence: 0.884999903076923

01:12:18.891 --> 01:12:22.398 we'll get to the medical oncology part.

NOTE Confidence: 0.884999903076923

01:12:22.398 --> 01:12:26.584 Doctor Justin Persico is with us to

NOTE Confidence: 0.884999903076923

01:12:26.584 --> 01:12:30.900 talk about advances in treatment. Thanks

NOTE Confidence: 0.7925358725

01:12:30.910 --> 01:12:33.974 Jeremy, I'm gonna. Get my screen up here.

NOTE Confidence: 0.8051710725

01:12:57.040 --> 01:12:59.371 OK coming up so I first want

NOTE Confidence: 0.8051710725

01:12:59.371 --> 01:13:01.589 to thank all my colleagues.

NOTE Confidence: 0.53821009

01:13:03.890 --> 01:13:07.215 Father, so far I've really enjoyed it.

NOTE Confidence: 0.53821009

01:13:07.220 --> 01:13:09.748 I really like how I've driven home the

NOTE Confidence: 0.53821009

01:13:09.748 --> 01:13:12.595 idea of a team breached based approach

NOTE Confidence: 0.53821009

01:13:12.595 --> 01:13:14.997 to colorectal cancer care and my job

NOTE Confidence: 0.53821009

01:13:14.997 --> 01:13:17.341 as part of that team is as the medical

NOTE Confidence: 0.53821009

01:13:17.341 --> 01:13:19.686 doctor giving any of the medicines as

NOTE Confidence: 0.53821009

01:13:19.686 --> 01:13:22.133 well as doing a lot of the surveillance

NOTE Confidence: 0.53821009

01:13:22.133 --> 01:13:24.147 to follow up the monitoring for

NOTE Confidence: 0.53821009

01:13:24.147 --> 01:13:26.800 years to come after somebody has been

NOTE Confidence: 0.53821009

01:13:26.875 --> 01:13:29.180 diagnosed and treated with cancer.  
NOTE Confidence: 0.53821009

01:13:29.180 --> 01:13:30.335 And also I'm going to hit on.  
NOTE Confidence: 0.53821009

01:13:30.340 --> 01:13:32.097 I think some themes that my colleagues  
NOTE Confidence: 0.53821009

01:13:32.097 --> 01:13:33.660 have been been hitting on here,  
NOTE Confidence: 0.53821009

01:13:33.660 --> 01:13:38.096 which is that we are all engaged in  
NOTE Confidence: 0.53821009

01:13:38.096 --> 01:13:41.152 effort to reduce the overall toxicity.  
NOTE Confidence: 0.53821009

01:13:41.152 --> 01:13:43.036 Side effects improve recovery  
NOTE Confidence: 0.53821009

01:13:43.036 --> 01:13:44.449 times from surgery,  
NOTE Confidence: 0.53821009

01:13:44.450 --> 01:13:46.284 like invert about and and a significant  
NOTE Confidence: 0.53821009

01:13:46.284 --> 01:13:48.208 part of what I'm going to talk about  
NOTE Confidence: 0.53821009

01:13:48.208 --> 01:13:50.264 today is how we can improve on the  
NOTE Confidence: 0.53821009

01:13:50.264 --> 01:13:52.106 treatments that we give as medical  
NOTE Confidence: 0.53821009

01:13:52.106 --> 01:13:53.569 oncologists chiefly chemotherapy treatment.  
NOTE Confidence: 0.53821009

01:13:53.569 --> 01:13:56.663 So I'm going to pick up from where  
NOTE Confidence: 0.53821009

01:13:56.663 --> 01:13:59.064 the surgeons left off and talk about.  
NOTE Confidence: 0.53821009

01:13:59.070 --> 01:14:00.690 Well, what happens next after

NOTE Confidence: 0.53821009

01:14:00.690 --> 01:14:01.986 the surgery when you,

NOTE Confidence: 0.53821009

01:14:01.990 --> 01:14:03.586 when you first meet the medical oncologist,

NOTE Confidence: 0.53821009

01:14:03.590 --> 01:14:04.136 what do you?

NOTE Confidence: 0.53821009

01:14:04.136 --> 01:14:05.410 What are you there to talk about?

NOTE Confidence: 0.53821009

01:14:05.410 --> 01:14:08.146 What are you likely to hear?

NOTE Confidence: 0.53821009

01:14:08.150 --> 01:14:09.779 And I'm going to try to focus on some

NOTE Confidence: 0.53821009

01:14:09.779 --> 01:14:11.632 of the key points of the presentation

NOTE Confidence: 0.53821009

01:14:11.632 --> 01:14:13.130 and the interest interest of time.

NOTE Confidence: 0.53821009

01:14:13.130 --> 01:14:15.092 I'm not going to go over some of the

NOTE Confidence: 0.53821009

01:14:15.092 --> 01:14:16.908 anatomy as you see in the picture here,

NOTE Confidence: 0.53821009

01:14:16.910 --> 01:14:17.842 But I'll just mention,

NOTE Confidence: 0.53821009

01:14:17.842 --> 01:14:18.308 you know,

NOTE Confidence: 0.53821009

01:14:18.310 --> 01:14:20.529 with a little bit about the background

NOTE Confidence: 0.53821009

01:14:20.529 --> 01:14:22.119 of of colorectal cancer and

NOTE Confidence: 0.599502876666667

01:14:22.130 --> 01:14:24.650 the burden of slides.

NOTE Confidence: 0.723011397909091

01:14:26.000 --> 01:14:27.746 Like it's something were you able  
NOTE Confidence: 0.723011397909091

01:14:27.746 --> 01:14:30.000 to see them initially or yeah?  
NOTE Confidence: 0.90636617

01:14:33.520 --> 01:14:35.528 Yeah, looks like it stopped  
NOTE Confidence: 0.90636617

01:14:35.528 --> 01:14:37.296 sharing for some reason.  
NOTE Confidence: 0.519885096666667

01:14:37.300 --> 01:14:38.209 Try this again.  
NOTE Confidence: 0.768389758571429

01:14:46.150 --> 01:14:47.627 Alright, are you able to see it?  
NOTE Confidence: 0.768389758571429

01:14:47.630 --> 01:14:50.900 Yeah perfect OK great.  
NOTE Confidence: 0.768389758571429

01:14:50.900 --> 01:14:53.532 So there is approximately 150 new diagnosis  
NOTE Confidence: 0.768389758571429

01:14:53.532 --> 01:14:55.899 of colorectal cancer each year in the US,  
NOTE Confidence: 0.768389758571429

01:14:55.900 --> 01:14:58.609 of which about 70% of them are  
NOTE Confidence: 0.768389758571429

01:14:58.609 --> 01:15:00.678 involving the colon and 30% involving  
NOTE Confidence: 0.768389758571429

01:15:00.678 --> 01:15:02.902 the \*\*\*\*\* and I have the picture here  
NOTE Confidence: 0.768389758571429

01:15:02.902 --> 01:15:04.766 just to remind everybody about the  
NOTE Confidence: 0.768389758571429

01:15:04.766 --> 01:15:06.660 different parts there of the colon.  
NOTE Confidence: 0.768389758571429

01:15:06.660 --> 01:15:08.375 My focus for today is really going  
NOTE Confidence: 0.768389758571429

01:15:08.375 --> 01:15:10.140 to be talking about colon cancer,

NOTE Confidence: 0.768389758571429  
01:15:10.140 --> 01:15:12.500 and in particular stage two and stage three,  
NOTE Confidence: 0.768389758571429  
01:15:12.500 --> 01:15:14.540 which I'll define for you shortly.  
NOTE Confidence: 0.768389758571429  
01:15:14.540 --> 01:15:16.180 Rectal cancer is another topic  
NOTE Confidence: 0.768389758571429  
01:15:16.180 --> 01:15:18.471 after do alluded to some of the  
NOTE Confidence: 0.768389758571429  
01:15:18.471 --> 01:15:20.223 specifics that we that we think  
NOTE Confidence: 0.768389758571429  
01:15:20.223 --> 01:15:22.127 about when it comes to treating.  
NOTE Confidence: 0.768389758571429  
01:15:22.130 --> 01:15:22.774 Rectal cancer,  
NOTE Confidence: 0.768389758571429  
01:15:22.774 --> 01:15:25.028 but I'm gonna leave that out for  
NOTE Confidence: 0.768389758571429  
01:15:25.028 --> 01:15:26.838 today and I will point everybody  
NOTE Confidence: 0.768389758571429  
01:15:26.838 --> 01:15:29.472 then in case they do want to learn a  
NOTE Confidence: 0.768389758571429  
01:15:29.472 --> 01:15:31.587 little bit more about that that this  
NOTE Confidence: 0.768389758571429  
01:15:31.587 --> 01:15:33.969 presentation from this month last year,  
NOTE Confidence: 0.768389758571429  
01:15:33.970 --> 01:15:35.605 there was an excellent presentation  
NOTE Confidence: 0.768389758571429  
01:15:35.605 --> 01:15:37.517 by Doctor Cort Manske higher so  
NOTE Confidence: 0.768389758571429  
01:15:37.517 --> 01:15:39.085 we can always find that on the  
NOTE Confidence: 0.768389758571429

01:15:39.085 --> 01:15:40.818 website or it's on YouTube as well.

NOTE Confidence: 0.80859613

01:15:45.630 --> 01:15:47.968 OK, now my slide is not advancing.

