

WEBVTT

NOTE duration:"01:04:11.4580000"

NOTE language:en-us

NOTE Confidence: 0.907792568206787

00:00:00.020 --> 00:00:31.070 And welcome to this really very special grand rounds as you all know today is our annual Paul Calabrisi Memorial Lectureship. This lectureship as you'll hear from doctor. Hertz is is really been an important event in our Cancer Center and our cancer hospital. Recognizing extraordinary individuals who have made lifetime achievements in cancer. Medison Cancer Research and so to introduce our speaker and open the.

NOTE Confidence: 0.835961282253265

00:00:31.070 --> 00:00:39.540 Electra ship well doctor, Roy Herbst SAR Chief Medical Onkologie, an associate director for Translational Sciences will get us started.

NOTE Confidence: 0.868281006813049

00:00:42.080 --> 00:01:06.740 Thank you Charlie and welcome everyone to our 13th, Calabrese Memorial Lecture in honor of oil Calabrese and hopefully on the way in you picked up a little flyer that can tell you a little bit about doctor. Calabrese's life and career. I'm really proud to invite the Calabrese family here on campus and especially honored to have doctor Otis Brawley here this year is Calabrese lecturer.

NOTE Confidence: 0.86261922121048

00:01:07.500 --> 00:01:38.850 Pull Calabrese is often referred to as the father of oncology and his influence here at Yale Cancer Center remains there's actually. I believe the first chief of oncology here really founded the field before more faculty member who was an internationally recognized authority on the pharmacology of anti cancer agents. He served as director of the Yellow Cancer Center Advisory Board until 2003 and actually there's a K12 Award called the Calabrese Award. We actually have one of those here at Yale Dr Cougars, the P.

NOTE Confidence: 0.900347530841827

00:01:38.850 --> 00:01:52.830 On a personal note, I had the good fortune to meet Paul over 30 years ago. Why? Because by coincidence. His son Peter, who is in the front row was my freshman roommate at Yale was even actually little more than 30 years ago, but who's counting.

NOTE Confidence: 0.836285889148712

00:01:53.730 --> 00:02:25.460 Over the years, Paul served as an advisor mentor and friend to Maine and it's very meaningful to me now that I hold the job, he once I had, and this is I believe my Cemetery is time that we've organized a lecture since I'm here so joining us today. We have Steven Calabresi, Janice

Calabrese, an Peter Calabrese, an were so happy that you're here and that we've continued to have this. This lectureship and today we have Otis broiling. So I've also known doctor Burley for quite some time.

NOTE Confidence: 0.881305456161499

00:02:25.460 --> 00:02:56.980 He was my mentor also when I was a member of the first ask, OACR Joint Conference to teach Fellows to write clinical trials and now he wasn't the mentor. I was assigned. I drifted over to his table because you'll see. He is allowed to talk about doctor. Brawley is the Bloomberg Distinguished Professor of oncology and Epidemiology at Johns Hopkins University. He's an authority on cancer screening and Prevention and leads a broad research effort of cancer. Health disparities at their school of Madison, the Bloomberg School of Public Health.

NOTE Confidence: 0.880512654781342

00:02:56.980 --> 00:03:28.500 And a student came out comprehensive Cancer Center. He's focusing on how to close racial economic and social disparities in the prevention detection and treatment of cancer. This is an area. We are continuing to grow and build here at Yale. So there's no better time to have doctor broly here. He's got many awards are just mention a few he's a member of the National Cancer Institute. Border Scientific Advisers, an elected Member of the National Academy of Madison so please join me in welcoming doctor, Burley to yell Cancer Center and I've asked the Calabrese family to please come up in Doctor Fuchs.

NOTE Confidence: 0.687574148178101

00:03:28.980 --> 00:03:30.240 So a plaque for you.

NOTE Confidence: 0.748153567314148

00:03:32.240 --> 00:03:52.080 So it says Paul Calabrese Memorial Lectureship or destroy cancer control in the 21st century, when you come in the middle and Charlene activity in the end, that way.

NOTE Confidence: 0.564312517642975

00:03:52.730 --> 00:04:00.000 Further on over.

NOTE Confidence: 0.619970917701721

00:04:00.850 --> 00:04:04.410 One side for you.

NOTE Confidence: 0.801114201545715

00:04:11.760 --> 00:04:16.920 Thank you. Thank you very much.

NOTE Confidence: 0.862450361251831

00:04:17.510 --> 00:04:34.980 Thank you very much. It's it's a true privilege to be here and it's really neat. I met Roy when he was a fellow and I was a young attending and it's actually amazing to see where we are now.

NOTE Confidence: 0.860451519489288

00:04:35.630 --> 00:04:39.980 How many of you are not a conchology fellows here?

NOTE Confidence: 0.88514369726181

00:04:41.230 --> 00:05:12.140 Goodly number sorry you guys have to set over there, I hope I make it worth it for you. Paul Calabrese was a friend of mine. Paul Calabrese was a mentor. He was one of the people who started our profession of medical oncology and indeed even though we have a very young profession. Only 50 or so years old. It has a strong tradition.

NOTE Confidence: 0.912333369255066

00:05:12.140 --> 00:05:45.390 Of mentor ship a strong tradition of encouraging our young educating our young. Paul was one of the people who started that tradition. He carried it out on people like doctor, Devita and Doctor Davenas carried it out on the rest of us and you guys will pass it on to the next generation. So I'm thrilled to be here with some young medical Oncologist. Now I'm a medical Oncologist and epidemiologist and I've spent, the last.

NOTE Confidence: 0.937410473823547

00:05:45.390 --> 00:06:16.200 30 years ago, observing Madison in the United States and I first need to tell you I work for Johns Hopkins. I do some consulting for the federal government, including the Department of Defense. I wrote a book a few years ago. They did pretty well. But I'm not hear those promote the book today by still disclose it. I'm going to talk to you about the National Cancer Act Arms, 1st I'm going to talk about the cost of health care and health outcomes in the United States and compared to other countries.

NOTE Confidence: 0.9181769490242

00:06:16.200 --> 00:06:38.480 I'm going to talk to you about the national can't react in progress in cancer cancer control, especially are changing definition of cancer and cancer ain't what it used to be and then we're going to talk about disparities and cancer and try to move try to meld the first two things together and talk about some outcomes now first, the cost of health care.

NOTE Confidence: 0.953233778476715

00:06:40.180 --> 00:07:05.900 The cost of health care in United States has been going up since. About 1980 compared to other countries here. This is the cost average spending per person on health care in the United States from 1980 to about 2010 the United States is in black here and you can see other countries of the Western world are going up, but not going up nearly as quickly as the United States.

NOTE Confidence: 0.942770183086395

00:07:06.760 --> 00:07:37.550 First problem in 2016, the United States spent 3.3 trillion dollars on healthcare 3.3 trillion dollars is a lot of money to give you an idea million seconds ago was about 11, 1/2 days ago, a billion seconds ago was about 32 years ago, a trillion seconds ago was approximately 32,000 years ago, a trillion is a big number.

NOTE Confidence: 0.95848423242569

00:07:37.550 --> 00:07:41.780 And we spent 3.3 trillion dollars on healthcare last year.

NOTE Confidence: 0.944384515285492

00:07:42.610 --> 00:07:44.520 These are the.

NOTE Confidence: 0.883396506309509

00:07:45.090 --> 00:07:46.140 Budget.

NOTE Confidence: 0.929808735847473

00:07:46.860 --> 00:08:07.340 Work GDP of the what 6 largest countries in the world 3.3 trillion dollars means that we spent more on healthcare than was spent on everything in the United Kingdom in 2016 and it approached the entire economy of Germany.

NOTE Confidence: 0.939397692680359

00:08:08.030 --> 00:08:16.850 3.3 trillion dollars is a lot of money it represents about \$10,000 per man, woman and child in the United States.

