[SQUEAKING]

[RUSTLING]

[CLICKING]

JON GRUBER: We're going to continue our discussion today of Medicare. Remember, we're talking about the fact that Medicare's costs rose very rapidly, and the government was trying to find ways to control them in the early 1980s, and they took two routes.

One route was to stay within the existing Medicare structure, but to move towards a prospective reimbursement system, which, as we said, worked somewhat, but only partially because of the hazards of partial reform.

The other approach was to actually lean into managed care as a tool of Medicare. This is the elusive Medicare Part C, which is now called Medicare Advantage. It's had various names along the way.

The basic idea was to say that enrollees, instead of signing up for Medicare, would sign up for a Medicare HMO, what's called Medicare Advantage Plan. The way that works is you, as the enrollee, agree that you will get your health care delivered by this Medicare HMO-- they're run by folks like Aetna and Humana, et cetera, big insurance companies-- including any limitations on their doctor networks.

So it's an HMO. In return, the HMO gets a fixed reimbursement from the government. It's a capitated arrangement. The government pays the HMO a fixed amount, which depends on your age initially. Depending on your age-- so 75-year-olds the government paid more than 65-year-olds.

And what do you get? So what does the government get? The government sheds the risk. The government says, I'm going to pay a fixed amount. And this managed care company is going to bear the risk. I'm out of the business.

For enrollees, it's a trade-off. On the one hand, you have a limited doctor network. On the other hand, these Medicare Advantage plans typically cover all the cost sharing that's in Medicare. Remember last time, if you look back at table-- if you look back at table 16-2, you see Medicare has a lot of cost sharing, in particular, the uncapped doctor coinsurance. That all goes away under Medicare Advantage.

So the idea is you basically save a lot in out-of-pocket costs in return for a more restrictive doctor network and more management of your care. So a couple of things I want to talk about this.

Well, first of all, what was the effect of this on enrollees? There's now been a number of studies, including by myself. And the bottom line is that Medicare Advantage appears to deliver much less costly care-- to deliver much less expensive care than does traditional Medicare fee for service, which is what we'd expect from the managed care evidence.

In other words, what we talked about with managed care, which is managed care, saves money, is true as well for Medicare Advantage. It seems to save money without a meaningful effect on patient outcomes.

That is, once again, Medicare was operating the flat of the curve. And so we moved people to these Medicare Advantage plans. They are able to operate more efficiently to lower costs without worsening outcomes.

Now, worsening outcomes, let me be clear, along the dimensions we care about most, like things like mortality and hospitalizations. They may make life less pleasant. You have to shop around for a doctor. Your wait times can be longer. People bitch about them constantly. But the bottom line is it turns the outcomes we care most about-- things like mortality-- they appear to be no worse and they save money.

The interesting question here is, how much should the government pay them? I said the government was just going to pay them a fixed amount. Well, how do you set that amount? Well, the government said, we've got a good idea.

We want to save money. That's the whole idea we set these things up. We will pay them 95% of what a typical Medicare enrollee would cost at that age. So if you get a 70-year-old, we'll compute the average cost of 75-year-olds on Medicare.

We'll pay you 5% less. And woo-hoo, the government makes money. Except it doesn't. In fact, the government lost massive amounts of money. Why? Why did the government lose money by setting up this new program people could enroll in and paying 5% less than the average cost of people on Medicare? Yeah.

AUDIENCE: Because it's the average cost and there's an adverse selection.

JON GRUBER: Yeah, because the people who signed up are who? Who's going to sign up for a program that limits the number of doctors? The healthiest people. And the government paid the average. We could see this illustrated, an example of this, in figure 16-4.

So imagine there's three types of people, OK? People who cost on average $1,000, $2,000, and $3,000. Imagine there's 100 of each of these people in a group. And imagine that they're all on traditional Medicare.

Then on average, the government spends $2,000. This is the left-hand column in figure 16-4. On average, the government spends $2,000 and total costs are $600,000. Now, the government says, we're going to introduce Medicare Advantage, and we're going to pay the Medicare Advantage plan 95% of what the average person costs on Medicare.

Well, what happens when you do that? Well, the cheapest people, 30% of them move over because the healthiest people like these plans. Let's assume the middle people, 15% move over. None of the sickest people move over. What's the new average cost of medicare? It's $2,118.

So you pay the HMOs 95% of $2,118, but it's actually costing them a ton less. It's actually cost them $1,333 because they're getting the healthiest enrollees. So the government loses money. This is a classic example of how adverse selection plays out. The government thought it was saving money. But since it was paying on the average and only the healthiest signed up, it actually lost money. So the government saw this and they said-- yeah.

AUDIENCE: And it's average at the particular point in time?

JON GRUBER: Every year, the average for that age.

AUDIENCE: And that would be the average across both those in--

JON GRUBER: No, only those in traditional Medicare.

AUDIENCE: Which means that that would also [INAUDIBLE].

JON GRUBER: Yes, exactly.

AUDIENCE: Which of those two effects is bigger?

JON GRUBER: The bigger effect is just the fact that the healthiest people are moving over, at least initially, because this was still a minority of the population. So if you look at figure 16-3, you can see Medicare Advantage really started to grow in popularity.

Then what happened? Well, in 1999, the government said, look, we're losing money on this. We know how to do that. We'll cut the 95% to 90%. That'll solve the problem. Well, to some extent, it did slow the growth of Medicare managed care. You can see that number drop then in the early 2000s.

Did that mean the government saved money? No. What happened was in some parts of the country, they could still make money at 90%. So those parts of the country, the Medicare Advantage plan stayed. In other parts, they couldn't, make money anymore at 90% so they dropped out. That is the selection wasn't enough to offset the drop to 90%.

Now you might think, OK, well, that's all well and good. Clearly, we can't save everyone from Medicare Advantage. But we've still got-- it was something like 10%-- that shouldn't be a 1. It should be a 10. Valerie, could you send me an email to remind me to fix that? There's a typo on figure 16-3. There should be a 10, not a 1. So 10% were in. That's cool.

The problem is, people lost sight of the point of this program. The point of the program was to save Medicare money. But people said oh no, all these people aren't able to access this new benefit. That's bad. We've got to raise what we pay them.

So under the same bill that they include the Part D plan, they started paying Medicare Advantage plans 120% of traditional Medicare. Now here, you don't need adverse selection. See, that's going to be a money loser. When you add adverse selection, that's a huge money loser.

And what happened? Well, enrollment took off, because this was a massive moneymaker. Indeed, for most of the major health insurance companies in America, this became their major profit center.

Under the Affordable Care Act-- this graph ends early. If you look at recent data, this growth-- under the Affordable Care Act, they cut that 120%, but only down to about 105%. OK? So insurance companies are still making money. Medicare Advantage is still growing.

At this point, about half of all enrollees in Medicare are Medicare Advantage. And now, as Steven said, that could lead to this cost spiral in this calculation over time. So we've got a situation where in some sense, we've gone away from the actual motivation for managed care, which was to save money, towards a goal of actually having people in those managed care programs.

And that is good for many seniors, because this gives seniors a chance to cover those high out-of-pocket costs in Medicare. But it just means the government is spending more money on a program where it's originally designed to spend less.

Now, what can we do about that? Well, one thing we can do about that is we can say, look, we don't know what the right number is. 95%, 90%, we don't know what it is. Let's just go ahead and let competition between the plans determine what the right number is.

That is, basically we could say we're going to set-- let's move to a full system of what we call premium support. A premium support system will be we just literally send you a brochure with your choices.

Here's traditional Medicare. Here's a bunch of plans. We're going to send you a check. It's like vouchers for schools. We're going to send you, Medicare recipient, a voucher. You can trade that in. If that covers the cost of your plan, then you might even get money back. If it covers it exactly, you get nothing.

If it's more than the cost of the plan, you get money back. If it's less, you pay in. So the idea is to basically give people a certain amount and let them shop. Essentially give people a certain amount and let them shop.