NOTE Confidence: 0.80859613

01:15:47.970 --> 01:15:49.690 Sorry about the technical difficulties.

NOTE Confidence: 0.907841147777778

01:15:55.910 --> 01:15:57.980 OK, so and this just

NOTE Confidence: 0.907841147777778

01:15:57.980 --> 01:15:59.636 briefly mention this slide,

NOTE Confidence: 0.907841147777778

01:15:59.640 --> 01:16:01.152 which is just showing the improvements

NOTE Confidence: 0.907841147777778

01:16:01.152 --> 01:16:02.854 that we made in treatment of

NOTE Confidence: 0.907841147777778

01:16:02.854 --> 01:16:04.454 colorectal cancer over the decades,

NOTE Confidence: 0.907841147777778

01:16:04.460 --> 01:16:06.685 and that the mortality has

NOTE Confidence: 0.907841147777778

01:16:06.685 --> 01:16:08.020 been decreasing significantly,

NOTE Confidence: 0.907841147777778

01:16:08.020 --> 01:16:09.560 both because of better treatments.

NOTE Confidence: 0.907841147777778

01:16:09.560 --> 01:16:11.762 But I think primarily because of

NOTE Confidence: 0.907841147777778

01:16:11.762 --> 01:16:13.576 better screening and the top couple

NOTE Confidence: 0.907841147777778

01:16:13.576 --> 01:16:15.554 top top two lines here you'll see

NOTE Confidence: 0.907841147777778

01:16:15.554 --> 01:16:17.675 the incidence or the number of cases

NOTE Confidence: 0.907841147777778

01:16:17.675 --> 01:16:20.115 of colorectal cancer that we see and

NOTE Confidence: 0.907841147777778  
01:16:20.115 --> 01:16:21.535 how that's declined significantly,  
NOTE Confidence: 0.907841147777778  
01:16:21.540 --> 01:16:23.580 primarily now because of screening  
NOTE Confidence: 0.907841147777778  
01:16:23.580 --> 01:16:24.804 techniques like colonoscopy.  
NOTE Confidence: 0.907841147777778  
01:16:24.810 --> 01:16:26.634 Where these precancerous lesions  
NOTE Confidence: 0.907841147777778  
01:16:26.634 --> 01:16:28.914 can be identified before they  
NOTE Confidence: 0.907841147777778  
01:16:28.914 --> 01:16:30.340 actually become cancer.  
NOTE Confidence: 0.907841147777778  
01:16:30.340 --> 01:16:34.358 So another plug for for screening here.  
NOTE Confidence: 0.907841147777778  
01:16:34.360 --> 01:16:36.369 And one of the first things you'll  
NOTE Confidence: 0.907841147777778  
01:16:36.369 --> 01:16:38.246 talk about with the medical oncologist  
NOTE Confidence: 0.907841147777778  
01:16:38.246 --> 01:16:40.160 is the stage of the cancer.  
NOTE Confidence: 0.907841147777778  
01:16:40.160 --> 01:16:42.032 'cause it's really determines for us  
NOTE Confidence: 0.907841147777778  
01:16:42.032 --> 01:16:44.115 how we should approach the next steps  
NOTE Confidence: 0.907841147777778  
01:16:44.115 --> 01:16:45.928 after surgery and the way we stage  
NOTE Confidence: 0.907841147777778  
01:16:45.986 --> 01:16:48.370 cancer is using what's called the TNM system,  
NOTE Confidence: 0.907841147777778  
01:16:48.370 --> 01:16:49.750 or tumor.  
NOTE Confidence: 0.907841147777778



01:16:49.750 --> 01:16:51.820 Nodal metastasis system.  
NOTE Confidence: 0.907841147777778

01:16:51.820 --> 01:16:54.356 And I have a a picture of sort  
NOTE Confidence: 0.907841147777778

01:16:54.356 --> 01:16:56.229 of explaining how we separate  
NOTE Confidence: 0.907841147777778

01:16:56.229 --> 01:16:58.563 the different T stages or tumor  
NOTE Confidence: 0.907841147777778

01:16:58.563 --> 01:17:00.680 stages showing a picture of the  
NOTE Confidence: 0.907841147777778

01:17:00.680 --> 01:17:02.894 of the colon with the bowel part  
NOTE Confidence: 0.907841147777778

01:17:02.894 --> 01:17:04.279 that's labeled as bowel being.  
NOTE Confidence: 0.907841147777778

01:17:04.280 --> 01:17:06.144 The inner part of the colon and then  
NOTE Confidence: 0.907841147777778

01:17:06.144 --> 01:17:07.882 the layers of the colon heading towards  
NOTE Confidence: 0.907841147777778

01:17:07.882 --> 01:17:09.699 the outer part of of that issue,  
NOTE Confidence: 0.907841147777778

01:17:09.700 --> 01:17:11.665 and small tumors involving just  
NOTE Confidence: 0.907841147777778

01:17:11.665 --> 01:17:14.542 the layer first layer of the of the  
NOTE Confidence: 0.907841147777778

01:17:14.542 --> 01:17:16.992 colon are staged as T1 and as you  
NOTE Confidence: 0.907841147777778

01:17:16.992 --> 01:17:19.458 invade deeper in through more layers,  
NOTE Confidence: 0.907841147777778

01:17:19.460 --> 01:17:20.656 you increase the stage,  
NOTE Confidence: 0.907841147777778

01:17:20.656 --> 01:17:22.750 leading all the way to what we

NOTE Confidence: 0.907841147777778  
01:17:22.750 --> 01:17:23.690 call it T4 tumor,  
NOTE Confidence: 0.907841147777778  
01:17:23.690 --> 01:17:25.206 which actually invades through  
NOTE Confidence: 0.907841147777778  
01:17:25.206 --> 01:17:27.480 the outer layer of the colon.  
NOTE Confidence: 0.907841147777778  
01:17:27.480 --> 01:17:29.340 The Internodal stage is determined  
NOTE Confidence: 0.907841147777778  
01:17:29.340 --> 01:17:32.018 by the number of lymph nodes that  
NOTE Confidence: 0.907841147777778  
01:17:32.018 --> 01:17:33.871 are involved with the cancer.  
NOTE Confidence: 0.907841147777778  
01:17:33.871 --> 01:17:36.073 So when you have your surgery,  
NOTE Confidence: 0.907841147777778  
01:17:36.080 --> 01:17:38.704 the surgeon, as as explained by the surgeons,  
NOTE Confidence: 0.907841147777778  
01:17:38.710 --> 01:17:40.306 it removes the section of colon  
NOTE Confidence: 0.907841147777778  
01:17:40.306 --> 01:17:41.917 that's involved with the cancer and  
NOTE Confidence: 0.907841147777778  
01:17:41.917 --> 01:17:43.399 along with that the blood vessels  
NOTE Confidence: 0.907841147777778  
01:17:43.399 --> 01:17:45.302 and the lymph nodes that are all  
NOTE Confidence: 0.907841147777778  
01:17:45.302 --> 01:17:46.657 associated with that section and  
NOTE Confidence: 0.907841147777778  
01:17:46.660 --> 01:17:48.811 all of that is taken to the lab and  
NOTE Confidence: 0.907841147777778  
01:17:48.811 --> 01:17:50.376 analyze under the microscope and  
NOTE Confidence: 0.907841147777778

01:17:50.376 --> 01:17:52.278 if any lymph nodes are involved,  
NOTE Confidence: 0.907841147777778

01:17:52.280 --> 01:17:54.870 those are counted as part of the  
NOTE Confidence: 0.907841147777778

01:17:54.870 --> 01:17:56.910 part of the pathology.  
NOTE Confidence: 0.907841147777778

01:17:56.910 --> 01:17:58.890 The MCS refer referring to metastases  
NOTE Confidence: 0.907841147777778

01:17:58.890 --> 01:18:00.797 basically means if we see cancer  
NOTE Confidence: 0.907841147777778

01:18:00.797 --> 01:18:02.624 in any other parts of the body.  
NOTE Confidence: 0.907841147777778

01:18:02.630 --> 01:18:03.168 For example,  
NOTE Confidence: 0.907841147777778

01:18:03.168 --> 01:18:05.950 the liver or the lung as Doctor do head show.  
NOTE Confidence: 0.907841147777778

01:18:05.950 --> 01:18:07.370 This is typically known,  
NOTE Confidence: 0.907841147777778

01:18:07.370 --> 01:18:08.790 and in this situation,  
NOTE Confidence: 0.907841147777778

01:18:08.790 --> 01:18:10.594 before having surgery would  
NOTE Confidence: 0.907841147777778

01:18:10.594 --> 01:18:12.742 typically have some forms of imaging,  
NOTE Confidence: 0.907841147777778

01:18:12.742 --> 01:18:14.590 cat scan or MRI that would be  
NOTE Confidence: 0.907841147777778

01:18:14.646 --> 01:18:16.648 there to look for any evidence of  
NOTE Confidence: 0.907841147777778

01:18:16.648 --> 01:18:18.409 the cancer having already spread,  
NOTE Confidence: 0.907841147777778