NOTE Confidence: 0.951265335083008

00:08:17.480 --> 00:08:24.680 It represents almost \$0.18 out of every dollar that was spent in the United States was spent on Healthcare.

NOTE Confidence: 0.91211724281311

00:08:26.460 --> 00:08:27.800 What do we get out of that?

NOTE Confidence: 0.941444575786591

00:08:28.790 --> 00:08:51.270 This is going back to 2013 when we spent \$8500 per man, woman and child on healthcare an our life. Expectancy was between 78 and 79 years, almost 79 years and you can see the expenditures from a number of countries in Western Europe along with Korea and Israel, an you can see their life expectancies.

NOTE Confidence: 0.953787744045258

00:08:53.410 --> 00:09:03.210 This is life expectancy in twenty 1478.9 years, it's gone down to 78.6 years by 2017.

NOTE Confidence: 0.950040400028229

00:09:03.920 --> 00:09:14.900 We've had a decline in life expectancy in the United States from 2014 to 2017 life expectancy of decrease over 4 years.

NOTE Confidence: 0.941560924053192

00:09:15.450 --> 00:09:28.780 That's the first time since World War One we have had a decrease over 4 years in life expectancy in the United States is the first time in Western Europe or North America. We've added decrease.

NOTE Confidence: 0.941724717617035

00:09:29.310 --> 00:09:34.360 In life expectancy over 4 years since 1950.

NOTE Confidence: 0.910784721374512

00:09:35.420 --> 00:09:38.320 Our health care system is an extremist.

NOTE Confidence: 0.758989572525024

00:09:38.880 --> 00:09:40.130 Not servings.

NOTE Confidence: 0.933922648429871

00:09:40.790 --> 00:10:02.620 Sorry Warren Buffett used to say cost is what you pay value is what you get. I would actually suggest that since we pay more than any other country in the world and we don't get a life expectancy as good. Maybe we're not getting what we should be getting out of our health care system. It is not a thing about it.

NOTE Confidence: 0.959723591804504

00:10:03.150 --> 00:10:11.060 The average family health care policy in the United States in 26 chain was \$18,500.

NOTE Confidence: 0.946623384952545

00:10:11.840 --> 00:10:14.270 That's for private health insurance policy.

NOTE Confidence: 0.938611447811127

00:10:14.920 --> 00:10:41.330 If we wish Wetterling which is the second most expensive country in the world for Healthcare. It would have been 11,600 dollars. We would have higher productivity because they have higher life expectancy less sickness. Less people off from work because of sickness. An because they don't spend as much on health care employers would actually hire more employees.

NOTE Confidence: 0.925848126411438

00:10:42.480 --> 00:10:45.620 And costs in the United States are going up.

NOTE Confidence: 0.907319784164429

00:10:46.320 --> 00:10:54.930 Indeed, this is an estimate that was published in Annals of family Medison. Not too too long ago and just look at sea.

NOTE Confidence: 0.946852743625641

00:10:57.040 --> 00:11:09.850 You see it's estimated that sometime between 2030 and 2035 that we're going to have family insurance premiums, equaling median household income in the United States.

NOTE Confidence: 0.931233465671539

00:11:11.260 --> 00:11:37.460 That just cannot happen in our economy survive. What is for certain is private health insurance is becoming increasingly unaffordable to low and middle income. Americans Anne it's going to become worse unless major changes of made access to care. Both preventative care and therapeutic cares essential to reducing disparities and lack of access can actually increase disparities.

NOTE Confidence: 0.949754059314728

00:11:38.140 --> 00:11:45.580 We have to be concerned about the cost of health care in our health care system is incredibly inefficient.

NOTE Confidence: 0.923631310462952

00:11:46.500 --> 00:11:52.460 There are groups of people who get too much health care. They overconsume in the harm because of that.

NOTE Confidence: 0.925778746604919

00:11:53.100 --> 00:12:25.270 The groups of people who under consume in their harm because they don't get enough adequate healthcare and our system actually could be much more efficient. We could do it cheaper and we could actually save more lives. This is a plea for evidence based Madison. This is a play that people start trying to look at the science and practice what the science says one of the problems in the United States is were incredibly unscientific another problem is some of us are just slopping at that raw.

NOTE Confidence: 0.931303679943085

00:12:25.270 --> 00:12:56.670 And trying to make as much money as we possibly can whether or not the health care services. We provide are needed or not a third thing I'll point out in the United States were heavily emphasizing treatment diagnosis and treatment of the disease. We need to start focusing more and more on Prevention of disease. Now let's talk about cancer. This Paris, which was found in the 1860s is from 1600 BC. It is the first.

NOTE Confidence: 0.919038355350494

00:12:56.670 --> 00:13:26.780 Known written mention of cancer and it's from Egypt and it says that it's a tumor against the gods. Enus and it says there is no treatment for cancer. This is the first known mention of cancer in writing now cancer was relatively rare from that point well into the 18th and 19th century. Dick answer was truly rare in the 1800s.

NOTE Confidence: 0.777042031288147

00:13:26.780 --> 00:13:29.570 This surgeon.

NOTE Confidence: 0.644622325897217

00:13:30.160 --> 00:13:31.450 Perceval pots.

NOTE Confidence: 0.937165021896362

00:13:31.980 --> 00:14:01.720 In the mid 1700s actually was the first person to know that there was the scrotal cancer found among chimney sweeps and he actually was the first person to ever associate an environmental exposure with A cause of cancer. The chimney sweeps were exposed to toxins in such and that's what caused their scrotal cancer first first determination of causality and cancer, but still a relatively rare disease.

NOTE Confidence: 0.882101953029633

00:14:02.330 --> 00:14:08.000 The German pathologist veer cow. This is very cold, there cause node for those of us who went to medical school.

NOTE Confidence: 0.917450904846191

00:14:08.510 --> 00:14:40.180 He was obsessed with the microscope? What did things look like under the microscope in the early 1850s. He and several of his students did a series of autopsies in Vicco also is the first real pathologist who worked out how he had do a biopsy mounted on a glass side stand it and look at it under microscope and he was also marvelous artists and he would look at something like this draw a picture of it published in the book and he labeled this add no carcinoma.

NOTE Confidence: 0.913412034511566

00:14:40.180 --> 00:14:55.170 You also I was the first person to describe leukemia. A number of things about cancer. The fact that it actually starts in one organ and Metastasizes and spreads elsewhere. This is 18. Fifties definition of cancer as given to us by her cop.

NOTE Confidence: 0.92199432849884

00:14:55.880 --> 00:15:26.060 He figured out it was uncontrolled cell growth in cancer spread and interfere with people's bodily functions. That was the beginning of cancer and there were a few things that happen onward. Very importantly in 1964. The surgeon general Luther Terry determined that cigarette smoking cause lung cancer as well as cancer of vocal cancer of the throat. This was again asentinel finding in cancer.

NOTE Confidence: 0.916078329086304

00:15:26.060 --> 00:15:56.960 Etiology and Epidemiology and cancer Medison perked along slowly overtime. We had some important findings chemotherapy. That was first invented here at Yale. The first cure of childhood leukemia first cure of lymphoma is done by Doctor Devita and his team at the National Cancer Institute. Then in 1971 December 1971, Richard Nixon signed what was known as?

NOTE Confidence: 0.927272140979767

00:15:56.960 --> 00:16:28.290 The National Cancer Act Richard Nixon is not known to ever have referred to it as the war on cancer. But the war analogy somehow stuck and so it's 48 years ago that we started the National War on cancer and that's when we started moving from the veer cow mid 19th century definition of cancer to have 21st century definition of cancer. That's when that's what set off all these new amazing things that we're hearing about now.