So how would a system like that work? Well, if you look at-- oh, here you go. Yeah, table 16-3. So now imagine that you had a system with three plans. OK? One cost $1,800 a person, one cost $2,000 a person, and one cost $2,500 a person.

And let's say you gave every senior a voucher. And you said, look, we're going to spend $2,000 a senior. And that amount can be anything. That's then pegged down by politics or something else. It's not a function of average cost anywhere.

It's literally you just say, here's the amount of money we want to spend in this program. So it gives us cost-- the government gets cost certainty. The government says, we have a budget such that we can give every senior $2,000. Here's your $2,000 voucher, go shop.

Well, in this case, if you sign up for plan A, you get $200 back from the managed care plan. You get $200 back. So for plan C, you have to pay an extra $500. And you shop. And then the government gets out of the business of figuring out what the right voucher is. The right voucher just determined by what the government's budget wants to be.

You just say, this is how much you want to spend on the program, and then you can say, we could raise it by x percent a year. The problem with that is it gets rid of this problem of the base of the cost being itself determined by selection, but doesn't get rid of selection.

So what happens if you do that? And then what happens and people sort themselves, so that the healthiest people go in the cheapest plan and the sickest people go in the most expensive plan?

Well, then you could end up with a situation like the second panel, where suddenly, after adverse selection, plan A is cheaper because it's getting the healthiest people. Plan C is more expensive because it's getting the sickest people. Plan B is about the same, maybe a little more expensive. OK?

What happens is, well, then the healthiest save more and the sickest pay more. Now, this is not inherently a problem from an efficiency perspective. The problem here is equity, which is that basically you end up with a system where, by allowing choice, you screw the sick. They end up having to pay more because they get stuck in expensive plans.

It could end up being a problem if you end up with what I described a few lectures ago of the death spiral. If it ends up being that the top plan becomes so expensive that almost no one ends up in it, it becomes unaffordable.

So there's two possible problems with adverse selection here. The first problem is literally the market could fail and the most generous option could become unaffordable and could go out of business. That's an explicit market failure. That's an efficiency loss. We talked about that with death spirals.

The second problem is just redistribution, that you move to the system and now, given adverse selection, you're essentially redistributing from the sick to the healthy. And people might find that unattractive.

So more generally, this ties to the fascinating issue of choice in the context of health insurance markets. We think about choice in the context of goods markets. There is a common-- it two big advantages, right?

Why do we like choice in 14.01? Because people can shop so they can match their tastes, and because it induces competition, which gets us to the first fundamental theorem of welfare economics. It gets us to efficiency.

In the context of health insurance, there are two countervailing problems that offset that. The first is adverse selection, that shopping leads to these potential market failures or at least redistribution from sick to healthy. That's the first problem.

The second problem is that choosing health insurance plans is really fucking hard. Have any of you ever had to choose a health insurance plan from a menu of options? A couple of you. It's hard. It's really complicated.

And in fact, I have a whole research agenda showing what a bad job people do choosing their health insurance plans in a variety of contexts. I mentioned this last time, research with Jason Abaluck at Yale University.

We showed that only about 12% of seniors choose the lowest cost plan available. We've shown in many, many contexts it's a really hard decision, because you've got to anticipate where your medical spending is going to be.

If you know for sure you're going to spend nothing, then you should buy a low premium, high deductible plan. But if you know for sure you're going to spend a lot, you may want to buy a high premium, low deductible plan. But you don't know what you're going to spend, and it's hard to figure that out. It's an incredibly complicated decision.

So the trade-off with choice, we have the standard benefits of choice, which is it matches consumer sovereignty and it reduces competition. But now we have these interesting trade-offs which is choice leads to adverse selection and choice can lead to confusion.

The adverse selection, by the way, just a side note. There's two types of adverse selection here. We talked about what you might call passive adverse selection. That's when people only sign up for the plan that's best for them. There's also active adverse selection, which is when plans do things to get the healthiest people.

So there was the old saying was the first HMOs were third-floor walk-ups. If you could make it up three flights of stairs, you're in. The idea being they wanted to only have the healthiest people. Now, that's a joke. But actually, in reality, plans did many things.

Plans would advertise not that their cancer doctors were good, but they offered free gym membership. They basically tilt their advertising and their focus towards things which would attract healthy enrollees and dissuade less healthy enrollees.

And this comes to a head with one of the most significant changes we've seen in health care markets in the US, which is the growth of what we call narrow network plans-- plans with a very restrictive set of doctors and hospitals you can go to.

The idea of that-- if you recall our discussion of PPOs-- it allows for tough negotiating. If you only let people go to a couple of hospitals, then you can negotiate harder with those hospitals to get their prices down.

But at the same time, if you're a plan that only wants to have healthy people, what do you do? You don't negotiate. You don't include the cancer hospital. So I mean, every hospital treats cancer. But if you have cancer, you want to go to the cancer hospital.

So you just say, I'm sorry. My network doesn't include the cancer hospital. You have cancer, that's too bad. You might consider this other insurance plan. They cover cancer really well. OK? So there's both passive selection, which is the sick people sign up for the most generous plans, and active selection, which is plans gear themselves to select out the sickest and selecting the healthiest through the way they set up their benefits and their networks of providers. OK? Yeah.

AUDIENCE: What does the story look like for someone who has already enrolled in some plan? For instance, if they have cancer, want to go to a cancer hospital, and then is not covered there and wants to change their insurance. What does that look like?

JON GRUBER: At open enrollment, you can change.

AUDIENCE: So you have to wait.

JON GRUBER: Yeah, you have to wait, basically. You have to wait till open enrollment, then you can change.

AUDIENCE: January?

JON GRUBER: Yeah, it runs like late fall, and then the year starts. In January, you start with the new plan.

AUDIENCE: And if that doesn't align with your health timeline, you're screwed?

JON GRUBER: Yep, you're screwed. Now, you can go out-of-network. Remember, HMOs cover certain things. You can always pay out of pocket and go wherever you want. But if you can't afford it-- if you have cancer-- if you find out you have cancer in February and you're locked in a plan without a cancer hospital-- once again, it doesn't mean you get no care. All hospitals treat cancer. It's just you might not get to go to the one you want.

Now, here's what I find most fascinating about this from an MIT perspective. Both of these problems, adverse selection and difficulty in making choices, have technical solutions. OK? Let's talk about the second one first.

How do we solve the fact that people have a bad time making decisions? We give them tools to make decisions easier. We use AI and other things to guide them through the decision and make it easier.

So technically, we can solve that problem. In practice, we haven't figured out how. And part of the reason is because when you give people these tools, they don't use them. There are a bunch of tools like this. And people just say, nah, I'm just going to use this plan. It looks good to me.

So part of the problem is you don't have to just provide the tools. You need to get people to use them. But in principle, that's solvable. With good decision support, you could solve that problem. What about adverse selection? Well, that's also solvable in principle by what we call risk adjustment.

That is, instead of paying the managed care plans a fixed amount based on the age of someone, you pay them based on how unhealthy that person is. So if your managed care plan signs up someone who's diabetic, you get paid more than if they're not diabetic, or with cancer, you get paid more.

As a result, there's no incentive to avoid the guy with cancer because now you're going to get paid more. That voucher you get is higher if you're a cancer patient. And therefore, managed care plans don't have an incentive to avoid the sickest patients.

So in principle, you can solve the adverse selection problem by actually tying the amount plans are reimbursed to the underlying health level of the people who are choosing. In practice, it's super hard.

It's hard because people's health is not easily predictable. If you run a regression, a statistical model that tries to predict people's medical care spending on everything you know about them, everything, you can explain at most about 20% of the variation in health care spending. Basically, health care spending is very, very unpredictable.

Moreover, the plans are very good at gaming the system. So for example, the government set up a system where it paid more for diabetics, for example. What the plans did is they said, well, within diabetics, some are sicker diabetics and some are healthier diabetics. So they avoided the sicker diabetics, just took the healthier diabetics, that made even more money.