01:18:18.410 --> 01:18:20.170 because that might change the

NOTE Confidence: 0.907841147777778  
01:18:20.170 --> 01:18:21.578 overall treatment strategy approach.  
NOTE Confidence: 0.874251498571429  
01:18:23.700 --> 01:18:28.040 We use that information to group the.  
NOTE Confidence: 0.874251498571429  
01:18:28.040 --> 01:18:29.868 Patients into different stages.  
NOTE Confidence: 0.874251498571429  
01:18:29.868 --> 01:18:32.153 And here I have outlined  
NOTE Confidence: 0.874251498571429  
01:18:32.153 --> 01:18:34.118 that stage one tumor is,  
NOTE Confidence: 0.874251498571429  
01:18:34.120 --> 01:18:36.080 in general our tumors that are not  
NOTE Confidence: 0.874251498571429  
01:18:36.080 --> 01:18:38.058 eating very deeply and have no lymph  
NOTE Confidence: 0.874251498571429  
01:18:38.058 --> 01:18:40.119 nodes involved in the approach of those  
NOTE Confidence: 0.874251498571429  
01:18:40.119 --> 01:18:42.059 cancers is typically just observation.  
NOTE Confidence: 0.874251498571429  
01:18:42.060 --> 01:18:44.900 We have thankfully a low risk of recurrence.  
NOTE Confidence: 0.874251498571429  
01:18:44.900 --> 01:18:46.580 There have a high rate of being  
NOTE Confidence: 0.874251498571429  
01:18:46.580 --> 01:18:47.640 cured with surgery alone,  
NOTE Confidence: 0.874251498571429  
01:18:47.640 --> 01:18:50.937 so so we just monitor those patients.  
NOTE Confidence: 0.874251498571429  
01:18:50.940 --> 01:18:52.680 Stage two tumors invade more  
NOTE Confidence: 0.874251498571429  
01:18:52.680 --> 01:18:54.880 deeply into the into the colon,  
NOTE Confidence: 0.874251498571429

01:18:54.880 --> 01:18:56.440 but still have no lymph nodes.  
NOTE Confidence: 0.874251498571429

01:18:56.440 --> 01:18:58.520 And this is where there's a little bit.  
NOTE Confidence: 0.874251498571429

01:18:58.520 --> 01:19:00.704 Or difficulty in in determining the  
NOTE Confidence: 0.874251498571429

01:19:00.704 --> 01:19:02.556 optimal strategy because we understand  
NOTE Confidence: 0.874251498571429

01:19:02.556 --> 01:19:05.228 that there is a higher risk of recurrence  
NOTE Confidence: 0.874251498571429

01:19:05.230 --> 01:19:07.926 and a lot of the efforts are trying  
NOTE Confidence: 0.874251498571429

01:19:07.926 --> 01:19:09.746 to that that we're doing right now.  
NOTE Confidence: 0.874251498571429

01:19:09.750 --> 01:19:11.550 We're trying to identify who are  
NOTE Confidence: 0.874251498571429

01:19:11.550 --> 01:19:13.401 those patients with in stage two  
NOTE Confidence: 0.874251498571429

01:19:13.401 --> 01:19:15.466 that are at the highest risk and  
NOTE Confidence: 0.874251498571429

01:19:15.466 --> 01:19:16.690 potentially offer them treatment  
NOTE Confidence: 0.874251498571429

01:19:16.690 --> 01:19:18.436 to try to reduce that risk.  
NOTE Confidence: 0.874251498571429

01:19:18.440 --> 01:19:22.107 Stage three cancer is now involved  
NOTE Confidence: 0.874251498571429

01:19:22.107 --> 01:19:24.609 lymph nodes and that is concerning  
NOTE Confidence: 0.874251498571429

01:19:24.609 --> 01:19:27.436 because that is the first time or  
NOTE Confidence: 0.874251498571429

01:19:27.436 --> 01:19:29.686 first behavior of a cancer starting

NOTE Confidence: 0.874251498571429

01:19:29.758 --> 01:19:32.031 to spread throughout the body and

NOTE Confidence: 0.874251498571429

01:19:32.031 --> 01:19:34.020 the hope is that we can stop it at

NOTE Confidence: 0.874251498571429

01:19:34.083 --> 01:19:36.039 that point before it does spread

NOTE Confidence: 0.874251498571429

01:19:36.039 --> 01:19:37.929 to distant sites within the body.

NOTE Confidence: 0.874251498571429

01:19:37.930 --> 01:19:40.090 And in this case there is a much

NOTE Confidence: 0.874251498571429

01:19:40.090 --> 01:19:42.176 higher risk and therefore additional

NOTE Confidence: 0.874251498571429

01:19:42.176 --> 01:19:44.636 treatment after surgery is recommended.

NOTE Confidence: 0.874251498571429

01:19:44.640 --> 01:19:47.307 Stage four cancer means that the cancer

NOTE Confidence: 0.874251498571429

01:19:47.307 --> 01:19:49.340 has already involved other organs,

NOTE Confidence: 0.874251498571429

01:19:49.340 --> 01:19:51.080 and that's another topic that

NOTE Confidence: 0.874251498571429

01:19:51.080 --> 01:19:53.400 could be talked about on its own.

NOTE Confidence: 0.874251498571429

01:19:53.400 --> 01:19:56.244 So we're going to skip over that for today.

NOTE Confidence: 0.926800298571429

01:19:59.050 --> 01:20:01.528 So why would we consider more treatment,

NOTE Confidence: 0.926800298571429

01:20:01.530 --> 01:20:02.194 specifically, chemotherapy?

NOTE Confidence: 0.926800298571429

01:20:02.194 --> 01:20:04.186 Well, this graph shows some of

NOTE Confidence: 0.926800298571429

01:20:04.186 --> 01:20:06.094 the risks that are associated with  
NOTE Confidence: 0.926800298571429

01:20:06.094 --> 01:20:07.584 the diagnosis of colon cancer.  
NOTE Confidence: 0.926800298571429

01:20:07.590 --> 01:20:09.546 As I mentioned stage one cancers,  
NOTE Confidence: 0.926800298571429

01:20:09.550 --> 01:20:10.957 I think we have a low risk.  
NOTE Confidence: 0.926800298571429

01:20:10.960 --> 01:20:12.878 The orange bar indicating what is what  
NOTE Confidence: 0.926800298571429

01:20:12.878 --> 01:20:15.187 is the risk of this cancer coming back  
NOTE Confidence: 0.926800298571429

01:20:15.190 --> 01:20:18.158 within the next five years or so,  
NOTE Confidence: 0.926800298571429

01:20:18.160 --> 01:20:19.948 and because the risk is low,  
NOTE Confidence: 0.926800298571429

01:20:19.950 --> 01:20:21.675 there's not really much we  
NOTE Confidence: 0.926800298571429

01:20:21.675 --> 01:20:23.850 can do to improve on that,  
NOTE Confidence: 0.926800298571429

01:20:23.850 --> 01:20:25.986 and so observation is just recommended.  
NOTE Confidence: 0.926800298571429

01:20:25.990 --> 01:20:27.670 But as you go up in stage  
NOTE Confidence: 0.926800298571429

01:20:27.670 --> 01:20:29.118 from stage two to stage 3.  
NOTE Confidence: 0.926800298571429

01:20:29.120 --> 01:20:30.940 That risk significantly climbs which  
NOTE Confidence: 0.926800298571429

01:20:30.940 --> 01:20:33.020 it with the average patient having  
NOTE Confidence: 0.926800298571429

01:20:33.020 --> 01:20:34.840 a stage three cancer having about a

NOTE Confidence: 0.926800298571429

01:20:34.840 --> 01:20:36.660 50% chance of their cancer recurring,

NOTE Confidence: 0.926800298571429

01:20:36.660 --> 01:20:38.442 so we'd like to do something if we can

NOTE Confidence: 0.926800298571429

01:20:38.442 --> 01:20:40.209 to reduce that chance and increase

NOTE Confidence: 0.926800298571429

01:20:40.209 --> 01:20:42.070 those patients chances of being cured.

NOTE Confidence: 0.850638713333333

01:20:44.910 --> 01:20:46.710 So when it comes to this stage two tumors,

NOTE Confidence: 0.850638713333333

01:20:46.710 --> 01:20:48.558 it's a bit more questionable how

NOTE Confidence: 0.850638713333333

01:20:48.558 --> 01:20:51.007 how we decide who is at the higher

NOTE Confidence: 0.850638713333333

01:20:51.007 --> 01:20:53.288 risk within that group and who might

NOTE Confidence: 0.850638713333333

01:20:53.288 --> 01:20:55.529 benefit from additional treatment the

NOTE Confidence: 0.850638713333333

01:20:55.529 --> 01:20:58.081 traditional way we look at this is by

NOTE Confidence: 0.850638713333333

01:20:58.081 --> 01:21:00.166 actually looking at the features of

NOTE Confidence: 0.850638713333333

01:21:00.166 --> 01:21:02.088 the cancer when those samples that

NOTE Confidence: 0.850638713333333

01:21:02.088 --> 01:21:03.762 are removed from from the surgery

NOTE Confidence: 0.850638713333333

01:21:03.762 --> 01:21:05.576 are analyzed in the lab and there

NOTE Confidence: 0.850638713333333

01:21:05.576 --> 01:21:07.049 are certain high risk features that

NOTE Confidence: 0.850638713333333



01:21:07.049 --> 01:21:08.568 might make us think that somebody is  
NOTE Confidence: 0.850638713333333

01:21:08.568 --> 01:21:11.104 at a high enough risk that they would  
NOTE Confidence: 0.850638713333333

01:21:11.104 --> 01:21:12.500 benefit from additional treatment.  
NOTE Confidence: 0.850638713333333