NOTE Confidence: 0.934289932250977

00:16:28.290 --> 00:16:47.640 Genomics and genotyping bioinformatics, we discovered the cancer was a genetic disease in the 1970s and 80s. We import his discovered the importance of cellular biology and metabolism. The role of the immune system in cancer prevention as well as cancer treatment.

NOTE Confidence: 0.922977030277252

00:16:48.160 --> 00:16:52.110 An the importance of cancer prevention.

NOTE Confidence: 0.938612103462219

00:16:53.160 --> 00:16:59.740 Now let's talk about some trends and outcomes in cancer over the last few years and Mary the first two parts of our Top.

NOTE Confidence: 0.934927821159363

00:17:00.770 --> 00:17:30.780 This is cancer death rates I am a medical Oncologist, an an epidemiologist. I apologize the Epidemiology side of me has to show you a few slides with rates in it from the way you read this as in 1900. The death rate from cancer in the United States with 64 deaths. For every 100,000 Americans and it rose until 1991 to 215 deaths per 100,000.

NOTE Confidence: 0.940250754356384

00:17:30.780 --> 00:17:56.330 And now there's been a decline by 26% going to 2016 to 159 per 100,000. This is age adjusted so it removes the fact that the population aged over the 20th century. You know the average life expectancy. In 1900 in the United States was about 55 and life expectancy rose throughout the 20th century.

NOTE Confidence: 0.915838003158569

00:17:56.840 --> 00:18:05.440 But this 26% decline in relative risk of death significant.

NOTE Confidence: 0.91791707277298

00:18:06.970 --> 00:18:07.800 Actually.

NOTE Confidence: 0.925646662712097

00:18:08.300 --> 00:18:16.910 Attributed very much so the National Cancer Act and the Luther Terry finding that cigarettes cause lung cancer.

NOTE Confidence: 0.942171394824982

00:18:19.260 --> 00:18:38.550 This age adjusted mortality decline is estimated that it means that one point 8 million Americans did not die a cancer death that significant but still, it's gonna be 600 and 7000. Deaths from cancer this year in the United States. That's an American Cancer Society estimate.

NOTE Confidence: 0.959477126598358

00:18:41.480 --> 00:18:46.180 The leading causes of death in the United States are listed on this slide.

NOTE Confidence: 0.951301634311676

00:18:46.740 --> 00:18:59.520 Heart disease is number one cancer's number 2. You will note that heart disease and cancer combined make up 45% of all the causes of death in the United States.

NOTE Confidence: 0.941086947917938

00:19:00.050 --> 00:19:33.860 Other important chronic diseases such as diabetes and stroke are also listed on this slide. I mentioned diabetes stroke cancer and heart disease in the same sentence Because when you think about the causes of cancer. They are also the causes of those diseases. We can prevent those diseases by having aggressive cancer prevention programs cardiac. Vascular death rates by the way in the United States have been going down dramatically since the 1980s.

NOTE Confidence: 0.945777952671051

00:19:33.860 --> 00:20:03.980 Indeed, they are going down at a faster rate than the cancer death right and in the next couple of years. We're going to have a big announcement that the number one killer of people in the United States is now cancer and not cardiac disease. This is because cardiac disease rates have been going down faster than cancer. Death rates, but keep in mind life expectancy in the United States is also going down.

NOTE Confidence: 0.920953512191772

00:20:04.000 --> 00:20:21.040 Compared to our colleagues in Western Europe. Now the declining cancer death rate is due to a couple of things what I'll call wise early detection and there is unwise early detection and screening, but wise screening and wise early detection.

NOTE Confidence: 0.944545865058899

00:20:21.870 --> 00:20:24.850 Cancer prevention, especially tobacco control.

NOTE Confidence: 0.932644963264465

00:20:25.350 --> 00:20:57.080 And improvements in cancer treatment. The 3 major reasons why there's a decline in cancer death rates in the United States. Well, I say Wise early detection and wise cancer screening. I just want to note

that cancer screening can be beneficial. It can also be harmful. It is often both and we need to do good perspective. Randomized trials testing our screening interventions to see if they actually reduce risk of death. We need to follow the good science and I've mentioned that.

NOTE Confidence: 0.945936977863312

00:20:57.080 --> 00:21:03.520 Because it frequently doesn't happen in the United States and it's one of the reasons for all of that waste that we're talking about.

NOTE Confidence: 0.947403728961945

00:21:04.070 --> 00:21:21.400 This is from Graham called it's at Washington University. These are the major causes of cancer and through this. You can actually talk about how you can prevent cancer. I want to note that 33% of cancers are caused by smoking today.

NOTE Confidence: 0.946690261363983

00:21:22.110 --> 00:21:38.080 Is actually much higher 2530 years ago as smoking rates have gone down dramatically will show some of that overweight and obesity and diet and lack of exercise. Let's move the three of them together, 30% combined.

NOTE Confidence: 0.926964938640594

00:21:39.200 --> 00:21:46.400 That synergy balance, it's not just obesity. It's overweight, too many calories and lack of exercise.

NOTE Confidence: 0.936167776584625

00:21:47.840 --> 00:22:01.770 Second leading cause of cancer in the United States then of course, other things here, such as viruses at 5% alcohol consumption UV and ionizing radiation.

NOTE Confidence: 0.94619208574295

00:22:02.290 --> 00:22:10.150 Actually, medical radiation is now thought to cause 1 to 2% of cancers in the United States.

NOTE Confidence: 0.952881336212158

00:22:11.430 --> 00:22:28.560 This is smoking cessation in 1955. Fifty 5% of American men smoke cigarettes and you can see the decline in blue in 1960. Five 35% of American women smoke cigarettes and you can see the decline.

NOTE Confidence: 0.938784658908844

00:22:30.180 --> 00:22:43.870 Tobacco is still the leading cause of cancer in the United States. It will be surpassed by NRG balance in the next decade or so, but tobacco is still a good target for Prevention, who smokes.

NOTE Confidence: 0.949494481086731

00:22:45.040 --> 00:22:53.160 Well, 16% of the men and 12% of women in the United States smoke and you can see the age distributions there.

NOTE Confidence: 0.949053049087524

00:22:53.700 --> 00:23:05.870 By the way most people who start smoking start dabbling in cigarettes when you're 15 or 16 years old. It is rare. The person who smokes their first cigarette after the age of 18.

NOTE Confidence: 0.928263127803802

00:23:07.270 --> 00:23:35.400 Smoking prevalence by race and these are OMB categories for race will talk perhaps a little bit more about OMB categorization in a little bit, but you can see, there's a special problems among black men and Native American men and white men in terms of smoking look at Native American females. This is this is not is not a misprint by way more Native American females smoked in Native American males.

NOTE Confidence: 0.866966128349304

00:23:37.260 --> 00:23:38.590 By education.

NOTE Confidence: 0.930759310722351

00:23:39.210 --> 00:24:12.420 I don't know why people who get a GE day. Have a much higher smoking rate than any other group, but no high school grads high school dropouts in those who have a GE D something about education. That lowers risk of smoking dramatically in the United States. This is just a map to show you where people who smoke live and I want you to know that the very dark states in the South of the United States are where the smoking prevalence is are the highest.

NOTE Confidence: 0.921460092067719

00:24:12.950 --> 00:24:43.350 The state Utah and California had the lowest smoking prevalence is I guess when I talk about California for the stress. I'm talk about smoking of tobacco here, but anyway, there are some states where literally close to 30% of adults smoke. Indeed, there certain cities the city. I live in Baltimore, 34% of adults in Baltimore smoke whereas the smoking prevalence in California is 10%.