So it turns out, once again, this is hard to carry out. So this is why I find this a fascinating topic I've worked a lot on for a lot of years. I still haven't cracked this nut, which is we have these two problems.

We love competition and choice in economics. I wish we could make that work in this context. But we haven't figured out how to solve the two fundamental problems, which is, how do we solve this adverse selection problem, which can destroy markets or at least cause bad redistribution? And how do we solve the fact that people aren't good at making these choices? OK? Questions about that? Yeah, Enoch.

AUDIENCE: So outside of equity concerns, earlier in the class, you mentioned it's hard to basically create incentives for people to, for instance, not drink soda and live healthier lives, I suppose.

Assuming we are ignoring people who have chronic illnesses and just people who's, I don't know, decisions they make when they're 30 or 40 could affect their health in the future, would the idea of paying healthier people and charging sicker people more address that?

JON GRUBER: Well, yeah, I mean, basically there's essentially the same trade-off. And the trade-off is, to the extent that you are in control of your future health care expenditures, then we should basically use financial incentives to get you to where you need to be. To the extent you're not, then you're discriminating.

So if, for example, a plan says, I'm going to charge you more if you're overweight, is that an incentive or discriminatory? Well, it depends on why people are overweight and how you feel about that. So that's a very tricky ethical line between incentivizing an discriminating that gets hard. Yeah.

AUDIENCE: I was curious on the line of discrimination. If government is paying more for these plans to take up, say, diabetics or otherwise people who have higher health care costs, is that basically the same as if the insurance company was charging an increased premium for having a pre-existing condition, except the government's the one footing the bill?

JON GRUBER: Exactly. So it's basically saying-- it's as if we're allowing insurers to charge sicker people more. But the government's paying the insurers more than insurers and the people paying more. So it's not discriminatory in that sense. It's just the government is trying to offset this adverse selection with this risk adjustment.

So look, this is in the weeds, but it's very important. Just like we talked about with PPS, this whole point of the end of last lecture and this lecture is there's lots of smart, productive directions to go when dealing with these problems.

But they're all hard and they all raise new issues. And it means there's always room to keep improving-- things like, how do we reimburse providers in a way which gets their incentives right? How do we protect against adverse selection destroying markets? There's constant work on improving that. OK? Questions about that?

All right. I have some other stuff I want to talk about, but I want to make sure we have time. So why don't we talk about health care reform? So let me talk big picture about health care reform. This will be pretty boring if you guys don't ask questions. So please, along the way, fire away.

OK, let's set the stage. OK, let's set the stage. Basically in 2009 America, you have-- or let's go back further, early 2000s America. You have a system with basically three groups. You got about 60% of people with employer-sponsored insurance. You got about 20% of people with government insurance-- Medicare for the?

AUDIENCE: Old.

JON GRUBER: And Medicaid for the?

AUDIENCE: Poor.

JON GRUBER: And then you have about 20% of people who, to put it in strict economic terms, are fucked. Why is that? Because those people, if you don't get insurance from the government or your employer, the only option was the non-group insurance market. And as I said, in those days, the non-group insurance market was a market where insurers were free to discriminate and not cover you.

So once you got cancer, you were out, or they could raise your premiums 1,000,000% or whatever. As a result, of that remaining 20%, most of them were uninsured. We had about a 16% uninsurance rate. A few people did enter that market, but most were uninsured.

And that's the situation as it stood. Now, for many decades, we'd had this problem with the uninsured. And the world was divided into two types of solutions. The solution on the right was too much government, more market, that will solve the problem.

We need freer competition, freer choice in health care. I think I've been clear enough that that's just not going to-- I think I've explained enough about this market, going back to Kenneth Arrow in 1963, that wasn't going to solve the problem.

More freedom would not allow insurers to-- insurers would still discriminate against the uninsured. That wasn't going to get them-- against the sick. That was going to get them health insurance.

On the left, the answer was single-payer health care. Let's do what the rest of the world does. Let's just have one national government insurer. And that has two huge advantages. First of all, everyone's insured from birth.

No adverse selection about insurance, no signing up, none of this stuff. You're just insured from birth. Zero uninsurance. Second of all, lower costs, because think about why US health care costs are higher. We talked about it two lectures ago. Administrative costs are much lower. Administrative costs in the Canadian National health insurance are like 2%, compared to 15% in the US.

And it's easier to regulate and control health care prices in a single-payer system. One payer, they set the prices. You have full market power to set the prices and regulate the system. Now, there are economic arguments against this approach, primarily the fundamental economic argument that goes back to what I talked about in the first lecture, which is just because the government can make something better doesn't mean it will.

That once the government is running the whole health care system, the problem is the government is running the whole health care system. And the government makes a lot of mistakes on a lot of things. So there's those challenges.

In particular, the challenge you face is you want to set prices high enough so people still want to be doctors and still want to invent drugs, but also low enough that the government can afford the health care. And that's a tough spot to hit.

But in some sense, that's irrelevant, because the fundamental problem of single payer is political. And the reason that single payer never made any headway is because supporters of single payer never have found a way to get past three fundamental barriers to single-payer health care in America.

The first barrier is the fact that most people get their insurance from their employer, and they pay for it with what you might call a hidden tax. What do I mean by that? Remember I said, MIT gives me health insurance. I pay about $6,000 year. MIT pays about $18,000 a year for my family.

MIT doesn't just do that out of the goodness of their heart. They do that because they're in a competitive labor market. I wouldn't work here without health insurance. And in a competitive labor market, they make me pay for that with a lower wage.

Indeed, there's lots of evidence that higher costs of health insurance are reflected in lower wages. So I pay for my health insurance. My health insurance isn't free. The $18,000 doesn't come to me free. I pay for it in lower wages.

Let's say we got rid of that system and moved to a single-payer system, where now we all have government insurance provided by the government, paid for by a tax. Now, roughly speaking, what that would mean is it would just shift from my getting $18,000 lower wages to my getting $18,000 higher wages and paying $18,000 in taxes. And I'd I be in the same spot, roughly speaking. There's a lot of little bits, but you get the idea.

So from a social efficiency perspective, it wouldn't really matter. It's just who I'm paying. Either way, I'm paying for my insurance, plus this $6,000 I pay out of pocket. The problem is that it's hard to explain to people.

People say, wait a second, you're going to tax me $18,000 and my employer is going to make all this extra money by dropping the health insurance? That's crazy. It's just a big win for employers.

You try to explain, well, no, employers will shift that to lower-- and they tune you out. So basically the problem is it is politically very challenging to replace a hidden tax with an overt tax. That's the first problem.

The second problem highlights why it's so important when you set up government policy to get it right the first time, which is that it is very hard to change an existing system. Once you've gotten it wrong for long enough, it's hard to fix it.

What do I mean by that? Which is, well, 80% of people have insurance and it largely works for them. People don't like aspects of it. But they like it enough that if you come to them and say, do you want to give up your insurance for some unknown thing? We'll call it Berniecare. They're going to say no. And you're not going to win with a policy 80% of people oppose.

Now, I lived through this personally because in the Affordable Care Act-- which I'll describe in a few minutes-- one of the things we did is recognize that many people had insurance which was not real insurance. There are many insurance policies being sold out there that, for example, would say, we will insure you, but we won't cover the hospital.

They'd say it in the small print on page 16. Or we'll insure you, but if you spend more than $5,000 a year, we're not paying anything more. Those aren't real insurance plans. We banned them.

As a result, on the order of about 3 million Americans had to change their insurance plans. And President Obama had promised you wouldn't have to give up your insurance. They were very upset.

Now, they didn't really have insurance before, but they were still upset. In fact, they all emailed me, every single one of them, like it's my fault. And it was a big political drag on the ACA. Imagine that now with 250 million people, not 3 million people. It's just not going to-- that's just a nightmare. So that's the second problem.

The third problem is related to the entrenched political interests issue, which is we now have a $1.2 trillion insurance industry in America. And it's not just going to go, say, it's been a good run. We don't need to make any more money. We're going to all quit now. It's not going to happen. They're going to fight. And that's a fight that the government is not going to win.