01:21:12.500 --> 01:21:14.954 There are now also more sophisticated  
NOTE Confidence: 0.850638713333333

01:21:14.954 --> 01:21:17.739 ways to help us determine this risk.  
NOTE Confidence: 0.850638713333333

01:21:17.739 --> 01:21:20.420 Some of the first ideas that were  
NOTE Confidence: 0.850638713333333

01:21:20.494 --> 01:21:23.175 developed were to look at the genome  
NOTE Confidence: 0.850638713333333

01:21:23.175 --> 01:21:25.150 within the cancer and specifically  
NOTE Confidence: 0.850638713333333

01:21:25.150 --> 01:21:28.158 at genes that are known to predict a  
NOTE Confidence: 0.850638713333333

01:21:28.160 --> 01:21:30.778 higher risk of the cancer having bad  
NOTE Confidence: 0.850638713333333

01:21:30.778 --> 01:21:32.700 behavior and potentially coming back.  
NOTE Confidence: 0.850638713333333

01:21:32.700 --> 01:21:35.148 I've listed some of the available tests here,  
NOTE Confidence: 0.850638713333333

01:21:35.150 --> 01:21:37.579 and so sometimes this test might be  
NOTE Confidence: 0.850638713333333

01:21:37.579 --> 01:21:39.734 ordered by her oncologist to help  
NOTE Confidence: 0.850638713333333

01:21:39.734 --> 01:21:42.792 him or her with a decision about.  
NOTE Confidence: 0.850638713333333

01:21:42.792 --> 01:21:45.708 Other offer chemotherapy.

NOTE Confidence: 0.850638713333333

01:21:45.710 --> 01:21:47.663 The sort of new frontier that there's

NOTE Confidence: 0.850638713333333

01:21:47.663 --> 01:21:49.995 a lot of interest in is looking at

NOTE Confidence: 0.850638713333333

01:21:49.995 --> 01:21:52.124 whether or not we can detect the

NOTE Confidence: 0.850638713333333

01:21:52.124 --> 01:21:54.343 presence of tumor DNA in your blood.

NOTE Confidence: 0.850638713333333

01:21:54.350 --> 01:21:56.506 People who have a tumor DNA detected

NOTE Confidence: 0.850638713333333

01:21:56.506 --> 01:21:58.986 in their blood are felt to be at a

NOTE Confidence: 0.850638713333333

01:21:58.986 --> 01:22:01.069 higher risk for their cancer recurring,

NOTE Confidence: 0.850638713333333

01:22:01.070 --> 01:22:03.688 and maybe the patients who are best

NOTE Confidence: 0.850638713333333

01:22:03.688 --> 01:22:07.470 served by getting adamant chemotherapy

NOTE Confidence: 0.850638713333333

01:22:07.470 --> 01:22:09.108 if they have stage two disease and

NOTE Confidence: 0.850638713333333

01:22:09.108 --> 01:22:10.796 we'll talk about it a little bit

NOTE Confidence: 0.850638713333333

01:22:10.796 --> 01:22:12.200 later on about clinical trials that

NOTE Confidence: 0.850638713333333

01:22:12.251 --> 01:22:13.167 are looking at this,

NOTE Confidence: 0.850638713333333

01:22:13.170 --> 01:22:15.170 this is not yet the standard of care,

NOTE Confidence: 0.850638713333333

01:22:15.170 --> 01:22:16.394 but appears to be.

NOTE Confidence: 0.850638713333333

01:22:16.394 --> 01:22:19.429 On the cusp of becoming the standard of care.

NOTE Confidence: 0.850638713333333

01:22:19.430 --> 01:22:20.686 And I'm not going to go into this

NOTE Confidence: 0.850638713333333

01:22:20.686 --> 01:22:21.550 in the sake of time,

NOTE Confidence: 0.850638713333333

01:22:21.550 --> 01:22:22.998 but I I had a link down here.

NOTE Confidence: 0.850638713333333

01:22:23.000 --> 01:22:24.890 I was thinking of showing everybody,

NOTE Confidence: 0.850638713333333

01:22:24.890 --> 01:22:26.768 but basically there are also these

NOTE Confidence: 0.850638713333333

01:22:26.768 --> 01:22:28.605 normal grams or calculators that that

NOTE Confidence: 0.850638713333333

01:22:28.605 --> 01:22:30.446 we can use as medical oncologists where

NOTE Confidence: 0.850638713333333

01:22:30.446 --> 01:22:32.302 we can input information about the

NOTE Confidence: 0.850638713333333

01:22:32.302 --> 01:22:34.141 the patient and the patient's cancer

NOTE Confidence: 0.850638713333333

01:22:34.141 --> 01:22:36.760 to come up with a risk score to help

NOTE Confidence: 0.850638713333333

01:22:36.833 --> 01:22:39.068 us guide our treatment decisions.

NOTE Confidence: 0.850638713333333

01:22:39.070 --> 01:22:40.430 So there's actually something that's

NOTE Confidence: 0.850638713333333

01:22:40.430 --> 01:22:42.019 available for patients to access as

NOTE Confidence: 0.850638713333333

01:22:42.019 --> 01:22:43.467 well so they can also go along through

NOTE Confidence: 0.850638713333333

01:22:43.467 --> 01:22:45.076 this with their with their own colleges.

NOTE Confidence: 0.850638713333333

01:22:45.080 --> 01:22:46.504 And I've done this with many patients in

NOTE Confidence: 0.850638713333333

01:22:46.504 --> 01:22:47.997 the past to help us with our decisions.

NOTE Confidence: 0.915919533333334

01:22:51.680 --> 01:22:53.696 So when somebody does need chemotherapy,

NOTE Confidence: 0.915919533333334

01:22:53.700 --> 01:22:55.275 what are the drugs that we use?

NOTE Confidence: 0.915919533333334

01:22:55.280 --> 01:22:57.032 Well, the mainstay in the backbone

NOTE Confidence: 0.915919533333334

01:22:57.032 --> 01:22:59.059 of treatment are our class of drugs,

NOTE Confidence: 0.915919533333334

01:22:59.060 --> 01:23:01.876 which we call floral, permittees and it

NOTE Confidence: 0.915919533333334

01:23:01.876 --> 01:23:04.697 comes in both intravenous and oral forms.

NOTE Confidence: 0.915919533333334

01:23:04.700 --> 01:23:07.193 In the US, we primarily use these two forms,

NOTE Confidence: 0.915919533333334

01:23:07.200 --> 01:23:09.570 the intravenous being called 5 fluorouracil

NOTE Confidence: 0.915919533333334

01:23:09.570 --> 01:23:12.602 or five FU in the oral form being called

NOTE Confidence: 0.915919533333334

01:23:12.602 --> 01:23:15.538 keep side mean or the brand name is valoda.

NOTE Confidence: 0.915919533333334

01:23:15.540 --> 01:23:17.165 Commonly the intravenous form of

NOTE Confidence: 0.915919533333334

01:23:17.165 --> 01:23:19.230 these drugs is combined with something

NOTE Confidence: 0.915919533333334

01:23:19.230 --> 01:23:20.388 called local board.

NOTE Confidence: 0.915919533333334

01:23:20.390 --> 01:23:21.806 Which is not a chemotherapy drug,  
NOTE Confidence: 0.9159195333333334

01:23:21.810 --> 01:23:23.098 but actually an adjunct.  
NOTE Confidence: 0.9159195333333334

01:23:23.098 --> 01:23:26.262 It's actually a form of folic acid that helps  
NOTE Confidence: 0.9159195333333334

01:23:26.262 --> 01:23:29.524 the drug better target its target enzyme,  
NOTE Confidence: 0.9159195333333334

01:23:29.530 --> 01:23:30.574 which is what actually  
NOTE Confidence: 0.9159195333333334

01:23:30.574 --> 01:23:31.618 kills the cancer cells,  
NOTE Confidence: 0.9159195333333334

01:23:31.620 --> 01:23:34.071 so it improves the efficacy with  
NOTE Confidence: 0.9159195333333334

01:23:34.071 --> 01:23:37.197 adding little to no increase toxicity.  
NOTE Confidence: 0.9159195333333334

01:23:37.200 --> 01:23:40.240 The other drug that is commonly used is  
NOTE Confidence: 0.9159195333333334

01:23:40.240 --> 01:23:42.498 something called oxaliplatin or locks.  
NOTE Confidence: 0.9159195333333334

01:23:42.500 --> 01:23:44.060 It in is the brand,  
NOTE Confidence: 0.9159195333333334

01:23:44.060 --> 01:23:47.183 and this is a drug that can add a little bit  
NOTE Confidence: 0.9159195333333334

01:23:47.183 --> 01:23:50.055 more to the backbone of the floor perimeter.  
NOTE Confidence: 0.9159195333333334

01:23:50.060 --> 01:23:52.292 And for patients who are at the highest risk,  
NOTE Confidence: 0.9159195333333334

01:23:52.300 --> 01:23:54.750 the combination has been shown to to  
NOTE Confidence: 0.9159195333333334