NOTE Confidence: 0.931269347667694

00:24:45.250 --> 00:25:18.430 Number of cancers are caused by infection. This is something that we learn from the National Cancer Act in that momentum to do Cancer Research. We know that liver cancer deaths are caused liver cancers are caused by a hepatitis B. hepatitis C and we know that deaths are expected to go up by 50% over the next decade or so we know head and neck. Cancers are now do the human papilloma virus. That's actually hepatitis B in human papilloma are vaccine Obel.

NOTE Confidence: 0.937714040279388

00:25:18.680 --> 00:25:41.560 Hepatitis C is actually treatable with a drug and curable as we talk about disparities. I want to note. There are certain Medicaid programs in certain states of the United States. They tend to be in the South that will not pay the \$35 to \$40,000 to cure hepatitis C.

NOTE Confidence: 0.928252637386322

00:25:43.670 --> 00:26:06.620 That's cheap I give drugs that cost \$15,000 a month. All the time and I can cure hepatitis C and prevent liver cancer for \$35,000 and there's certain Medicaid programs that will not pay for it. They'd rather pay for the expense of taking care of the patient once they get metastatic liver cancer.

NOTE Confidence: 0.855125188827515

00:26:07.230 --> 00:26:11.000 Ill energy balance already told you about.

NOTE Confidence: 0.926569163799286

00:26:11.540 --> 00:26:29.980 Too many calories obesity not enough exercise, it's a huge problem in the United States have some graphs to show you that in a bit and again with the decline in tobacco usage in the United States. Energy balance will become the number one cause of cancer in the USA.

NOTE Confidence: 0.920449554920197

00:26:30.630 --> 00:26:36.200 This is obesity in the United States versus some of the favorite countries.

NOTE Confidence: 0.946656048297882

00:26:38.190 --> 00:26:50.100 15% of Americans were obese in 1970 and it's over 35% today compared to England, Canada, Spain, Hungary, Ireland, Italy, France, Switzerland, Korea.

NOTE Confidence: 0.935286998748779

00:26:50.840 --> 00:26:57.570 Yes, there is increasing obesity in these other other countries, but it's worse in the United States.

NOTE Confidence: 0.946101367473602

00:26:58.160 --> 00:27:08.390 Let's look at it among Blacks and white this is the rise in obesity in the United States for black and white women.

NOTE Confidence: 0.935227870941162

00:27:08.990 --> 00:27:34.370 And black and white men I want you to focus, especially on non Hispanic black women. You'll know that in the period from 2009 onward. We're getting close to 60% of the population being obese. This is not obese plus overweight. This is the condition the worst condition obese 60%.

NOTE Confidence: 0.926262140274048

00:27:35.740 --> 00:27:43.130 Let's look at a couple of diseases where we've made some progress and figure out how we can make progress better breast cancer.

NOTE Confidence: 0.937842071056366

00:27:43.800 --> 00:27:56.150 The American Cancer Society estimates that 269 thousand will be diagnosed and little more than 42,000 will die from it this year, there has been a 40% decline.

NOTE Confidence: 0.915804266929626

00:27:56.650 --> 00:28:00.170 In age adjusted breast cancer death rate.

NOTE Confidence: 0.940464973449707

00:28:00.760 --> 00:28:03.630 From 1990 to 2016.

NOTE Confidence: 0.917732775211334

00:28:04.150 --> 00:28:09.440 That is to say your average woman in the United States of picking age 55.

NOTE Confidence: 0.942313551902771

00:28:10.060 --> 00:28:18.060 Her risk of dying from breast cancer now is 60% what it was for 55 year old in 1990 that's progress.

NOTE Confidence: 0.920466423034668

00:28:19.590 --> 00:28:20.960 That is progress.

NOTE Confidence: 0.916868209838867

00:28:21.900 --> 00:28:29.810 Screening by the way as a trivia 240 to 50% of that decline improvements and how we treat the disease much of the rest.

NOTE Confidence: 0.919690132141113

00:28:31.170 --> 00:28:32.410 But that's progress.

NOTE Confidence: 0.938704013824463

00:28:34.570 --> 00:29:03.220 This is black, white data this is going back to 1975 Blacks and red, white and blue. I want you to know that there's no black, white disparity in mortality in the 1970s. It's only the early 1980s as we learn how to screen your treat this disease. The mortality rate for Blacks and the mortality rate for white actually starts to diverge and the difference between this. The Delta that's the disparity black versus White in breast cancer mortality.

NOTE Confidence: 0.938517034053802

00:29:03.850 --> 00:29:20.720 Starting in 1990, they began collecting data on other races and ethnicities. According to the OMB classification. Green is Hispanics Native Americans in Alaska Natives and purple and Asian Pacific Islanders in blue.

NOTE Confidence: 0.936947405338287

00:29:21.740 --> 00:29:33.500 But again the black white disparity only started after we learn how to screen your treat for this disease. It is greater today than it has ever been in the United States.

NOTE Confidence: 0.934502363204956

00:29:34.080 --> 00:29:45.380 It's about 30% difference. For every 100,000 black women in the USA. About 28 or going to die from breast cancer and for every 100,000 whites about 20.

NOTE Confidence: 0.947791218757629

00:29:46.950 --> 00:29:54.810 There are 7 states in the United States, where there is no black, white disparity in breast cancer death rate.

NOTE Confidence: 0.927469551563263

00:29:57.310 --> 00:30:07.270 There's a 30% difference in death rate in the United States as a whole. But there 7 states where there's no black, white death rate.

NOTE Confidence: 0.896887242794037

00:30:08.610 --> 00:30:12.610 This is a difference in biology or difference in access to care.

NOTE Confidence: 0.945387303829193

00:30:14.640 --> 00:30:19.230 Now I talk to you about 40% decline in the United States as a whole.

NOTE Confidence: 0.938252627849579

00:30:20.860 --> 00:30:46.500 This is a map of the United States. The Blue is where the decline has been forwarding 4 to 51% and the purple is whether decline has been 20 to 29%? Why has there been a 50 plus percent a halving of the death rate from breast cancer in Massachusetts and at the same time, it's gone down by 20% in Mississippi.

NOTE Confidence: 0.981385886669159

00:30:47.580 --> 00:30:50.670 Massachusetts versus Mississippi.

NOTE Confidence: 0.902094781398773

00:30:51.670 --> 00:30:57.540 That's our new definition of disparities folks where people are going to see some more of that.

NOTE Confidence: 0.420867919921875

00:30:59.110 --> 00:31:00.500 Now.

NOTE Confidence: 0.940697848796844

00:31:01.080 --> 00:31:31.820 This is one of my pet peeves when I was Chief Medical Officer of the American Cancer Society. Everybody always talked about screen screen screen. This is Jeannie Mandel Blatina Group at the National Cancer Institute. They did what's called cesnet modeling his mathematical modeling? What they literally did was they looked at breast cancer screening in breast cancer treatment of your part of this, you have to realize we have data show that 40% of women with breast cancer get less than optimal therapy that's a euphemism.

NOTE Confidence: 0.926733672618866

00:31:34.080 --> 00:31:48.040 What Genie Mendelblatt and her group did is they actually looked at what current breast cancer screening and treatment patterns is going to be an estimated 50 to 57,000 breast cancer deaths in 2025.

NOTE Confidence: 0.468691259622574

00:31:49.220 --> 00:31:50.290 Now.

NOTE Confidence: 0.930155754089355

00:31:51.130 --> 00:31:55.800 If there were guideline appropriate screening of all women.

NOTE Confidence: 0.887277960777283

00:31:57.020 --> 00:32:01.600 There would be 5100 to 6100 fewer deaths.

NOTE Confidence: 0.937968015670776

00:32:02.440 --> 00:32:17.150 But if we kept screening rates the same about 60% of women get screened nowadays. But we treat all women who are diagnosed appropriately we would save 11 to 14,000 lives.

NOTE Confidence: 0.939900875091553

00:32:18.600 --> 00:32:23.330 Now I had lots of Congress people complained to Maine about.