So the bottom line is, I'm not saying single payer won't happen. It goes to an old joke that's told that I learned many years ago when I started as a health economist, which is the American health economist who dies and goes to heaven and gets there and God says, you can ask me one question. And the health economist says, will we ever have single-payer health care in America? And God says, yes, but not in my lifetime.

So basically, it's not saying that it can't happen. It's just saying that-- I'm not saying it's not a good idea. I don't waste any time thinking about it's a good idea because I don't see how it's going to happen. And until someone convinced me they've solved all three of those seemingly intractable political problems, I don't see how we get there.

So we were stuck. We had one side on the right, which basically didn't want to do anything. They couched it in ooh, we want free market health care. Basically, they were like, we like the system as it is. And one side which wanted to rip it up and start over. And every 18 years on average, we try to reform health in the US and the fight between those two sides. Yeah.

AUDIENCE: Is there a chance that US health care costs go up so high that this overt tax would be so much lower than the hidden tax that people would want [INAUDIBLE]?

JON GRUBER: No, because health care costs go up, the overt tax will have to go up too.

AUDIENCE: But if single payer is much cheaper, wouldn't that--

JON GRUBER: No, that's right, that's right. And you can make that argument. But imagine the following political argument. Well, don't worry, now you pay $18,000. But in our system, you'll pay taxes of $14,000. They'll be like, I don't care. That's $14,000 in taxes.

No, you don't understand. You'll get an $18,000 raise. My employer won't give me a raise. What are you talking about? My employer is an asshole. So that's the problem is even if it's $14,000 and $18,000, it doesn't solve the problem.

AUDIENCE: But you're not paying it?

JON GRUBER: It's still a tax. Yeah.

AUDIENCE: What if you just taxed the employers?

JON GRUBER: Well, that was actually Elizabeth Warren's solution was to basically try to essentially do it through employers. The problem is, what about employers that now don't offer health insurance? So that's a new tax on employers. Oh my god, you're crushing US business. Yeah.

AUDIENCE: Wasn't that the point from earlier about wages, with interventions that affect the economy at this scale, how quickly [INAUDIBLE]?

JON GRUBER: Awesome, we're going to talk about that in chapter 18-- chapter 20. So let me get to that later.

AUDIENCE: And do some areas respond faster than others?

JON GRUBER: Chapter 20, man. I don't want you to not come to class later. I want to give you the answer now. I can't give the answer out before drop date, because then who knows? OK, so that's where we're stuck. Yeah.

AUDIENCE: How do you think having a single payer would impact drug prices?

JON GRUBER: Well, clearly we know drug prices would go down. They're lower everywhere else in the world. See, the key thing is single payer confounds two pieces. And it's important to separate it in your mind. One is the coverage piece and one is the cost piece.

The coverage piece is easy to think about. It's just everyone's just on one plan. The cost piece is separable. And we could do without single payer. That's just price regulation. Anybody can do price regulation. You can do it in our current system.

The question there is, do you regulate-- how do you choose that sweet spot where prices don't go so low we don't invent any new drugs, but we're not making excessive profits that they don't need that they're spending on ads? Yeah.

AUDIENCE: Are there any other countries than the US that you think are doing it right, or have a single-payer system, because maybe they're smaller and it's more [INAUDIBLE]?

JON GRUBER: Oh, I think once again-- so there's two answers to that. The first answer is I don't really care because we can't ever get there. So it's not really worth a lot. It's not that I don't care, but it's not really worth a lot of my intellectual effort to figure that out.

Second is there's lots of countries that do it right, that I believe feature a system which are more attractive than ours. And typically what you see in other countries is-- we have in the US essentially an implicit two-tier health care system. What do you mean by that?

I mean if you're in the system, you're getting good care. If you're out of system, you're getting bad care. Other countries have a different two-tier system. Everyone gets a base level of care. Then rich people buy up on top of that.

That, to me, is better because at least it's explicit. Now, the rich are still getting more, but that's the American way. I don't think we're going to fight that. But basically, at least it's explicit. At least everyone gets a minimum. If the rich want to top up, they can. And that's more typical around the world. That would be a system I'd advocate for more. OK? Yeah.

AUDIENCE: Do you attribute like the innovation that's happening in the US medical system to the higher cost? Do you see that?

JON GRUBER: Yeah, there's definitely a relationship. There's no doubt that if we lowered the costs-- there is no doubt-- well, I won't say there's no doubt. It is very, very likely that if we significantly lower the prices that pharmaceutical companies can charge, they will spend less on R&D. I believe it's an elastic margin.

The question you have to then ask is-- the interesting question then is, what is the welfare cost of that relative to the revenues you raise? So the welfare cost is, we get fewer drugs. But let's be clear. What drugs do we get fewer of?

What is the innovation on the margin that we're not having? A lot of the innovation is inventing really expensive cancer drugs that you live a week longer. And it doesn't bother me so much if those drugs don't get invented. OK?

So the question is, what is the actual impact on life quality that we're getting from this lack of innovation? That's a much harder question. Once again, I think the direction is clear. There is no doubt the more money the drug companies make, the more they'll innovate. And some of it will be very, very valuable. No doubt, the direction is clear.

The magnitude is unclear. And what is also clear is that you are raising-- in the meantime, you're getting a lot of money, which can be used for other purposes. In particular, that money can be used to invest directly in pharmaceutical R&D.

So if you think of the way pharmaceutical R&D works in America today-- did I already talk about this? OK, sorry. I hate to repeat myself. This is the argument laid out in my book Jump-Starting America with Nobel Prize winner Simon Johnson.

It didn't really boost my book sales. I was very sad. I was like, woo-hoo, my co-author won the Nobel Prize. But it didn't really do anything. So basically, the argument we lay out is that essentially, if you think about the way-- our country is the most innovative country in the world, OK?

It's ironic. That two most innovative countries in the world are the US and China, which are two very extremes of economic freedom. But ours is still the most innovative, at least traditionally. That really came from a marriage of a public investment in basic science and a private investment in applied science.

And what we show in this book is that what happened in the decades after World War II when America was great, was that basically, the government invested massively in science. In 1965, 2% of the entire US economy was government-funded R&D.

$1 in every $50 was the government spending money on NASA or energy or Department of Defense or health and human services research. That's now about 0.5%. We're about 14th in the world now. That innovation set the base for everything.

Everything on your phone, every drug we take all came from that original public investment. So if you think about how drugs are invested, there isn't a single drug that's invented that doesn't rely at some extent on NIH research. NIH is the National Institutes of Health. They do the basic science research.

So we did the following calculations-- my co-authors and I in our editorial, we do the following calculation. Which is we said, imagine you regulated the top 250 most expensive drugs.

There was a bill that would have done that. And the estimates were that if you did that, the Congressional Budget estimated-- pretty heroically, but as good an estimate as anyone could-- that if you did that, the lower price would cost 10 fewer drugs to be invented every decade.

OK, so that's bad. Now, once again, how bad? Depends on what drugs, but clearly bad. However, if you took one quarter of that savings and gave it to the NIH, by estimates based on economists here at MIT, you would get 80 new drugs a decade.

So basically, you have to remember, we're not just regulating drugs and burning that money. We're doing stuff with that money. And that other stuff may have value. So the proper analysis of a government intervention is a full analysis of both the impact of where you get the money and the impact of where you spend the money.

And I think that's missed. There's this tendency in health care-- in everything, but particularly health care-- to think in very black and white terms. We can't regulate drug prices. There'll be less innovation. That's not right. There's a trade-off between how much we lower the price and how much innovation there is. And that depends on what else we do with the money.

And let's say we didn't put the money in. Let's say we gave the money to very poor people. Maybe that would do a lot more for US life expectancy than a few new cancer drugs. Maybe that's a better thing to do, I don't know. But the point is, we have to constantly evaluate that trade-off.

The other thing is-- let me make one other point while I'm on my soapbox on this. The other point is, most of health care spending is not in pharmaceuticals. It's on doctors and hospitals.