01:23:54.750 --> 01:23:57.330 be better in terms of helping them

NOTE Confidence: 0.915919533333334  
01:23:57.330 --> 01:24:00.020 have a higher chance of being cured,  
NOTE Confidence: 0.915919533333334  
01:24:00.020 --> 01:24:01.924 and when we combine these drugs we  
NOTE Confidence: 0.915919533333334  
01:24:01.924 --> 01:24:03.578 use the following acronyms that you  
NOTE Confidence: 0.915919533333334  
01:24:03.578 --> 01:24:05.405 may hear when you talk with your  
NOTE Confidence: 0.915919533333334  
01:24:05.465 --> 01:24:06.459 medical oncologist.  
NOTE Confidence: 0.915919533333334  
01:24:06.460 --> 01:24:07.280 When you combine the.  
NOTE Confidence: 0.915919533333334  
01:24:07.280 --> 01:24:08.770 Drive if you in the oxalic plan,  
NOTE Confidence: 0.915919533333334  
01:24:08.770 --> 01:24:10.820 we call that regimen folfox,  
NOTE Confidence: 0.915919533333334  
01:24:10.820 --> 01:24:11.900 and when you combine the Cape  
NOTE Confidence: 0.915919533333334  
01:24:11.900 --> 01:24:13.289 side to being in the oxaliplatin,  
NOTE Confidence: 0.915919533333334  
01:24:13.290 --> 01:24:14.808 we call that regimen key box.  
NOTE Confidence: 0.915919533333334  
01:24:14.810 --> 01:24:16.378 Or are you sometimes might hear AZ  
NOTE Confidence: 0.915919533333334  
01:24:16.378 --> 01:24:18.318 locks if they use the brand name Xeloda?  
NOTE Confidence: 0.7884673  
01:24:22.030 --> 01:24:24.245 So what are the benefits of  
NOTE Confidence: 0.7884673  
01:24:24.245 --> 01:24:25.909 chemotherapy and what are the potential  
NOTE Confidence: 0.7884673

01:24:25.909 --> 01:24:27.357 downsides or adverse effects?  
NOTE Confidence: 0.7884673

01:24:27.360 --> 01:24:29.538 Well, the benefit as has been  
NOTE Confidence: 0.7884673

01:24:29.538 --> 01:24:31.510 shown in multiple clinical trials,  
NOTE Confidence: 0.7884673

01:24:31.510 --> 01:24:33.942 is that it reduces the risk of cancer  
NOTE Confidence: 0.7884673

01:24:33.942 --> 01:24:35.854 coming back by about 30 to 35%.  
NOTE Confidence: 0.7884673

01:24:35.854 --> 01:24:37.674 So that's increasing your chance  
NOTE Confidence: 0.7884673

01:24:37.674 --> 01:24:39.929 of being cured of the cancer.  
NOTE Confidence: 0.7884673

01:24:39.930 --> 01:24:40.396 Unfortunately,  
NOTE Confidence: 0.7884673

01:24:40.396 --> 01:24:42.260 chemotherapy does is associated  
NOTE Confidence: 0.7884673

01:24:42.260 --> 01:24:44.590 with some significant side effects,  
NOTE Confidence: 0.7884673

01:24:44.590 --> 01:24:46.310 and I have this list I've listed here.  
NOTE Confidence: 0.7884673

01:24:46.310 --> 01:24:48.170 I was by no means inclusive,  
NOTE Confidence: 0.7884673

01:24:48.170 --> 01:24:50.792 but some of the more common  
NOTE Confidence: 0.7884673

01:24:50.792 --> 01:24:52.124 effects that we see.  
NOTE Confidence: 0.7884673

01:24:52.124 --> 01:24:53.912 I'll highlight a couple in particular,  
NOTE Confidence: 0.7884673

01:24:53.920 --> 01:24:56.544 I would say fatigue is by far the

NOTE Confidence: 0.7884673

01:24:56.544 --> 01:24:58.879 most common effective chemotherapy

NOTE Confidence: 0.7884673

01:24:58.880 --> 01:25:00.488 and the peripheral neuropathy,

NOTE Confidence: 0.7884673

01:25:00.488 --> 01:25:03.340 which is in effect on the nerves

NOTE Confidence: 0.7884673

01:25:03.340 --> 01:25:05.853 that are in the periphery of our

NOTE Confidence: 0.7884673

01:25:05.853 --> 01:25:08.087 bodies and our fingers and toes

NOTE Confidence: 0.7884673

01:25:08.090 --> 01:25:10.390 can can be very problematic,

NOTE Confidence: 0.7884673

01:25:10.390 --> 01:25:12.042 and one of the.

NOTE Confidence: 0.7884673

01:25:12.042 --> 01:25:14.520 Potential side effects that we can

NOTE Confidence: 0.7884673

01:25:14.520 --> 01:25:17.075 that that may result in a treatment

NOTE Confidence: 0.7884673

01:25:17.075 --> 01:25:20.480 changes or or limit the amount of treatment.

NOTE Confidence: 0.7884673

01:25:20.480 --> 01:25:22.566 Most of these are monitored or all

NOTE Confidence: 0.7884673

01:25:22.566 --> 01:25:25.034 of these I should say are monitored

NOTE Confidence: 0.7884673

01:25:25.034 --> 01:25:27.296 very closely and can be managed.

NOTE Confidence: 0.7884673

01:25:27.300 --> 01:25:29.110 There are rare more severe

NOTE Confidence: 0.7884673

01:25:29.110 --> 01:25:30.558 side effects listed here,

NOTE Confidence: 0.7884673



01:25:30.560 --> 01:25:32.048 but we also monitor very closely  
NOTE Confidence: 0.7884673

01:25:32.048 --> 01:25:33.376 for those who make treatment  
NOTE Confidence: 0.7884673

01:25:33.376 --> 01:25:35.044 as safely as safe as possible.  
NOTE Confidence: 0.929705616428571

01:25:37.880 --> 01:25:39.833 However, we're always looking to see how  
NOTE Confidence: 0.929705616428571

01:25:39.833 --> 01:25:42.037 can we improve the toxicity of treatment,  
NOTE Confidence: 0.929705616428571

01:25:42.040 --> 01:25:43.984 and I would say the number one thing that  
NOTE Confidence: 0.929705616428571

01:25:43.984 --> 01:25:46.220 we do is by maximizing our supportive care.  
NOTE Confidence: 0.929705616428571

01:25:46.220 --> 01:25:48.005 So these are medicines that we might  
NOTE Confidence: 0.929705616428571

01:25:48.005 --> 01:25:50.451 give you or use to help prevent or reduce  
NOTE Confidence: 0.929705616428571

01:25:50.451 --> 01:25:52.398 the side effects as well as support  
NOTE Confidence: 0.929705616428571

01:25:52.398 --> 01:25:54.620 services that we have to help as well.  
NOTE Confidence: 0.929705616428571

01:25:54.620 --> 01:25:56.624 For example, if somebody really is  
NOTE Confidence: 0.929705616428571

01:25:56.624 --> 01:25:58.520 struggling with appetite during treatment,  
NOTE Confidence: 0.929705616428571

01:25:58.520 --> 01:26:00.410 then we have dietitians that work with  
NOTE Confidence: 0.929705616428571

01:26:00.410 --> 01:26:02.404 us that can become involved and to  
NOTE Confidence: 0.929705616428571

01:26:02.404 --> 01:26:04.625 help make sure the patient is getting

NOTE Confidence: 0.929705616428571

01:26:04.625 --> 01:26:06.529 the appropriate nutritional support.

NOTE Confidence: 0.929705616428571

01:26:06.530 --> 01:26:09.110 Through their through their treatment,

NOTE Confidence: 0.929705616428571

01:26:09.110 --> 01:26:10.635 there's also always dose adjustments

NOTE Confidence: 0.929705616428571

01:26:10.635 --> 01:26:11.855 that can be made.

NOTE Confidence: 0.929705616428571

01:26:11.860 --> 01:26:14.500 Chemotherapy is typically tailored

NOTE Confidence: 0.929705616428571

01:26:14.500 --> 01:26:16.054 individually to the patient.

NOTE Confidence: 0.929705616428571

01:26:16.054 --> 01:26:18.140 We use variables such as the patient

NOTE Confidence: 0.929705616428571

01:26:18.203 --> 01:26:20.113 height and weight and laboratory

NOTE Confidence: 0.929705616428571

01:26:20.113 --> 01:26:22.435 results to adjust your dose even

NOTE Confidence: 0.929705616428571

01:26:22.435 --> 01:26:23.983 sometimes treatment the treatment,

NOTE Confidence: 0.929705616428571

01:26:23.990 --> 01:26:25.878 but sometimes we don't get it exactly right

NOTE Confidence: 0.929705616428571

01:26:25.878 --> 01:26:27.960 and we have to make an adjustment there.

NOTE Confidence: 0.929705616428571

01:26:27.960 --> 01:26:30.382 A lowering the dose or or altering

NOTE Confidence: 0.929705616428571

01:26:30.382 --> 01:26:32.459 the schedule of the treatment.