NOTE Confidence: 0.951500713825226

00:32:23.860 --> 00:32:36.750 ACS another recommendations for breast cancer screening by had no Congress person ever complain about the fact that 40% of women diagnosed with breast cancer get truly.

NOTE Confidence: 0.716947555541992

00:32:37.280 --> 00:32:38.740 Bad care.

NOTE Confidence: 0.935266077518463

00:32:39.440 --> 00:32:46.640 In the United States by the way if you screened everybody and treated everybody right you would save 18 to 20,000 lives.

NOTE Confidence: 0.877592861652374

00:32:47.870 --> 00:32:49.470 I'm not against screening.

NOTE Confidence: 0.927676677703857

00:32:50.780 --> 00:32:52.520 Let's look at colon cancer.

NOTE Confidence: 0.934374094009399

00:32:53.800 --> 00:33:07.780 The American Cancer Society estimates about 100 and one thousand will develop colon cancer about 40 four thousand rectal cancer and colorectal cancer will be about 51,000 deaths there has been a having.

NOTE Confidence: 0.953036248683929

00:33:08.320 --> 00:33:14.540 In age adjusted colorectal cancer death rate in the United States since 1980.

NOTE Confidence: 0.943902313709259

00:33:17.170 --> 00:33:25.320 A man or a woman of any given age. Today, the risk of dying from colon cancer is about half what it was in 1980.

NOTE Confidence: 0.855397164821625

00:33:25.820 --> 00:33:26.900 As progress.

NOTE Confidence: 0.936762094497681

00:33:27.590 --> 00:33:33.280 That's the United States as a whole screening is responsible for about 2/3 of that.

NOTE Confidence: 0.926773726940155

00:33:34.740 --> 00:33:38.440 This is black, white for women.

NOTE Confidence: 0.939935982227325

00:33:39.800 --> 00:34:10.000 Blacks and red, white and blue and you can see, there was no disparity in the 1970s come about 1980. We learned how to screen and treat this disease. That's the beginning of the disparity. It's getting a little better today and you can see the other races and ethnicities here. Huge amounts of noise in Native American population because it's only about one. One and a half percent of the entire you S population so one or 2 cases can move that dramatically.

NOTE Confidence: 0.932340621948242

00:34:10.000 --> 00:34:28.630 This is men Blacks and whites Blacks actually did better in the 1970s and then around 1980. We learn how to screen and treat and you can see the disparity between Blacks and whites and here are again the other three races and Ethnicities, according to OMB categorization.

NOTE Confidence: 0.918899953365326

00:34:32.770 --> 00:35:06.480 This is just to show you insurance matters. I actually prepared this during the debate about the Affordable Care Act Insurance.

I hate 5 year survival statistics. Most people misquote them. So I don't usually use them. This is the one time you're going to see me show a 5 year survival graph. This is X axis 60 months or 5 years. .6 is 60% point, 8 is 80% point, 9 is 90% in red is stage one in blue is Stage 2.

NOTE Confidence: 0.925401985645294

00:35:06.480 --> 00:35:36.650 The solid lines are people who have insurance in the dotted lines are people who have no insurance at diagnosis. Or they get Medicaid shortly after diagnosis. When I first want you to notice insured stage. One does better than uninsured stage. One insured stage 2 does better than uninsured Stage 2, it determines the probability you're going to be alive at 5 years.

NOTE Confidence: 0.933106541633606

00:35:36.650 --> 00:35:59.990 The other thing I want you to know is in the in this something we can really be a proud of in the United States, you're better off having Stage 2, colon cancer with insurance than Stage 1, colon cancer without insurance. You're more likely to be alive. At 5 years with the more advanced disease. If you have insurance. Then the less advanced disease without insurance.

NOTE Confidence: 0.871526658535004

00:36:00.520 --> 00:36:01.770 Insurance matters.

NOTE Confidence: 0.926585257053375

00:36:03.970 --> 00:36:12.260 Talked about that 50% decline in colorectal death rates from 1980, the having and talk about how that was great.

NOTE Confidence: 0.9534912109375

00:36:12.790 --> 00:36:18.040 The Blue states are 55 to 63% decline.

NOTE Confidence: 0.936916649341583

00:36:19.350 --> 00:36:24.440 The purple states are 12 to 31% decline.

NOTE Confidence: 0.956945359706879

00:36:25.740 --> 00:36:34.500 Why has there been a 63% decline in risk of death from colon cancer in Massachusetts?

NOTE Confidence: 0.950601756572723

00:36:35.130 --> 00:36:38.590 At the same time a 12% decline.

NOTE Confidence: 0.945445418357849

00:36:39.110 --> 00:36:40.150 In Mississippi,

NOTE Confidence: 0.943505704402924

00:36:41.960 --> 00:36:46.110 This is the new definition of health disparity.

NOTE Confidence: 0.873316705226898

00:36:46.810 --> 00:36:47.880 To where you live?

NOTE Confidence: 0.922111630439758

00:36:50.240 --> 00:36:58.060 Now this is actually another one of my favorite points to make Kim Rhodes Wonderful Surgeon at Stanford.

NOTE Confidence: 0.864153027534485

00:36:58.660 --> 00:37:02.830 Actually, just moved to UC San Francisco.

NOTE Confidence: 0.882083296775818

00:37:03.630 --> 00:37:11.400 She looked at the California registry disallowed a wording. I just explain it, real quick book California registry for cancer.

NOTE Confidence: 0.559496879577637

00:37:11.910 --> 00:37:12.470 And.

NOTE Confidence: 0.918895304203033

00:37:13.420 --> 00:37:17.790 You supposed to have at least 12 left nodes looked at by a pathologist.

NOTE Confidence: 0.911802649497986

00:37:18.790 --> 00:37:33.530 When you have a colorectal surgery and she noticed that people who are in the registry who are black. Tin have about 6 and people who are in the registry who are white tend to have about 18.

NOTE Confidence: 0.904932081699371

00:37:34.700 --> 00:38:00.650 A lot of Blacks are called Stage 2 becaus. They looked at 6 left nodes in the pathologist after surgery and none of those left nodes had cancer. And it 0 out of 6 and a lot of the whites are Stage 3. 'cause they looked at 18 left nodes or 20 left nodes. An one out of 18 or one out of 20 left nodes was positive so they called Stage 3.

NOTE Confidence: 0.928115963935852

00:38:01.280 --> 00:38:08.350 And then you have a bunch of Blacks who are staged to who relapse there cancer comes back.

NOTE Confidence: 0.912553727626801

00:38:09.230 --> 00:38:16.340 Anna whole bunch of black or white or Stage 3, who don't relapse this is how you end up with.

NOTE Confidence: 0.93784886598587

00:38:16.850 --> 00:38:42.080 Cancer is more aggressive in black people colon cancer is more aggressive. Becaus low stage. Black people are more likely to relapse than even some higher stage white people, but you forgot that the

Blacks were not adequately assessed and the whites were actually even more than adequately assess.

NOTE Confidence: 0.928569912910461

00:38:43.630 --> 00:39:14.620 Literally. There's a lot of Blacks have more aggressive this and that and sometimes it's be cause of this issue now is it that pathologists are all racists and they don't do as good a job in taking care of the pathology samples of black patients versus white patients. Welchem actually notice that the Blacks in California who treated for colon cancer tend to be treated in overcrowded hospitals where the pathologist frequently has 6 or 8 cases to do per day.

NOTE Confidence: 0.941517055034637

00:39:14.620 --> 00:39:44.990 And the whites tend to be treated in nice, hospitals where the pathologist frequently have only one or 2 cases per day and even in the University of California, San Francisco system. You can have a pathologist will be at San Francisco General a public hospital, and be overwhelmed with 6 or 8 cases and the next month. They get rotated to the private hospital where they have one or 2 cases. This is sort of an institutional racism that has led to a whole bunch of people thinking.