In that case, it's not quite clear how much innovation we're getting. Clearly pharmaceuticals, it's one of the most amazing, miraculous sectors on Earth, US pharmaceuticals, in terms of what's invented.

Doctors and hospitals, they do cool stuff, but kind of because they want to learn and do cool stuff, not because it's making them a lot of-- it's not obvious that paying them higher prices is causing a lot of productive innovation. And that's where most of the savings would come from regulating. Might be causing some. But once again, we need to learn that and understand that and evaluate the trade-off. Yeah.

AUDIENCE: Public R&D seems to be a more cost efficient engine for innovation than private R&D. That's not a bigger part [INAUDIBLE]?

JON GRUBER: Well, it's not more cost efficient. It's that basically, they complement each other-- that the reason that spending NIH would cause so much more R&D is because then it would be picked up by private companies that would then invest themselves and create the drugs. But you're asking a question, why don't we have more of it?

Chapter 9. Basically, we had 2% of GDP. What happened? Three things happened. The first is the scientists got too big for their britches. In 1960, the *Time Magazine* man of the year-- it was only men back then--*Time Magazine* man of the year was the scientist.

Can you imagine that today? Scientists were like fucking studs. And they got a little bit too full of themselves. So when people would say, gee, shouldn't we worry this nuclear energy thing might have some bad effects on us? They're like, no, no, no, don't worry about it. They tried to invent a nuclear pen.

So scientists kind of became a little too big for their britches, was problem one. Problem two was that basically, scientists and politicians started disagreeing. The whole reason this consensus grew was a bipartisan consensus-- Republican, Democrat-- for R&D was because we're all trying to win World War II, get to the moon, do common things.

Then the Vietnam War happened, and the scientists didn't necessarily like what the government was doing. And they got mad about it. And as the saying goes, if you speak truth to power, power will cut your funding. And so that was another problem.

The third problem was the US government started spending money on a lot of other stuff-- the Vietnam War. And in particular, programs like Medicare and Medicaid grew rapidly. And it put pressure on the budget. And as we learned in chapter 4, there's two types of budgetary categories. There's mandatory spending and discretionary spending.

Mandatory spending is stuff you have to spend every year. So if someone's on Medicare, you got to pay their bills every year. Discretionary is other stuff, including R&D. Wherever you have to appropriate it, you have to decide how much you're going to spend.

So what happens when there's fights over the government? No one wants to touch Social Security and Medicare. We can't touch that. So what's left is this relatively small share of government spending called discretionary, which includes public R&D.

Now, President Biden did pass the CHIPS plus Science Act. I helped work on that act. And that did put a lot of new money allocated for science funding. Unfortunately, that money has not yet been appropriated, because these same kind of budget fights. Yeah.

AUDIENCE: These proposals by certain [INAUDIBLE] like Medicare for All, how do those fit into the--

JON GRUBER: Well, Medicare for All is literally just a version of a single payer. It's just trying to tap into-- what that answer is doing is trying to solve problem two. There's three problems. There's the hidden explicit tax problem was one, three was the powerful insurance companies.

Problem two was people not wanting to give up something they like. The reason Medicare for all is attractive is like, don't worry, you're giving it up for Medicare. Everybody likes Medicare. That's an effort to solve problem two is by calling it Medicare for all. Yeah.

AUDIENCE: And then how is this government approach trying to reimburse the super ultra rare diseases like gene therapies?

JON GRUBER: Great, great, great question. Something I'm also working on. It's an enormous challenge. So basically, here's what's very challenging. We know in theory how to regulate health care prices.

We calculate what an intervention is worth. And we say we won't pay more than that. So there's something you can calculate called QALYs-- Quality-Adjusted Life Years. This goes back to chapter 8. Quality-adjusted life years are literally a measure of, take this given drug. How many years of life does it save adjusted for the quality of those years of life?

So if it saves life and you're comatose, that's worth less than it saves your life and you're robustly healthy. So we can calculate for every intervention, like a drug, what its QALY benefit is.

We have a number, based on chapter 8, of what a year of life is worth in full health. It's about $150,000, our best estimate. So we can say for every QALY of 1, the drug is worth $150,000. That's what the world does in terms of regulating its drug prices. And that's why they're much lower than us, because we pay way more than what drugs are actually worth in terms of their value.

So that's the easy part of drug price regulation, which is you calculate QALYs and you pay up to that amount. Done. The problem is, that doesn't help when you have a new drug that's miraculous and miraculously expensive, which is these new cell and gene therapies.

So there's a disease called spinal muscular atrophy. Horrible disease, birth defect disease. You're born with it. You live a horrible life. You're dead by age two. I mean, nothing worse as a parent, you can imagine.

OK, they've cured it. They invented this thing. They inject in a virus in your body. It replaces your cells, and they've cured. I mean, it's a miracle. Literally, it's the definition of miracle. And it's $2.1 million.

Now, if you look at our estimate of value of life, that's almost certainly worth it. And indeed, when they brought that drug to England, it became the first ever US expensive drug where they allowed it the same price in England they did in the US, because they said yeah, it's worth it.

So all of a sudden now, our regulatory framework-- it's hard enough to regulate when you have a QALY, when you have a basis for doing it. What do you do when, in fact, it's worth it? And what do you do when we start inventing these things-- right now we only get these drugs for very rare diseases-- as they start to get for more and more common diseases.

So this is really where ethics meets economics, which is if in 10 years, one of you guys invents a therapy that can literally cure OK, that therapy will be worth millions of dollars a shot. But the US would go bankrupt paying for it.

This is a, in some sense, much bigger version-- we're seeing a modest version of this with these GLP-1s like Ozempic, which are miraculous drugs that are doing incredible things for people's health, but are expensive. And we can't afford to pay for everybody.

What do you do? What governments do now is they limit who can get them-- limit them to probably many fewer people than who could actually benefit from them. So we're limiting them too much because we just can't afford it.

So that becomes an enormous challenge going forward. So that's the lay of the land early 2000s. Then enters the hero of our story, Mitt Romney. Mitt Romney was the governor of Massachusetts.

Mitt Romney said, look, we've got this problem. We've got this classic free rider problem in health care in Massachusetts, which is that healthy people don't buy insurance. When they get sick, when they get hit by a car, they go to the hospital and we all pay their costs.

Indeed, in Massachusetts-- remember I talked about uncompensated care. Massachusetts literally had what we call an uncompensated care pool. What that was was every hospital paid a little tax into a pool. And that pool was used to pay for the cost of uninsured people that got treated.

So he's like, look, we've got this classic free rider problem. I'm sort of an upstanding, moral Mormon guy. I don't think that's right. I think we ought to make people get health insurance. And indeed, the previous round of health care reform in the 1990s under Bill and Hillary Clinton, the centerpiece of that round of health care reform is what was called the employer mandate-- mandating employers provide health insurance.

Conservatives didn't like that. So they said, we shouldn't do that. We should have instead an individual mandate. We should mandate individuals buy health insurance. Mitt Romney said, look, that would be great.

Why don't we mandate people buy health insurance? And then that way, we can make sure we solve the free rider problem. Now, that's when he brought me in. And I worked to help him understand what that would cost the state and what it would do.

And what I pointed out is that, in fact, this would have other benefits that he wasn't appreciating, because Massachusetts was one of six states that had actually tried to ban discrimination in insurance markets.

He probably appreciated this point, but I helped him put numbers on it. What does that mean? In other words, Massachusetts passed a law which said, in the non-group insurance market, you cannot discriminate.

You cannot charge the sick more than the healthy. You have to impose what's called community rating, which is everyone at the same age in the same location pays the same price, regardless of how sick or healthy they are, or their gender and things like that. Same age, same location, same price. Well, what do you think happened in these seven states when they put in a law saying insurers couldn't discriminate? Yeah.

AUDIENCE: Adverse selection.