NOTE Confidence: 0.929705616428571

01:26:32.460 --> 01:26:34.420 The other goal is to use the

NOTE Confidence: 0.929705616428571

01:26:34.420 --> 01:26:35.260 minimum treatment necessary.  
NOTE Confidence: 0.929705616428571

01:26:35.260 --> 01:26:39.100 Now that should be self explanatory,  
NOTE Confidence: 0.929705616428571

01:26:39.100 --> 01:26:42.502 but a lot of like what Doctor do had  
NOTE Confidence: 0.929705616428571

01:26:42.502 --> 01:26:45.343 just mentioned a lot of the treatments,  
NOTE Confidence: 0.929705616428571

01:26:45.343 --> 01:26:47.744 doses and amount of treatment we give  
NOTE Confidence: 0.929705616428571

01:26:47.744 --> 01:26:49.790 are somewhat historical and with more  
NOTE Confidence: 0.929705616428571

01:26:49.790 --> 01:26:52.100 study overtime we found that maybe maybe  
NOTE Confidence: 0.929705616428571

01:26:52.100 --> 01:26:54.444 we can adjust or reduce the amount of  
NOTE Confidence: 0.929705616428571

01:26:54.444 --> 01:26:55.940 treatment and still get the same effects.  
NOTE Confidence: 0.941450300833333

01:26:59.350 --> 01:27:00.491 So when we look at whether or  
NOTE Confidence: 0.941450300833333

01:27:00.491 --> 01:27:01.850 not we can reduce chemotherapy,  
NOTE Confidence: 0.941450300833333

01:27:01.850 --> 01:27:03.668 there are some studies that can  
NOTE Confidence: 0.941450300833333

01:27:03.668 --> 01:27:05.810 help inform us on this decision.  
NOTE Confidence: 0.941450300833333

01:27:05.810 --> 01:27:07.784 So initially some big clinical trials  
NOTE Confidence: 0.941450300833333

01:27:07.784 --> 01:27:10.436 set the standard that we would give six  
NOTE Confidence: 0.941450300833333

01:27:10.436 --> 01:27:12.344 months of chemotherapy for patients who

NOTE Confidence: 0.941450300833333

01:27:12.406 --> 01:27:14.527 are at the highest risk of recurrence.

NOTE Confidence: 0.941450300833333

01:27:14.530 --> 01:27:16.888 And this is what had been

NOTE Confidence: 0.941450300833333

01:27:16.888 --> 01:27:19.100 done for for many years.

NOTE Confidence: 0.941450300833333

01:27:19.100 --> 01:27:22.355 However, analysis of more and more data

NOTE Confidence: 0.941450300833333

01:27:22.355 --> 01:27:24.743 coming from multiple trials looking

NOTE Confidence: 0.941450300833333

01:27:24.743 --> 01:27:27.828 at the treatment of colon cancer has

NOTE Confidence: 0.941450300833333

01:27:27.828 --> 01:27:29.916 called some of this into question,

NOTE Confidence: 0.941450300833333

01:27:29.920 --> 01:27:31.555 and in particular,

NOTE Confidence: 0.941450300833333

01:27:31.555 --> 01:27:34.096 this idea group collaboration looked

NOTE Confidence: 0.941450300833333

01:27:34.096 --> 01:27:36.232 at this fairly recently and challenged

NOTE Confidence: 0.941450300833333

01:27:36.232 --> 01:27:38.246 whether six months should be the

NOTE Confidence: 0.941450300833333

01:27:38.246 --> 01:27:40.022 standard of care for all patients.

NOTE Confidence: 0.941450300833333

01:27:40.030 --> 01:27:41.806 What they did is they looked at a

NOTE Confidence: 0.941450300833333

01:27:41.806 --> 01:27:43.349 patient in stratified them into low

NOTE Confidence: 0.941450300833333

01:27:43.349 --> 01:27:45.529 and high risk groups to see if there

NOTE Confidence: 0.941450300833333

01:27:45.529 --> 01:27:47.191 was a difference in whether outcomes  
NOTE Confidence: 0.941450300833333

01:27:47.191 --> 01:27:48.760 were just as good with less treatment,  
NOTE Confidence: 0.941450300833333

01:27:48.760 --> 01:27:49.968 as with more treatment.  
NOTE Confidence: 0.941450300833333

01:27:49.968 --> 01:27:52.161 They also looked at the impact of  
NOTE Confidence: 0.941450300833333

01:27:52.161 --> 01:27:53.746 the intensity of the treatment.  
NOTE Confidence: 0.941450300833333

01:27:53.750 --> 01:27:56.326 How many doses were given for example,  
NOTE Confidence: 0.941450300833333

01:27:56.330 --> 01:27:58.094 and also looked at whether their  
NOTE Confidence: 0.941450300833333

01:27:58.094 --> 01:28:00.308 differences based on the age of the patient,  
NOTE Confidence: 0.941450300833333

01:28:00.310 --> 01:28:01.570 particular or their patients over  
NOTE Confidence: 0.941450300833333

01:28:01.570 --> 01:28:02.578 the age of 7.  
NOTE Confidence: 0.774671662

01:28:06.270 --> 01:28:08.580 In these studies, they died.  
NOTE Confidence: 0.774671662

01:28:08.580 --> 01:28:10.518 They sorry, defined low risk patients  
NOTE Confidence: 0.774671662

01:28:10.518 --> 01:28:13.282 as those who have three or fewer lymph  
NOTE Confidence: 0.774671662

01:28:13.282 --> 01:28:15.042 nodes involved with their cancer.  
NOTE Confidence: 0.774671662

01:28:15.050 --> 01:28:16.832 No evidence that their cancer had  
NOTE Confidence: 0.774671662

01:28:16.832 --> 01:28:18.805 perforated the colon or caused an

NOTE Confidence: 0.774671662

01:28:18.805 --> 01:28:20.410 obstruction and no advanced tumors.

NOTE Confidence: 0.774671662

01:28:20.410 --> 01:28:21.650 In meeting through that

NOTE Confidence: 0.774671662

01:28:21.650 --> 01:28:23.010 outer layer of the colon.

NOTE Confidence: 0.774671662

01:28:23.010 --> 01:28:25.666 As I mentioned before and in those patients,

NOTE Confidence: 0.774671662

01:28:25.670 --> 01:28:28.134 they found that three months of the

NOTE Confidence: 0.774671662

01:28:28.134 --> 01:28:29.915 regimen with capecitabine and oxaliplatin

NOTE Confidence: 0.774671662

01:28:29.915 --> 01:28:32.246 had the same efficacy as six months,

NOTE Confidence: 0.774671662

01:28:32.250 --> 01:28:33.225 making three months.

NOTE Confidence: 0.774671662

01:28:33.225 --> 01:28:35.500 The new standard of care for those.

NOTE Confidence: 0.774671662

01:28:35.500 --> 01:28:36.862 Patients this, interestingly,

NOTE Confidence: 0.774671662

01:28:36.862 --> 01:28:39.132 was not true for regimen

NOTE Confidence: 0.774671662

01:28:39.132 --> 01:28:40.900 that used for uracil,

NOTE Confidence: 0.774671662

01:28:40.900 --> 01:28:41.956 with the oxaliplatin,

NOTE Confidence: 0.774671662

01:28:41.956 --> 01:28:44.068 it's not entirely clear why there

NOTE Confidence: 0.774671662

01:28:44.068 --> 01:28:45.978 was a small difference there,

NOTE Confidence: 0.774671662

01:28:45.980 --> 01:28:48.056 but for now the keep side,  
NOTE Confidence: 0.774671662

01:28:48.060 --> 01:28:49.360 I mean based regimen,  
NOTE Confidence: 0.774671662

01:28:49.360 --> 01:28:52.107 is that regiment of choice for people who  
NOTE Confidence: 0.774671662

01:28:52.107 --> 01:28:54.648 are eligible for a three month treatment  
NOTE Confidence: 0.774671662

01:28:54.648 --> 01:28:56.768 rather than a six month treatment.  
NOTE Confidence: 0.774671662

01:28:56.770 --> 01:28:58.930 Now, in patients who are older over 70,  
NOTE Confidence: 0.774671662

01:28:58.930 --> 01:29:00.772 there's been some study on this  
NOTE Confidence: 0.774671662

01:29:00.772 --> 01:29:02.869 already before and in this database.  
NOTE Confidence: 0.774671662

01:29:02.870 --> 01:29:05.174 It was also not entirely clear  
NOTE Confidence: 0.774671662

01:29:05.174 --> 01:29:07.910 that there was any any difference  
NOTE Confidence: 0.774671662

01:29:07.910 --> 01:29:10.710 between younger and older patients.  
NOTE Confidence: 0.774671662

01:29:10.710 --> 01:29:11.105 However,  
NOTE Confidence: 0.774671662

01:29:11.105 --> 01:29:12.290 the trends overall,  
NOTE Confidence: 0.774671662

01:29:12.290 --> 01:29:14.660 or that the likely benefit to  
NOTE Confidence: 0.774671662

01:29:14.737 --> 01:29:17.327 combination chemotherapy may be small,  
NOTE Confidence: 0.774671662

01:29:17.330 --> 01:29:19.535 and that the risk of toxicity is

NOTE Confidence: 0.774671662

01:29:19.535 --> 01:29:21.530 is increased in older patients.

NOTE Confidence: 0.774671662

01:29:21.530 --> 01:29:23.119 So this is something that really needs

NOTE Confidence: 0.774671662

01:29:23.119 --> 01:29:24.652 to be an individualized discussion

NOTE Confidence: 0.774671662

01:29:24.652 --> 01:29:27.046 between the oncologists and the patient.

NOTE Confidence: 0.774671662

01:29:27.050 --> 01:29:29.456 And takes into account multiple factors,

NOTE Confidence: 0.774671662

01:29:29.460 --> 01:29:30.860 specifically the patients performance.

NOTE Confidence: 0.774671662

01:29:30.860 --> 01:29:32.960 That is how functional they are,

NOTE Confidence: 0.774671662

01:29:32.960 --> 01:29:35.588 what other medical comorbidities or or

NOTE Confidence: 0.774671662

01:29:35.588 --> 01:29:38.079 other medical diseases that they have.