NOTE Confidence: 0.94105464220047

00:39:44.990 --> 00:39:49.180 That cancer is more aggressive in Blacks versus white.

NOTE Confidence: 0.492111772298813

00:39:50.270 --> 00:39:51.280 Now.

NOTE Confidence: 0.938861966133118

00:39:52.170 --> 00:40:05.170 Colon cancer outcomes differences are due to the prevalence of screening. The quality of the screening. The proportion treated the quality of the treatment and even the quality of the pathology being handled.

NOTE Confidence: 0.937337815761566

00:40:05.850 --> 00:40:11.870 And their differences by race by socioeconomic status and by region of residency.

NOTE Confidence: 0.914690494537354

00:40:12.840 --> 00:40:13.960 Lung cancer.

NOTE Confidence: 0.920044541358948

00:40:14.570 --> 00:40:17.670 234 thousand will be diagnosed.

NOTE Confidence: 0.929570138454437

00:40:18.170 --> 00:40:23.500 Breakdown for men and women about 154 thousand will die this year.

NOTE Confidence: 0.945015549659729

00:40:25.560 --> 00:40:32.070 Lung cancer mortality rates by state you'll note there's a continuous pattern here that the dark.

NOTE Confidence: 0.938195645809174

00:40:32.640 --> 00:40:41.000 Dark always ends up in the South there, but you can see, those are the states where we have the highest death rates from lung cancer.

NOTE Confidence: 0.923649847507477

00:40:42.720 --> 00:41:09.990 By the way if you just look at age adjusted mortality rates in Utah versus Kentucky from all cancers. You see 125 versus 195. We frequently talk about black, white disparities. We should be talking bout, Utah versus Kentucky disparities. The difference by the way his head in this one is heavily influenced by lung colon and breast cancer differences. We have a study that shows that.

NOTE Confidence: 0.939003467559814

00:41:10.610 --> 00:41:36.710 Lung cancer screening saves lives best screening study ever done in the history of cancer screening done by the National Cancer Institute. Randomized 54,000 people at high risk for lung cancer because of age and smoking history is done in 30 of the greatest hospitals in the United States and 10 years into the study. There's a 20% reduction in relative risk of.

NOTE Confidence: 0.865732610225677

00:41:37.260 --> 00:41:39.730 Death from cancer this is good.

NOTE Confidence: 0.915774703025818

00:41:40.570 --> 00:42:04.960 The other part of that study is for every 5.4 lives that were saved 2 people got sent to an intensive care unit and one person died because of iatrogenic. Sis problem after a long biopsy problem after bronchoscopy so for it saves lives. But it costs lives actually in the 50 four thousand it prevented 87 deaths and it kills 16.

NOTE Confidence: 0.908838272094727

00:42:05.830 --> 00:42:12.840 87. Over 16 that's 5.4 to one that's the way a professional Screener looks at a screening test.

NOTE Confidence: 0.835206627845764

00:42:13.740 --> 00:42:15.390 Benefit risk.

NOTE Confidence: 0.910363793373108

00:42:16.370 --> 00:42:24.850 I'm actually a big believer. We should inform people of benefit and risk and let them make a decide decision as to whether they want to be screened or not.

NOTE Confidence: 0.936276853084564

00:42:27.050 --> 00:42:34.230 If we were to do lung cancer screening throughout the entire country and we had outcomes.

NOTE Confidence: 0.909528911113739

00:42:34.840 --> 00:42:40.260 Just as they had at those 30 wonderful hospitals.

NOTE Confidence: 0.911013722419739

00:42:41.490 --> 00:42:49.390 Of the 160,000 who currently die every year, we would prevent 8 to 10,000 deaths and we'd kill 1500 to 1800.

NOTE Confidence: 0.907194495201111

00:42:52.250 --> 00:42:58.390 That's how I think a professional auto look at lung cancer screening.

NOTE Confidence: 0.917531311511993

00:43:00.320 --> 00:43:23.340 6 respected groups recommend spiral scti for people who are informed or the benefits and rests who have access to good care. When I say access to good care. I showed you the results from 30 of the finest hospitals in the country. You know, most people in this audience are too young to remember the Haldeman Comment. How this go down in Peoria.

NOTE Confidence: 0.947380483150482

00:43:23.960 --> 00:43:55.710 You know there are some hospitals that just don't have the ability to provide good high quality services. And maybe they should not be involved in lung cancer screening. There's some hospitals in this country right now. This gets to the three point three trillion dollars who becaus lung cancer. Screening is resource intensive they're robbing resources from things that their community needs that they can do better to build a lung cancer screening program that is not going to do very well.

NOTE Confidence: 0.934989511966705

00:43:55.710 --> 00:44:17.440 So you have to do this balance, and Unfortunately in our capitalistic medical system where people want to make money and advertise and so forth. This happens, all the time so how can we provide adequate high quality care to include preventative services the populations that so often? Don't receive it is I think the most important question, we can ask Madison.

NOTE Confidence: 0.941303730010986

00:44:18.010 --> 00:44:30.720 Unnecessary care interferes with institutional abilities to provide necessary care and state by state disparities are Unfortunately, increasing with the Affordable Care Act.

NOTE Confidence: 0.933288395404816

00:44:31.420 --> 00:45:01.470 This is a map of the United States and the blue dark blueish states that have expanded Medicaid. Such that all adults have some form of Insurance. The light blue or states. That plan to do it and the orange or states that have not done it. We already are starting to do studies. One actually came from Yale. We Foundation, Madison information. We're starting to do studies to show that people are doing better.

NOTE Confidence: 0.933178424835205

00:45:01.470 --> 00:45:31.540 In the blue states versus the Orange State in a number of cancers, especially a number of early indices of cancer more women with cervical cancer being treated with the intention of preserving fertility in the blue states versus the Orange. States time from diagnosis of colon cancer lung cancer or breast cancer to actual treatment is lower in the blue states versus the Orange states.

NOTE Confidence: 0.921470522880554

00:45:31.540 --> 00:45:47.080 So we're going to have more an more state by state disparities. Becaus some states have advanced Medicaid to all their residents in some states have not now. The true cost of healthcare to a cancer Doc.

NOTE Confidence: 0.957738995552063

00:45:47.580 --> 00:45:51.790 I told you about 3.3 trillion dollars. Let's talk about lives.

NOTE Confidence: 0.949559509754181

00:45:52.540 --> 00:45:55.250 It is a fact that college education.

NOTE Confidence: 0.939342439174652

00:45:55.770 --> 00:46:00.030 Reduces risk of death from a number of diseases cancer included.

NOTE Confidence: 0.949215650558472

00:46:01.730 --> 00:46:18.350 College educated people are less likely to smoke more likely to realize they have a problem more likely to have insurance. More likely to feel that they can go to the doctor and say what the hell is this in my breast or I have this problem that needs to be addressed more likely be able to follow instructions.

NOTE Confidence: 0.933174431324005

00:46:19.520 --> 00:46:36.140 It is actually true that a college educated black man has a lower risk of cancer death than a man in general in the United States and even a white man in the United States College Education. For every category. You can think of lowers risk of death.

NOTE Confidence: 0.934038996696472

00:46:37.060 --> 00:47:03.620 We actually said this non new treatment, not a new screening test. This is just getting people what we've decided that human beings ought to get and so we tried. This my Swan song as I left the American Cancer Society. We wanted to quantify health disparities for cancer in the United States. How many people die because they don't get the care that we've defined every human being get.

NOTE Confidence: 0.866733193397522

00:47:04.440 --> 00:47:08.600 Or we define that care as the care that college educated human beings get.