JON GRUBER: Yeah, the insurers all left. They're like, screw that. We're making money by selecting. You tell us we can't select, we're not going to make any money. We're worried that Jon Gruber is going to walk in sick as a dog. And we're going to have to give him health insurance. At the average price, we're going to lose money.

Classic Akerlof lemons problem. And the insurance markets collapsed in all seven states, including Massachusetts. So by having the mandate, the other benefit of the mandate in Massachusetts was that we could bring healthy people into the pool and bring the price down and essentially strike a deal.

We said to insurers, look, you're going to charge the average fair price. But we're going to promise you there won't be adverse selection because everyone will buy. And so basically the idea was, we already got rid of discrimination. Let's have a mandate so we can solve that.

But we'll bring premiums down and solve the problem, bring people in. But then we had another problem, which is that basically, you can't mandate something people can't afford. At this time in Massachusetts, a family living at the poverty line had an income of about $20,000.

The typical family insurance plan at that point cost $12,000. You couldn't mandate they spend 60% of their income on health insurance. That wasn't going to work, morally and politically. So that's why we need to also subsidize the cost of insurance.

So what we did is we set up a new program where for people who were below average income, we would help offset the cost of their insurance so they could afford to meet this mandate. It was a sliding scale, where if you were very poor, you paid nothing, all the way up to paying-- I forget what it was, 6% or 7% of your income. It's a sliding scale based on your income.

So basically what we did-- so what we did is we created-- so I wrote a comic book to try to explain how-- it's a graphic novel to try to explain health care reform. And in that comic book, I label this a three-legged stool. The idea is, you want to end discrimination, so you ban discrimination.

The problem if you end discrimination is insurers leave the states. You put in the mandate so they don't go out of business. But you can't do that, because people can't afford it. So you put in the subsidies. And the three things together hold up the stool.

Funny story with the graphic novel, they called me up to ask me to do this, and I said thanks and hung up. And then they called me back and said, no, wait, this is a really good idea, because actually people learn very well from cartoon imagery.

They said look, if you're on a plane, you're about to go down, they don't give you three paragraphs to read. They give you a cartoon. People learn very well that way. I said, that's really interesting and hung up.

And then my kids were like, no, no, you got to do this. This is cool. So I said I'd do it. And they said, we want you to be like the avatar in the book, so like the guide through the book. And I said, that's great, as long as you make me look like Brad Pitt.

And they said, funny story, which is that they had the-- and remember, this is 2011 when you hear this story. They had the contract for the movie *Inglourious Basterds* to do a graphic novel, which Brad Pitt was in. And Brad Pitt's agent killed it-- and remember, this is 2011, not today-- because he said they made Brad Pitt look too gay.

Now, I said, I will take gay Brad Pitt any minute over me. But they didn't do it. So they put me in as the guide through the book. So we did the book, and it was fun. It was a fun thing to do. Anyway, so a bunch of graphic images. I like to think in that sense.

Anyway, we set up this three-legged stool in Massachusetts. We'd already banned insurance discrimination. We mandated people buy health insurance. Now, if you start to get into the details, what does a mandate mean? Are you going to throw them in jail if they don't have insurance? Are you going to cut off their arm? That would sort of defeat the purpose?

OK, so what we did is we put a large penalty on people. If they didn't have health insurance, we put in place a large penalty. And then we set up a system where we made health insurance affordable for low income people. We put them together. It passed almost unanimously in the Massachusetts legislature and was incredibly popular.

It never had less than about 60% popular support, and it was as high as 80% popular support in Massachusetts. Incredibly popular law and successful, in the sense of what it accomplished.

First of all, insurance premiums came way down because we brought healthy people into the pool. So insurance premiums came way down. Second of all, we covered 2/3 of the uninsured in Massachusetts, getting our uninsurance rate down to about 3%, which is comparable to many European nations.

And third of all, we did it with broad public support. In fact, it was so successful that other states wanted to do it, in particular states that were governed by moderate Republicans like Arnold Schwarzenegger.

So one of the highlights of my career was I got to fly out and meet with Schwarzenegger to talk about this plan. Now, it's not as meaningful to you as to me because I'm a child of the '80s action movies. Actually, in the ante room before you meet Schwarzenegger, you can actually hold the sword from *Conan the Barbarian,* which was really cool.

I got a picture holding the sword. That was cool. And I met with Schwarzenegger. And it really is like-- he's like a cartoon character. He was like, (MIMICKING SCHWARZENEGGER) we will cover everyone in California with health insurance. It really was like, OK.

But the problem was-- and it wasn't just him, it a number of states were like, we want to copy this Massachusetts model. And they brought me in to help them. The problem was over and over again, we ran into the same problem, which is Massachusetts had a unique set of advantages.

Advantage one was we had a very low baseline uninsurance rate. While the country was at 20%, we were at 10%. So it was a lot cheaper to do. Advantage two was we already had this uncompensated care pool. So we were already collecting essentially a bunch of tax revenues that we'd just rededicate to finance the program. Other states didn't have that.

So in California, I literally worked-- we had the entire legislature and the governor on board for a plan until the cost came out. And they said, we can't afford this, and killed it. And state after state said that. And that's why it became a big issue in the 2008 election.

President Obama actually initially campaigned against the Massachusetts plan. Hillary Clinton was for the Massachusetts plan. Obama was not. But then once he got elected, he realized, to his credit, this was a plan that was really working, and decided he'd try to influence it at the national level, and brought me down to help work on it, which was super fun, and helped figure out how we could do this at the national level.

And after a lot of fighting back and forth and scars and other things that we can talk about some time, we ended up in 2010 passing the Affordable Care Act. Now, what is the Affordable Care Act? The Affordable Care Act is basically, at its core, the Massachusetts act plus three zeros.

It's basically the same three-legged stool. First leg, banning insurer discrimination. I'll pause there because this is fundamental to the law. We were the only country in the world where literally insurers could tell sick people to go take a hike. They couldn't do that anymore. That was a fundamental accomplishment.

The second was the individual mandate with a penalty if you didn't buy health insurance. And the third was making health insurance cheaper through two mechanisms. One was expanding the Medicaid program-- we've talked about that already-- to 133% of the poverty line.

The second was setting up a bunch of what's called state exchanges, which were marketplaces to go buy health insurance, where you could get a tax credit to offset the cost of your health insurance if you're below average income.

So it was below 133% of poverty-- so think about that's about $30,000 for a family-- insurance was free. From 133% to three times poverty-- no, 133% to four times poverty, you got subsidies. So that's up to about median income.

So from very poor to median income, the government gave you subsidies to offset the cost of your private insurance. You bought private insurance. The government offset that. And then above median income, you were on your own.

So that was the third leg of the stool. And so the same three-legged stool structure-- ban insurance discrimination, individual mandate, subsidies-- was set up. Same three-legged stool was set up and put in place. The law passed in 2010 and was enacted in 2014.

Now the question is, did it work? Well, the answer did it work depends on what your perspective is. If your perspective is 14.41, that is policy, then yes, it did work. If your perspective is 14.40 absent chapter 9, then yes, it did work.

Which is that we covered almost half the uninsured within two years of it being implemented. By 2016, we covered about half the uninsured in America with insurance coverage. We'd done so actually below government budget estimates-- at a cost that was below estimates. And we fixed this broken non-group insurance market. That was the good news.

If your answer is chapter 9, it was bad news, which is the law was incredibly unpopular-- deeply unpopular, well below 50% support. Now, many words have been spilled on why this is. And there's lots of theories.

I will give you my two leading contenders for what happened. And they're interactive. The first thing is the law was passed in 2010, but did not take place until 2014. That gave four years for opponents of the law to beat up on it, while supporters had nothing to show for it.

That's a long time to have bad press and opponents beating up on it with nothing to show. Moreover-- and this is important for MIT-- the first thing that people interacted with this law was the website, which blew up and didn't work when it first started.

Now, it got fixed within four weeks, but that didn't matter. It was too late. For four years, opponents are saying this law is going to be a disaster. The first thing that happens is the website blows up and no one can get on it. They're like, see? We told you. Yeah.