NOTE Confidence: 0.774671662

01:29:38.080 --> 01:29:41.112 The other thing they looked at here is the,

NOTE Confidence: 0.774671662

01:29:41.112 --> 01:29:43.376 specifically the drug oxaliplatin,

NOTE Confidence: 0.774671662

01:29:43.380 --> 01:29:45.834 and when they looked at patients

NOTE Confidence: 0.774671662

01:29:45.834 --> 01:29:48.417 who were planning to receive six

NOTE Confidence: 0.774671662

01:29:48.417 --> 01:29:51.009 months of chemotherapy but had to

NOTE Confidence: 0.774671662

01:29:51.009 --> 01:29:53.628 have their doses of their axali,

NOTE Confidence: 0.774671662



01:29:53.628 --> 01:29:55.813 Platten stops or reduced because  
NOTE Confidence: 0.774671662

01:29:55.813 --> 01:29:58.420 of toxicity if they if they  
NOTE Confidence: 0.774671662

01:29:58.420 --> 01:30:00.842 received at least 50% of the doses,  
NOTE Confidence: 0.774671662

01:30:00.842 --> 01:30:03.455 they had the same outcomes as those who  
NOTE Confidence: 0.774671662

01:30:03.455 --> 01:30:05.870 received all the doses over six months.  
NOTE Confidence: 0.774671662

01:30:05.870 --> 01:30:06.986 So this lead.  
NOTE Confidence: 0.774671662

01:30:06.986 --> 01:30:08.846 To the thought that perhaps  
NOTE Confidence: 0.774671662

01:30:08.846 --> 01:30:10.729 in this drug at least,  
NOTE Confidence: 0.774671662

01:30:10.730 --> 01:30:12.335 the oxaliplatin could be reduced  
NOTE Confidence: 0.774671662

01:30:12.335 --> 01:30:13.940 as part of this treatment.  
NOTE Confidence: 0.96943897

01:30:16.400 --> 01:30:17.680 And why does this matter?  
NOTE Confidence: 0.96943897

01:30:17.680 --> 01:30:18.661 Well, in particular,  
NOTE Confidence: 0.96943897

01:30:18.661 --> 01:30:20.623 reducing the oxaliplatin has been shown  
NOTE Confidence: 0.96943897

01:30:20.623 --> 01:30:22.814 to cut the overall risk of significant  
NOTE Confidence: 0.96943897

01:30:22.814 --> 01:30:24.440 adverse effects by 1/3 to 1/2,  
NOTE Confidence: 0.96943897

01:30:24.440 --> 01:30:26.492 so it would be very helpful

NOTE Confidence: 0.96943897

01:30:26.492 --> 01:30:28.160 if we could reduce it.

NOTE Confidence: 0.96943897

01:30:28.160 --> 01:30:30.694 Solid plan is the drug that causes

NOTE Confidence: 0.96943897

01:30:30.694 --> 01:30:32.192 that peripheral neuropathy symptom

NOTE Confidence: 0.96943897

01:30:32.192 --> 01:30:34.642 I mentioned and it can lead to

NOTE Confidence: 0.96943897

01:30:34.642 --> 01:30:35.880 permanent neurologic effects.

NOTE Confidence: 0.96943897

01:30:35.880 --> 01:30:37.500 Including this,

NOTE Confidence: 0.96943897

01:30:37.500 --> 01:30:42.360 including functional issues related to this.

NOTE Confidence: 0.96943897

01:30:42.360 --> 01:30:45.360 The risk of to show you the difference,

NOTE Confidence: 0.96943897

01:30:45.360 --> 01:30:46.800 the risk of peripheral neuropathy

NOTE Confidence: 0.96943897

01:30:46.800 --> 01:30:48.240 with only three months of

NOTE Confidence: 0.96943897

01:30:48.292 --> 01:30:49.660 the drug was only about 10%,

NOTE Confidence: 0.96943897

01:30:49.660 --> 01:30:51.860 whereas if you were to get a full six months,

NOTE Confidence: 0.96943897

01:30:51.860 --> 01:30:54.416 that risk goes up to 30%.

NOTE Confidence: 0.96943897

01:30:54.420 --> 01:30:55.964 Now this is the best data we've had

NOTE Confidence: 0.96943897

01:30:55.964 --> 01:30:57.820 so far and it's certainly provocative,

NOTE Confidence: 0.96943897

01:30:57.820 --> 01:30:59.340 and I think becoming incorporated  
NOTE Confidence: 0.96943897

01:30:59.340 --> 01:31:00.860 more and more into practice.  
NOTE Confidence: 0.96943897

01:31:00.860 --> 01:31:02.774 But there may be individual reasons  
NOTE Confidence: 0.96943897

01:31:02.774 --> 01:31:04.840 for each patient that they should  
NOTE Confidence: 0.96943897

01:31:04.840 --> 01:31:06.675 discuss with their oncologists why  
NOTE Confidence: 0.96943897

01:31:06.680 --> 01:31:08.678 treatment may not be recommended to  
NOTE Confidence: 0.96943897

01:31:08.678 --> 01:31:11.039 be reduced in their particular case.  
NOTE Confidence: 0.8830054285

01:31:13.900 --> 01:31:16.462 So in summary, patients with low risk  
NOTE Confidence: 0.8830054285

01:31:16.462 --> 01:31:19.172 colon cancers can be treated with three  
NOTE Confidence: 0.8830054285

01:31:19.172 --> 01:31:21.488 months of chemotherapy instead of 6.  
NOTE Confidence: 0.8830054285

01:31:21.490 --> 01:31:23.185 Patients who are older should  
NOTE Confidence: 0.8830054285

01:31:23.185 --> 01:31:24.880 discuss with their oncologists and  
NOTE Confidence: 0.8830054285

01:31:24.940 --> 01:31:26.692 be counseled about the risk versus  
NOTE Confidence: 0.8830054285

01:31:26.692 --> 01:31:28.252 benefit of the using combination  
NOTE Confidence: 0.8830054285

01:31:28.252 --> 01:31:29.947 chemotherapy rather than just using  
NOTE Confidence: 0.8830054285

01:31:29.947 --> 01:31:33.920 one of the floor remedy drugs alone.

NOTE Confidence: 0.8830054285

01:31:33.920 --> 01:31:35.316 Patients who experience neuropathy

NOTE Confidence: 0.8830054285

01:31:35.316 --> 01:31:37.410 during their treatment may not derive

NOTE Confidence: 0.8830054285

01:31:37.459 --> 01:31:39.175 much benefit from more than three

NOTE Confidence: 0.8830054285

01:31:39.175 --> 01:31:40.610 months of the oxaliplatin drug,

NOTE Confidence: 0.8830054285

01:31:40.610 --> 01:31:42.978 and so it appears that it is safe

NOTE Confidence: 0.8830054285

01:31:42.978 --> 01:31:45.334 and does not affect outcomes if we

NOTE Confidence: 0.8830054285

01:31:45.334 --> 01:31:48.398 have to stop that drug early due to

NOTE Confidence: 0.8830054285

01:31:48.398 --> 01:31:50.558 the risk of worsening neurotoxicity.

NOTE Confidence: 0.8830054285

01:31:50.560 --> 01:31:53.116 And patients who tolerate the oxaliplatin,

NOTE Confidence: 0.8830054285

01:31:53.120 --> 01:31:55.025 perhaps should continue until we

NOTE Confidence: 0.8830054285

01:31:55.025 --> 01:31:57.236 have more information and more data

NOTE Confidence: 0.8830054285

01:31:57.236 --> 01:31:59.648 on this on an individualized basis,

NOTE Confidence: 0.8830054285

01:31:59.648 --> 01:32:02.540 the risk really should be discussed

NOTE Confidence: 0.8830054285

01:32:02.624 --> 01:32:05.035 between you and your oncologists and

NOTE Confidence: 0.8830054285

01:32:05.035 --> 01:32:06.910 individualize to your particular case.