NOTE Confidence: 0.933980345726013

00:47:09.370 --> 00:47:40.170 There are 607 thousand or got die from cancer this year. If all Americans had the risk of cancer death of college educated. Americans there would be 455 thousand 100 and 52,000, one in four cancer deaths would go away if all Americans had access to what we have decided that all Americans ought to have now that includes a smoking rate. That's very low that goes back 3040 years.

NOTE Confidence: 0.94037789106369

00:47:40.650 --> 00:48:13.430 Giving everybody everything this year that's giving everybody what we've decided every human needs to have not a new screening tests, not a new diagnostic not a new treatment just give everybody what we already know, people ought to have 152 thousand one in 4. American deaths from cancer would have gone away. This is the failure of the inefficiency of our three point three trillion dollar health care system. Now the amazing thing about that 100 and 52,000.

NOTE Confidence: 0.936924159526825

00:48:13.430 --> 00:48:16.190 Is the majority of those people are white?

NOTE Confidence: 0.918554604053497

00:48:16.970 --> 00:48:20.700 110,000 of the 100 and 52,000 or white Americans.

NOTE Confidence: 0.92812579870224

00:48:22.670 --> 00:48:30.580 They live in every state in the United States, but they will live more in the South in those states that kept showing up dark on my slides.

NOTE Confidence: 0.943566143512726

00:48:31.760 --> 00:48:36.610 But this is the cost of the inefficiency of the American health care system.

NOTE Confidence: 0.934751510620117

00:48:38.040 --> 00:48:53.730 Now population disparities will always increase when they're scientific progress in Madison. I showed you with those black,

white disparities in breast and colon cancer in the early 1980s that continue to this day.

NOTE Confidence: 0.922487020492554

00:48:54.860 --> 00:49:01.270 It's going to occur even more as we move into an Aero Precision Medicine immunotherapy and our treatments get better.

NOTE Confidence: 0.931447625160217

00:49:02.160 --> 00:49:04.410 Our point out that there are no.

NOTE Confidence: 0.920070648193359

00:49:05.370 --> 00:49:35.730 Are there no disparities and smallpox disease is where we have really good prevention. We don't have disparities? I'm a real big promoter of trying to prevent disease because of the disparities are far less. There's been a lot of people say what we need is a quality in healthcare and I actually think we need equity. This is just to show some people. Some groups of folks and you might define them as people who live in Mississippi.

NOTE Confidence: 0.925244688987732

00:49:36.450 --> 00:50:10.080 Versus people who live in Massachusetts are going to need a little bit more help to get where we all want to get this? What this picture basically shows an I'm going to end. This is the Johns Hopkins Original Hospital. Some people in the audience know this building really well. This is the building where Doctor Osler used to walk around to see the patients and that's why we round to this day.

NOTE Confidence: 0.852328777313232

00:50:10.080 --> 00:50:38.500 And Doctor Osler used to keep his young doctors up in the tower and that's why we're called residents to this day, literally and so thank you very much. I thank you for a wonderful Paul Calabrese lecture and as is our tradition. The senior member of the Cowboys family in the audience asked the 1st question is Steven.

NOTE Confidence: 0.926919937133789

00:50:39.110 --> 00:50:54.020 So there was a wonderful discussion of the Epidemiology of cancer and of the different race of cancer in different parts of the country. Uh it's very striking what a drop in cancer rates. They've been as a result of the no smoking campaign.

NOTE Confidence: 0.915433645248413

00:50:54.520 --> 00:51:28.060 UH-1 current legal development is that marijuana is becoming very widely available in many parts of the United States is marijuana carcinogen does it cause lung cancer in particular, an is an education campaign warranted vis-a-vis that well one of the finest most respected epidemiologists in my world is in the 2nd row here Beth Jones. I'll let her answer that actually doctor, Jones is wonderful epidemiologist, I won't.

NOTE Confidence: 0.524141490459442

00:51:28.060 --> 00:51:30.780 Yeah.

NOTE Confidence: 0.934888660907745

00:51:31.560 --> 00:51:33.380 I worry about marijuana.

NOTE Confidence: 0.778682112693787

00:51:34.440 --> 00:51:35.510 40.

NOTE Confidence: 0.915089905261993

00:51:36.250 --> 00:51:43.240 Of the 80 definite carcinogens in tobacco smoke are in marijuana smoke.

NOTE Confidence: 0.925546586513519

00:51:43.830 --> 00:52:13.840 It is true that we talk about marijuana or when we talk about carcinogens. We talk about dose. Overtime and it is true that most people who smoke marijuana don't smoke nearly as much marijuana as they would smoke tobacco, but I worry a great deal about marijuana. The other thing about marijuana is the grades of it can vary dramatically, so the amounts of carcinogens can be.

NOTE Confidence: 0.93562388420105

00:52:13.840 --> 00:52:44.910 Much different then I'll go one further you didn't ask this question. I worry that a lot of people are using marijuana for medicinal purposes and very unscientific ways. We don't know that marijuana is good for some of the things people are using it for. I wish we did more marijuana research. There are clearly some chemicals in marijuana that have medicinal use indeed THC.

NOTE Confidence: 0.936088144779205

00:52:44.910 --> 00:53:16.960 Is already available as a pill? When used to treat nausea from chemotherapy legally but there probably other chemicals in marijuana that have medicinal use. If we were to in a very scientific rational way do the research. We might find out what those chemicals are with the doses are how they should be administered and so forth and we would be a lot better off. But what's happening right now is just an uncontrolled experiment in marijuana and people are probably hurting themselves.

NOTE Confidence: 0.944767415523529

00:53:16.960 --> 00:53:26.110 And I talked about cancer. I didn't talk about chronic obstructive pulmonary disease, and the other things that go along with smoking smoke be at marijuana or cigarettes.

NOTE Confidence: 0.874439358711243

00:53:26.670 --> 00:53:28.740 Great other questions or comments.

NOTE Confidence: 0.912199735641479

00:53:30.830 --> 00:54:03.620 Someone is going to question him, Linda Linda. I'll try to not get too political here. But it's striking that the slides that show the highest mortality rates are in the states that have did not do Medicaid expansion So what can we as medical professionals. Do thinking of the United States is our catchment area even though we live here in Connecticut. What can we do to help. Those efforts for Medicaid expansion. Yeah, well. I think the most important thing that we can do is make sure people realize that these disparities exist.

NOTE Confidence: 0.926672995090485

00:54:03.620 --> 00:54:34.750 And I will also give me the opportunity to say Medicaid expansion isn't complete answer to assistant to the problem. You need to give people access to care and then give people the ability to utilize that care their whole host of people who have insurance. Even they just don't know how to utilize the care don't know how to get into the system actually Beth Jones and I had some conversations about this morning that brought this really took the front of mine that you really have to help people.

NOTE Confidence: 0.938856661319733

00:54:34.750 --> 00:54:40.960 In the system and help people through the system. I'm I'm very much in favor of navigation and other things.

NOTE Confidence: 0.857073187828064

00:54:41.970 --> 00:54:51.610 Other questions or comments. I guess I Harriet what's your hypothesis is too wide. The disparities have gotten worse in states that have Obama care.

NOTE Confidence: 0.91778177022934

00:54:52.350 --> 00:55:07.340 Now the states that have Obamacare the disparities are better, yeah, yeah, yeah, they're better. The states that do not have Obama care or don't have Medicaid expansion are where the disparities are increased they're getting worse.

NOTE Confidence: 0.853829443454742

00:55:08.720 --> 00:55:09.960 Yes, please.

NOTE Confidence: 0.861939072608948

00:55:10.540 --> 00:55:42.370 And then you can you next so I had a question about the slides in which you talk about the black white disparities among the different types of cancer and how they increased with the implementation of screening so from the slides. I saw that note the white rates actually know started going down after training but the black race know started going up. So I'm thinking they know here in sensor increase for both but why was the deaths

going down for wise but the desperate Blacks going up that's actually a very good observation it has to do with ascertainment with the actual.