AUDIENCE: When people were saying it's a disaster, they were just saying the projected budget?

JON GRUBER: Well, that is the second piece.

AUDIENCE: It hadn't happened yet.

JON GRUBER: That's the second piece. So the whole idea of health care reform before Romney and then Obama was, let's rip up the system and start over. Romney's brilliant insight was, you know what, the system is working for 80% of people, 90% in Massachusetts.

Let's leave them alone. Let's just fix it for whomever it's not working. So the three-legged stool was designed to leave 80% of the people alone. It was designed to say, look, let's fix what's wrong for this uninsured market. But if you have employer insurance, we're not touching it.

If you have government insurance, we're not touching it. We're just making it bigger. The idea was, then people won't oppose it, because they won't be worried about losing their insurance. What did this miss?

This politically missed an important point, which is that that did not make the 80% of people automatically opposed, but it also did not make them automatic supporters. It made them wary. So you've passed this law. They hear all about Obamacare. And what's happening? Health care costs are going up.

Now, it turns out, health care costs were actually going up at the slowest rate in measured history, but still up. There's only two things that are always true in life. It's baseball games take too long and health care costs go up.

Health care costs were still going up. So all the opponents said, see, this Obamacare's fault. And I could go on TV and say, look, actually, they're growing up at a slower rate. Boom, shut me down.

Basically, it didn't matter that actually, we actually-- I'll talk about cost control in a little bit. We'd actually done very good things on cost control. Didn't matter. So suddenly, everything-- I went to a meeting at the White House and Obama's advisor said, we now own the whole US health care system. Whatever happens is our fault.

And the health care costs kept going up because they always do. And so there was a lot of reason-- plus misinformation, et cetera. We live in that world. So there's a lot of reasons people were wary of this.

And so in some sense, think about-- basically what the law did is it made about 80% of people were unaffected. About 17% were winners, about 3% were losers. Who were the losers? Well, there were two groups of losers. There were people who were benefiting from the discriminatory insurance system.

After all, if insurers can kick out sick people, they can offer a really good deal to healthy people. In California, if you were healthy, you'd get insurance for $100 a month. Well, that went away. It was now like $300 a month because now we weren't allowing insurers to discriminate anymore.

I mean, it's kind of-- basically, I'm sure that, racist or not, white people who got to have the front of the bus to themselves were upset when they had to share it. Well, fuck them, that's life. You share the front of the bus.

Likewise, the idea is basically we as a society feel like insurance should be fair. And basically, everyone should have a fair access to insurance. The problem is, that did raise costs for several million people. They were mad.

There was also the group, as I said, that had to give up policies. Even though they weren't real policies, they had to give them up, and they were upset. And then finally, there was one big difference from Massachusetts, which is i Massachusetts, we didn't have to pay for it, because we already had this uncompensated care pool.

At the federal level, you had to pay for it. And one way we paid for it was a large tax increase on the wealthy. Indeed, probably the largest tax increase on the wealthy we'd seen in decades. And they were mad, because they didn't get anything for it. That group really, truly lost. They already had good insurance, and we're taxing them more.

So for that reason, you had about-- and the problem was, the 80% were like wary on the fence. The 17% were like, this is good. I guess I have health insurance. The 3% were irate and they drove the conversation. So you combine that with normal political opposition, you end up with the situation we're in. Yeah.

AUDIENCE: Why [INAUDIBLE] consider a health care or hospital tax?

JON GRUBER: Oh, once again, that's a classic political economy. That's a big government intervention. Other states didn't want to do it. Massachusetts is a liberal state. They were able to do it. Yeah.

AUDIENCE: Why four years?

JON GRUBER: Someone asked this. I want to come back-- someone asked this question last time about why something took a while. This is a fascinating issue, which I did not appreciate at the time. I don't think many people did, which is a trade-off. You want to take long enough to get it right, but not so long that you allow a bad narrative to be built up.

The idea was, this is going to be a radical change to our health care system. We wanted to leave time to figure it out. Now obviously, it didn't matter, because the IT system blew up the first day anyway. So four years clearly wasn't enough probably.

In Massachusetts, we did it very differently. We passed the law in March or April. We had to have open enrollment by October that same year. And the team doing it was the director of this board I was on-- me, one other person, at a halftime RA. And we had to have a system up and running by October.

Now, it worked out pretty well, but life would have been a lot better if we had a year or two. But there's a trade-off, which is then that's room for bad vibes to get in the conversation. And so I think that's a really interesting trade-off of, how do you-- because the truth is, if

Obama had rushed it and the IT had blown up, it would have been like, oh my god, he rushed it too much. He should have waited. So you could see the obvious trade-off. Yeah.

AUDIENCE: You have 10 states that opted out of the Medicaid expansion. The uninsured rates are high there. What are ways that you could convince these 10 states?

JON GRUBER: So this is fascinating. So what happened was there was a lawsuit claiming the mandate was unconstitutional. Let's be clear. This is the other-- I would say there's a third reason for the political difficulties of the law that's important to recognize, which is that it was very complicated. I mean, super complicated, the law, the Affordable Care Act.

And the mandate was not popular, because who likes to be told what to do? In my comic book, I described the mandate as a spinach you had to get the dessert, which is fair insurance pricing. But people don't like spinach.

So people started attacking the mandate as a piece of it, and saying, look, this law is terrible because it's this mandate, without saying, oh, but you need mandate, it's a three-legged stool, blah blah blah. So basically, the problem was the mandate was very unpopular for that reason.

Now, the other thing was-- so the mandate was unpopular. There was a lawsuit to get rid of it. The lawsuit failed. But as part of that lawsuit, the Supreme Court said, by the way, the original Affordable Care Act told states they had to expand Medicaid to 133% of poverty with the federal government paying 100% for three years and 90% thereafter.

The Supreme Court said, you can't do that. You just have to offer states the deal that they can. Now, I remember the morning that decision came down, I was like, well, BFD. What state would turn down this deal? It's an incredible deal. Turned out 25 states did, now down to about 11 states.

Now, let's be clear. This is true political malpractice. I mean, this is as close to a Pareto improvement as you can get as a state. Because basically, what the federal government is saying is, we will cover your low income citizens, and we will pay for it, injecting massive dollars into your economy.

Indeed, most estimates are, even with states paying 10% of the cost, they'd be way better off because the multiplier effect of having 90% of those costs being paid by the federal government. So it's really just political malpractice, but it's a fascinating thing about what do you do when politicians don't serve their voters' interests?

And here clearly they were not. And the reasons were just partisanship. Now, that's gotten better over time. States have realized their self-interest over time. But there's still about 11 states that don't have these expansions. And it's not clear what you can do.

I mean, you've already said we're going to pay the whole cost. You're not going to pay them 110% like the Medicare Advantage plans. That doesn't really seem very sensible. So it's not clear what we can do. Yeah.

AUDIENCE: Why was it only 3% for [INAUDIBLE]?

JON GRUBER: 3% what?

AUDIENCE: [INAUDIBLE]

JON GRUBER: Yeah, so 3% because that's the only share-- and once again that's 3%, 4%. It's a small share. That's because most people were left alone. That gets 80% out. So you got the remaining 20%. Of the remaining 20%, people either were uninsured so they're getting new insurance, or they were low income so they were getting subsidies.

The only people who were hurt were high income people. The only people who were hurt were high income people who were benefiting from a discriminatory insurance market. Those folks got hurt, because right now they got cheap insurance. We replaced that with expensive insurance and didn't give them subsidies because they were above average income. That's a pretty small share of the pie.

AUDIENCE: Does it not affect the other percent of people who are also healthy?

JON GRUBER: No, because they get employer insurance. We didn't touch employer insurance. They get government insurance. We didn't touch that. It was just the non group. That was the idea, was to basically say, let's leave-- that mass of people is what's killed previous health care reform efforts. Let's leave them alone so that they don't get opposed to it. Yeah.