NOTE Confidence: 0.926055622608696

01:32:09.670 --> 01:32:11.820 So I wanted to just take a minute to talk  
NOTE Confidence: 0.926055622608696

01:32:11.878 --> 01:32:13.789 about some future directions and give a  
NOTE Confidence: 0.926055622608696

01:32:13.789 --> 01:32:16.028 plug for our clinical research efforts,  
NOTE Confidence: 0.926055622608696

01:32:16.030 --> 01:32:18.350 which at El we have a very robust  
NOTE Confidence: 0.926055622608696

01:32:18.350 --> 01:32:19.742 clinical trial portfolio and  
NOTE Confidence: 0.926055622608696

01:32:19.742 --> 01:32:21.968 always trying to advance the field.  
NOTE Confidence: 0.926055622608696

01:32:21.970 --> 01:32:24.634 The first two studies on to talk about  
NOTE Confidence: 0.926055622608696

01:32:24.634 --> 01:32:27.248 here are ones that are available here  
NOTE Confidence: 0.926055622608696

01:32:27.248 --> 01:32:29.796 at Yale for our patients and one of  
NOTE Confidence: 0.926055622608696

01:32:29.796 --> 01:32:31.350 the ways we're looking to improve the  
NOTE Confidence: 0.926055622608696

01:32:31.397 --> 01:32:33.049 chances of being of a patients being  
NOTE Confidence: 0.926055622608696

01:32:33.049 --> 01:32:35.139 cured of their colorectal cancer is by  
NOTE Confidence: 0.926055622608696

01:32:35.139 --> 01:32:36.809 adding immunotherapy to their treatments.  
NOTE Confidence: 0.926055622608696

01:32:36.810 --> 01:32:39.036 This is a very hot topic.  
NOTE Confidence: 0.926055622608696

01:32:39.040 --> 01:32:40.944 And as a real breakthrough in the  
NOTE Confidence: 0.926055622608696

01:32:40.944 --> 01:32:42.379 treatment of cancer in general,

NOTE Confidence: 0.926055622608696  
01:32:42.380 --> 01:32:43.868 and in particular in colon cancer,  
NOTE Confidence: 0.926055622608696  
01:32:43.870 --> 01:32:45.322 it appears to be highly effective  
NOTE Confidence: 0.926055622608696  
01:32:45.322 --> 01:32:46.851 for patients that have what is  
NOTE Confidence: 0.926055622608696  
01:32:46.851 --> 01:32:47.628 called Linda Syndrome,  
NOTE Confidence: 0.926055622608696  
01:32:47.630 --> 01:32:50.248 which is a deficiency in DNA repair.  
NOTE Confidence: 0.926055622608696  
01:32:50.250 --> 01:32:52.462 So we have ongoing trials looking at  
NOTE Confidence: 0.926055622608696  
01:32:52.462 --> 01:32:54.854 adding these drugs to see if we can  
NOTE Confidence: 0.926055622608696  
01:32:54.854 --> 01:32:56.640 increase their chances of being cured.  
NOTE Confidence: 0.926055622608696  
01:32:56.640 --> 01:32:58.368 We also have for us looking at the  
NOTE Confidence: 0.926055622608696  
01:32:58.368 --> 01:33:00.194 use of the circulating tumor DNA  
NOTE Confidence: 0.926055622608696  
01:33:00.194 --> 01:33:02.192 testing that I mentioned before using  
NOTE Confidence: 0.926055622608696  
01:33:02.249 --> 01:33:04.174 that to help stratify the risk for  
NOTE Confidence: 0.926055622608696  
01:33:04.174 --> 01:33:06.760 patients who have stage 2 colon cancer.  
NOTE Confidence: 0.926055622608696  
01:33:06.760 --> 01:33:07.911 Where, as I mentioned,  
NOTE Confidence: 0.926055622608696  
01:33:07.911 --> 01:33:09.333 there's a bit more ambiguity about.  
NOTE Confidence: 0.926055622608696

01:33:09.340 --> 01:33:11.818 Who may benefit and who may not

NOTE Confidence: 0.926055622608696

01:33:11.818 --> 01:33:12.880 benefit from chemotherapy?

NOTE Confidence: 0.926055622608696

01:33:12.880 --> 01:33:14.458 In other centers they are looking

NOTE Confidence: 0.926055622608696

01:33:14.458 --> 01:33:16.399 at things like adding a third drug

NOTE Confidence: 0.926055622608696

01:33:16.399 --> 01:33:17.519 to the chemotherapy regimen,

NOTE Confidence: 0.926055622608696

01:33:17.520 --> 01:33:19.802 so this is in particular may be

NOTE Confidence: 0.926055622608696

01:33:19.802 --> 01:33:21.759 helpful for higher risk patients.

NOTE Confidence: 0.926055622608696

01:33:21.760 --> 01:33:23.992 And there's also trials looking at

NOTE Confidence: 0.926055622608696

01:33:23.992 --> 01:33:25.480 adamant cancer vaccine therapy.

NOTE Confidence: 0.926055622608696

01:33:25.480 --> 01:33:27.464 Another form of immunotherapy.

NOTE Confidence: 0.926055622608696

01:33:27.464 --> 01:33:27.960 Again,

NOTE Confidence: 0.926055622608696

01:33:27.960 --> 01:33:30.690 trying to reduce recurrences and

NOTE Confidence: 0.926055622608696

01:33:30.690 --> 01:33:33.420 improve chances of being cured.

NOTE Confidence: 0.926055622608696

01:33:33.420 --> 01:33:35.180 So I think I'll finish there and I

NOTE Confidence: 0.926055622608696

01:33:35.180 --> 01:33:36.926 thank you all for your attention and

NOTE Confidence: 0.926055622608696

01:33:36.926 --> 01:33:38.556 I'll be happy to answer questions

NOTE Confidence: 0.926055622608696

01:33:38.556 --> 01:33:40.488 and look forward to the discussion.

NOTE Confidence: 0.84358317

01:33:43.760 --> 01:33:47.368 Alright. Thank you Justin

NOTE Confidence: 0.84358317

01:33:47.368 --> 01:33:49.698 that was that was great.

NOTE Confidence: 0.84358317

01:33:49.700 --> 01:33:52.828 I think we've we've gone a long time

NOTE Confidence: 0.84358317

01:33:52.828 --> 01:33:56.142 tonight I I think it's clear that all

NOTE Confidence: 0.84358317

01:33:56.142 --> 01:33:59.034 of our panelists are very enthusiastic

NOTE Confidence: 0.84358317

01:33:59.034 --> 01:34:02.059 about what they do and how we can.

NOTE Confidence: 0.84358317

01:34:02.060 --> 01:34:06.414 We can help patients with colorectal cancers.

NOTE Confidence: 0.84358317

01:34:06.420 --> 01:34:10.128 I don't, I don't see any.

NOTE Confidence: 0.84358317

01:34:10.130 --> 01:34:12.110 Any questions in the the

NOTE Confidence: 0.84358317

01:34:12.110 --> 01:34:13.466 Q&A or the OR the chat,

NOTE Confidence: 0.84358317

01:34:13.470 --> 01:34:17.310 and so I think I'll take this opportunity

NOTE Confidence: 0.84358317

01:34:17.310 --> 01:34:21.836 to to say that there is a lot that we can

NOTE Confidence: 0.84358317

01:34:21.836 --> 01:34:25.787 do to to treat cancer and cure cancer,

NOTE Confidence: 0.84358317

01:34:25.790 --> 01:34:27.824 but still the best thing we can do is

NOTE Confidence: 0.84358317



01:34:27.824 --> 01:34:29.864 prevent it from happening in the 1st place.  
NOTE Confidence: 0.84358317

01:34:29.870 --> 01:34:33.632 And so I would say that that not only  
NOTE Confidence: 0.84358317

01:34:33.632 --> 01:34:36.654 includes all of the various ways that  
NOTE Confidence: 0.84358317

01:34:36.654 --> 01:34:40.060 we can screen for colon cancer with.  
NOTE Confidence: 0.84358317

01:34:40.060 --> 01:34:41.848 As Doctor Satcher outlined  
NOTE Confidence: 0.84358317

01:34:41.848 --> 01:34:43.636 at the very beginning,  
NOTE Confidence: 0.84358317

01:34:43.640 --> 01:34:46.825 but also by taking good care of  
NOTE Confidence: 0.84358317

01:34:46.825 --> 01:34:49.675 ourselves and focusing on a healthy  
NOTE Confidence: 0.84358317

01:34:49.675 --> 01:34:51.553 lifestyle that includes exercise,  
NOTE Confidence: 0.84358317

01:34:51.553 --> 01:34:56.279 a diet that is full of fruits and vegetables,  
NOTE Confidence: 0.84358317

01:34:56.280 --> 01:34:58.302 reducing alcohol intake  
NOTE Confidence: 0.84358317

01:34:58.302 --> 01:35:00.998 and and reducing stress.  
NOTE Confidence: 0.84358317

01:35:01.000 --> 01:35:02.344 And those are practical  
NOTE Confidence: 0.84358317

01:35:02.344 --> 01:35:04.360 things that that all of us,  
NOTE Confidence: 0.84358317

01:35:04.360 --> 01:35:07.546 even those of us on the panel that probably  
NOTE Confidence: 0.84358317

01:35:07.546 --> 01:35:10.319 can do a better job of everyday so.

NOTE Confidence: 0.84358317

01:35:10.320 --> 01:35:12.833 I'd like to thank all of our

NOTE Confidence: 0.84358317

01:35:12.833 --> 01:35:14.779 panelists for joining us tonight.

NOTE Confidence: 0.84358317

01:35:14.780 --> 01:35:17.335 I'd like to thank Cindy Barassi from

NOTE Confidence: 0.84358317

01:35:17.335 --> 01:35:19.739 the Colon Cancer Foundation for Co.

NOTE Confidence: 0.84358317

01:35:19.740 --> 01:35:20.582 Sponsoring this,

NOTE Confidence: 0.84358317

01:35:20.582 --> 01:35:23.108 and I'd like to thank everybody

NOTE Confidence: 0.84358317

01:35:23.108 --> 01:35:25.761 who took time out of their evening

NOTE Confidence: 0.84358317

01:35:25.761 --> 01:35:28.343 tonight to to join us and learn a

NOTE Confidence: 0.84358317

01:35:28.343 --> 01:35:30.029 little bit more about this disease

NOTE Confidence: 0.84358317

01:35:30.029 --> 01:35:31.839 and hopefully spread the word.

NOTE Confidence: 0.84358317

01:35:31.840 --> 01:35:34.016 So thank you and have a great night.

NOTE Confidence: 0.9435463

01:35:37.040 --> 01:35:39.000 Thanks everyone.