NOTE Confidence: 0.923564374446869

00:55:42.370 --> 00:56:00.410 We're starting to count them more and there was a slight rise in both lungs. Both colorectal cancer as well as breast cancer is a slight rise after you develop the screening and treatment and part of that is when there was no treatment people why make the diagnosis.

NOTE Confidence: 0.889795243740082

00:56:03.180 --> 00:56:22.190 Yeah, it's striking that smoking and obesity energy balance is still such a major driver. What can the medical profession or the government do or anyone do to bring those rates down. There's a lot of talk, especially well, smoking is actually pretty.

NOTE Confidence: 0.915020942687988

00:56:23.370 --> 00:56:47.410 Difficult but pretty easy. We've shown that the more you tax it. The less kids start. Smoking the more you restrict through clean air laws. The more you restrict where people can smoke. The less kids. Start smoking really aim at preventing people from starting to smoke tobacco nicotine is more addictive than cocaine.

NOTE Confidence: 0.935464441776276

00:56:48.120 --> 00:56:53.870 So once you have someone who's in their 30s and 40s who's smoking. It is hard to get them off.

NOTE Confidence: 0.920244455337524

00:56:54.410 --> 00:57:25.320 E cigarettes may actually be somewhat helpful in this area May is the operative word there, but you really gotta work on keeping teenagers from starting smoking and if you can keep him from smoking by the time they're 18, the likelihood there ever going to smoke goes down dramatically so taxation and so forth for obesity. I have, I do not have good answers for obesity.

NOTE Confidence: 0.92922967672348

00:57:25.320 --> 00:57:29.260 For obesity we talk a great deal about the built environment.

NOTE Confidence: 0.825632572174072

00:57:30.000 --> 00:57:32.360 How we live?

NOTE Confidence: 0.944386005401611

00:57:32.880 --> 00:57:53.140 Has changed so dramatically in the 1950s, we would those of us? Who lived in cities would walk to a grocery store buy some fresh meat. Fresh vegetables bring them home and put them in something called an icebox and cook them over the next 2 or 3 days.

NOTE Confidence: 0.947714447975159

00:57:53.920 --> 00:58:20.920 By the 1970s every family had a car now every family has 2 or 3 cars and we drive to the supermarket on Friday mornings and we fill the back of our SUV's up with all of this processed food from the freezers in the grocery store and we bring all that food home and we put them in these beautiful refrigerator freezers.

NOTE Confidence: 0.940644800662994

00:58:21.450 --> 00:58:34.480 An we use microwaves and we're not doing that, we go out to these fast food restaurants. I know when I was born there were 50 McDonald's restaurants in the world.

NOTE Confidence: 0.923263013362885

00:58:35.320 --> 00:58:41.330 Now they're opening 50 every month and there was a time when they were opening 50 every week.

NOTE Confidence: 0.377802610397339

00:58:42.160 --> 00:58:43.760 OK.

NOTE Confidence: 0.924398362636566

00:58:44.460 --> 00:58:59.530 By the way in 19 at this little tidbit of totally useless information in 1981. Wendy's fixed it. So you don't even expend. The calories getting out of your car to go in and get the fast food they invented the drive through.

NOTE Confidence: 0.902497708797455

00:59:00.490 --> 00:59:05.820 Most people don't know that was a Wendy's invention, but the way we live.

NOTE Confidence: 0.929164826869965

00:59:06.380 --> 00:59:37.470 The built environment, the CDC actually has some great studies on how they want to move us back in the cities and give us smaller grocery stores that we walked to and increase the amount of walking decrease the amount of using of cars and that sort of stuff foods intake exercise. All of those things have to change. We've seen that a little bit in Africa. What happened in East Africa, Ethiopia, Kenya, Mozambique is around 15 to 20 years ago.

NOTE Confidence: 0.928655564785004

00:59:37.470 --> 01:00:00.020 Other Japanese auto industry has huge overruns in their cars and they dump those cars in East Africa and they became very cheap and people started writing automobiles. If you've ever been to Kenya. Those are those darn Blue cabs that are all falling apart. People started riding in automobiles and stopped walking and there's an obesity problem is starting in East Africa, right now.

NOTE Confidence: 0.891944050788879

01:00:00.850 --> 01:00:35.280 So we need to think about how we live not just one thing well. Thank you doctor probably for your excellent talk had a question well really because it's a dual question. You mentioned there were some issues with the OMB racial classification. So we wanted you to touch on that and then also you've been mentioning about the difference between I guess contributions to disease whether it's behavior or biology. And if you could talk about that, too categorizing populations by race, really doesn't make senseancestry.com.

NOTE Confidence: 0.916093230247498

01:00:35.280 --> 01:01:10.290 Is really shown us that trying to slice groups of people by race is trying to like sliced soup? It just doesn't work. Alright I have some white blood's Native American blood and so forth. The OMB classifications are even worse. The office management and budget defines race in the United States. They do it. About 2 years before every census when the Republicans control the OMB and the White House Native Hawaiians or Pacific Islanders when Democrats control. It Native Hawaiians or Native Americans.

NOTE Confidence: 0.936464071273804

01:01:10.600 --> 01:01:35.900 If you know, someone who is from India if they are if they were born before 1950 in the 1950 census. They were one thing in 1960. They were Caucasian and since then, they've been something they've been 3 different races. And my favorite is Barack Obama was white in the 1970 census, it became black for the 1980 census.

NOTE Confidence: 0.928094267845154

01:01:37.040 --> 01:01:44.260 The 1970 census, said that you should declare yourself to be the race that your mother considers herself to be.

NOTE Confidence: 0.940847456455231

01:01:46.120 --> 01:02:16.450 And so race changes overtime an like I said there's 7 states in the United States, where there's no black, white disparity in breast cancer mortality. You can say the same thing about colorectal cancer mortality, Black Square. Military retirees or their spouses who are military retirees have much more white rates for cancer than they do black rates, including for prostate cancer by the way race.

NOTE Confidence: 0.939879715442657

01:02:16.450 --> 01:02:42.020 Matters but it doesn't matter as much biologically as we frequently attributed to but area geographic origin does matter. Sometime biologically for example. There is a group of people who live within the group is people who live or were born within 50 miles of the Burmese border on the Thai side of the Burmese border.

NOTE Confidence: 0.906051993370056

01:02:42.680 --> 01:02:50.190 If you give Tegra TA to that group of people, 20% of them are going to have Stevens Johnson.

NOTE Confidence: 0.933251976966858

01:02:51.330 --> 01:03:23.870 Now, at which for you guys don't know it's appealing in their hands and feet and mouth and so forth. It's a bad problem 20% of people who live within 50 miles of the Burmese border in Thailand are going to have Stevens Johnson because they have a particular genetic mutation that's not all Asian people. It's not even all Thai people. That's 20% of people who live from that particular area of geographic origin. You can say the same for G6. PD there are white people have sickle cell disease.

NOTE Confidence: 0.913800597190857

01:03:23.870 --> 01:03:54.560 Black people from southern Africa don't unless their mind unless their parents migrated from up North. We have to be careful with some of these racial categories, but this has been great. I think thank you. I think Paul Calabrese would look down finally today. He had a report that he prepared in the 1990s cancer at the crossroads to see all the progress that we've had in cancer is amazing. But there's still a lot of work to do and we have to make sure all people are benefiting from these new therapies so Otis. Thank you very much and before we clap, I'll just say.

NOTE Confidence: 0.856963992118835

01:03:54.560 --> 01:04:11.460 For Trainees Fellows or anyone who just wants to join us any training at Yale right next door. We have a one hour with him to ask some informal questions just discuss some other things more informally today. Thank you very much.