AUDIENCE: So you're saying that that 3% is in the group--

JON GRUBER: They were in the existing non-group insurance market. Yeah.

AUDIENCE: And then the other thing, is how did that tax-- what was that tax change like that was charged mostly to the wealthy people?

JON GRUBER: So you know we have a Medicare payroll tax, which is the Social Security FICA tax is capped. The Medicare payroll tax is uncapped. What they did is they said for families' incomes above $250,000, we're going to increase the Medicare payroll tax. And so that was a large tax increase on wealthy people. OK? Yeah.

AUDIENCE: So were there any considerations about longevity of the policy?

JON GRUBER: Well, I mean, this is why-- my list of reasons keeps growing for the political difficulties. The other thing is, we didn't anticipate-- the way political battles traditionally worked during my youth was you'd fight, fight, fight, one side would win, you'd move on to the next fight.

What happened, I think within a year of the Affordable Care Act, something like 40% of Americans didn't actually know it had passed, because the fight hadn't changed at all. It was just as vicious after it passed. And that was unusual. And so basically, you have the situation where-- I'm sorry, I'm losing track of your question. Your question was?

AUDIENCE: Political longevity.

JON GRUBER: Political longevity. So why was the fight so fierce? The fight was so fierce because of what happened after 2016. What happened? The law was incredibly unpopular, and it was a major factor in the election of both President Trump and the Republican Congress, all of whom campaigned on repealing and replacing the Affordable Care Act.

Now, it turned out there was no replace. Why was there no replace? Because the Affordable Care Act was a Republican plan. Remember, it came from Mitt Romney. It's an individual mandate. It's conservative. There was actually nothing you could do that could cover as many people without moving to the left. There's no way to move to the right without creating more uninsurance.

So repeal and replace got revealed to just be repeal. Now, once again, Obamacare was unpopular. So big deal, you repeal it. Well, it turned out, if you repeal it by the time they have these conversations, it had been in place three years.

People were like, wait a second, 24 million people are getting this insurance. They kind of like it. We're not sure we want it to go away. And so it started getting popular once it started getting threatened.

And by the time that the votes came, repeal is close to 50% and it barely survived. Now the popularity is at 60%. That's why we didn't worry about longevity, because the feature of the American system is an enormous status quo bias. Once people like something, it doesn't go away.

You may remember the famous-- during the debates you were too young. But during the debates over the Affordable Care Act, opponents were very worried that the Affordable Care Act would hurt the existing-- remember, we're going to leave existing insured people alone. But people were worried it would affect them.

Particularly people on Medicare were told it's going to hurt Medicare. So people would carry around signs saying, keep the government's hands off my Medicare. OK? So Medicare is a government-provided, single-payer program.

So basically, the point of that is even the most conservative people love Medicare. And the idea of political longevity is once it's in place, there's self-determined longevity. That's why the fighting was so fierce early on, because opponents knew that once we got to this point of 2024, it's not going away, because political longevity is-- in America, once you have a popular program in place, it's very hard to get rid of it. Yeah.

AUDIENCE: What do you think are some of the policy reforms post ACA?

JON GRUBER: Well, OK. So let me-- did you have a question about--

AUDIENCE: I was just wondering. So after the law had passed and been in effect for a while, its political longevity in some sense had implicitly been more or less secured. But people didn't really realize how secure it was until it was threatened. And then you saw graphically the approval rating, it just went up?

JON GRUBER: Yeah. I mean, so basically what happened was approval was pretty flat. And then starting around 2016, 2017, it started going up because people who had the program for a couple years started to realize the benefits. That was during the repeal debates.

Now, repeal almost happened. I mean, it was one vote that stopped it from happening. It almost happened. But it wasn't quite that close. Because remember, there were probably other people who would vote against it if they didn't know McCain was going to vote against it. It was more than one vote, but it was close.

But within a year, it started to get popular, and now it's 60% approval. So what's happened since then? So Trump comes in, tries to repeal it. They can't repeal it. But they significantly weaken the law. In particular, they got rid of the individual mandate.

Now, this shows the difficulty of people like me for predicting things. I would have predicted that would have been a complete disaster for the law. It wasn't. It was bad. Probably got rid of the mandate. Probably about four million or five million people lost health insurance, and premiums went up a lot. But there was no death spiral.

And the reason is because it turns out the subsidies were so generous, and some people were already in the system, that it didn't unravel. In some sense, the mandate may have only been needed at the start to kick start things. Maybe it needed a long run, just enough to kick start things.

But it did weaken it. Trump did a lot of other things, like basically allowing people to sell sham insurance plans and things like that, and weakened the law. Biden comes in, Biden strengthens the law. In particular, what Biden did was increase the generosity of the subsidies you get to buy health insurance on the exchanges.

It used to be that you got subsidies up to 400% of poverty line, which is above average income. But there were still many, many people who couldn't afford insurance. Biden got rid of that limit and said, every American who buys insurance on the exchange get health insurance for 8% of their income or less.

So a guarantee that no one has to pay more than 8% of their income for health insurance, which is incredible and amazing, but expires after next year. So it's not clear. The big question-- that's the number one question.

Health care has not been a big topic in this debate because Trump has basically backed off saying he's going to repeal the ACA, and Harris doesn't really have a lot of great ideas for improving it, because it's doing pretty well. I think the big part of the debate is-- the big part of the debate on the ACA part is about extending these subsidies.

The debate is instead-- and unfortunately, only a few minutes left. But those are great questions, thank you. The debate has instead turned its focus-- and this is where Harris is being more innovative-- to cost control.

Now, the ACA did some things for cost control. I don't have time to go through them. You can read about them in the book. The ACA did some things for cost control, and it's unclear how big an effect they had.

What is true is that starting in about 2010, health care costs in the US grew at the slowest rate they ever have. How much the ACA gets credit for that is unclear. We also had a recession and other things.

But the ACA did some things. The question is, what else do we need to do? And that's really the focus now, is on things like price regulation, and on things like-- the big term in the ACA, which we've gone away from, is comparative effectiveness.

Which is thinking about these QALYs, thinking about how do you actually decide whether health care spending is worth it or not. And once again, I want to come back to this. I want to conclude with this because the ethics here are really tricky. Let me talk about one of the tricky issues here.

QALYs say that a year of life is worth less if you're disabled than if you're not. So take two treatments. One fixes you, except you remain in a wheelchair. One fixes you and you're mobile, no wheelchair. The QALY metric would say that the second treatment is worth more.

Disability advocates say that's discriminatory, because you're basically saying lives of people outside wheelchairs are worth more than the lives of people in wheelchairs. Which is true, you are.

And in some sense, if we stop to think about it, it's like, wow, they've got a point. We're saying that. It's not clear we shouldn't. I mean, probably, I would guess the vast, vast majority of people would be happier without being restricted to a wheelchair than in a wheelchair.

But it is true it relates to a statement that a life year of someone in a wheelchair is worth less than a life year of someone not in a wheelchair, which feels a little morally squishy. So these are the kind of really, really difficult and interesting issues that economists have not worked nearly enough on, which is, how do we think about-- as we get to-- and this can become increasingly important.

Because there's this huge wave of this incredibly innovative and incredibly expensive new drugs and treatments coming along. We're going to have to tackle this issue or we'll be bankrupt as a country.

I wrote an editorial in the *New York Times* saying that if everyone in America got Ozempic who could benefit from it, it would cost the US government $1 trillion. We're going to have to deal with these issues. We're going to have to say, how much are we willing to pay for health?

How much are you willing to pay for health? You have to deal with ethical issues of what is a healthy life worth? And how do we think about things that extend life versus things that don't, and life in different circumstances?

So this kind of ethical stuff is not a strength of the MIT curriculum, I think. But this is something which is really, really, really important to be thinking about, and important to be thinking about as you go out and are creating this new science and creating these new, incredible things, to be thinking about the ethical issues that they raise, and how we think about ultimately paying for them.

All right? I'm going to stop there. I wish we had more time, but we will come back and start chapter 17 on Monday.