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ANNOUNCER: You're listening to the Slice of MIT Podcast, a production of the MIT Alumni Association.

JOE MCGONEGAL: This is the MIT Alumni Books podcast, and I'm Joe McGonegal.

Joining me is Raisa Berlin Deber, class of '71-- Masters '71 and PhD '77-- whose new book is called *Treating Health Care: How the Canadian System Works and How It Could Work Better.* It was published by University of Toronto Press in late 2017.

Deber is a professor of the Institute of Health Policy, Management, and Evaluation at the University of Toronto. Well, Raisa, thanks for joining me. Tell me. Why do you think 2018 is a good time to write this book and to read this book?

RAISA DEBER: Well, because there's all kinds of people talking about health care, and how to fix it, and what to do about it. And there's a lot of misunderstandings. So what this is is attempting to give people a primer in what some of the key issues are to help you understand. I'm not trying to tell you what to think, but I'm trying to sort of show which are the right answers, which are the wrong answers.

MCGONEGAL: And for Americans with an inferiority complex about their health care system, I was a little encouraged by the book in that the Canadian health care system is not perfect.

DEBER: Well, first thing to realize is that it's not really a system in that sense. It's individual doctors and hospitals providing services. And it just happens that certain of those things are paid for by a single payer insurer, very much like Medicare. The doctors are private, the hospitals are private, but they're not for profit. And for insured services, you have universal coverage of all Canadian residents such that those services are paid for. Full insurance.

It's not for all services. And this is part of the trouble, is the system was set up back in the time where health care was delivered a little differently. And you have some gaps, now, that people are trying to fill.

Another thing is that under Canada's constitution, health care is a provincial responsibility which is like being a state responsibility. So all the federal government can do is send money and give some rules about what you need to do to get federal money. But there's no such

thing as a national system. It's going to differ tremendously, depending on where you are, and who your providers happen to be.

MCGONEGAL: The readers of this book will get very familiar with policies in Saskatchewan and Alberta, versus policies in Ontario, for instance.

DEBER: What I try to do is give a once over, lightly, of the key concepts, rather than drown you in minutia. What I talk about is some potential reforms that might be useful, like how to keep people healthier in the first place so you don't need to have the medical care.

How do you coordinate and improve quality? How do you decide how to get better value for money? How do you organize the system? So it's some of those sorts of things. But it's just trying to explain what it is that we're talking about when we're talking about health care and health policy.

MCGONEGAL: The book gives us a great history of Canadian health care, dating as far back as the 1800s as a national idea, and then does a deep dive into the examination of existing practices. And then it talks a lot about metrics. This is a great book for economists and quants, too, who love math.

DEBER: Well, I am an MIT graduate, yes.

MCGONEGAL: Tell me-- even measuring what a successful national health policy looks like is a tough errand.

DEBER: Well, because there's a whole lot of different elements depending on what you focus on. And then some of it depends on, how do you actually measure things? And which things have you decided to be measuring?

One of the pieces of research that I did that has been actually fairly influential is showing that most health care costs are absorbed by a very small number of people. Most of us are pretty healthy most of the time, so you take a look at where the costs are.

The costs are this small proportion of people who account for a very high proportion of the spending. In fact, this is one of the big problems that you run into if you have competition in a health care market, because the easiest way to make money is not to take on the high cost people. It's one of the things that I don't understand why the US hasn't figured out.

If you have the lowest spending-- like, in some of the data we looked at in Manitoba, lowest spending 50% of the people are about less than 3% of health expenditures. And the top 1%

account for a much much, much higher proportion.

So you don't have to avoid a lot of people to save a bundle of money. And that's what the US model has been is we figure out how to make money by not insuring people who are going to cost a lot.

MCGONEGAL: And some estimates put it at about 40 million Americans, before the Affordable Care Act came along, were uninsured.

DEBER: Yeah. Some of this is so penny-wise and pound-foolish. Canada's got a similar problem. It is that you don't have to insure outpatient pharmaceuticals.

So again, if somebody has a stroke because they can't afford their blood pressure meds, this is not exactly a cost saving exercise. Canada, you have to pay for care if it's given in hospitals or by doctors. But the other things, you don't have to. And certain provinces have decided it makes sense to do it, and other provinces haven't, but it depends on who you are, what your condition is, how old you are. So there's incredible variability around the pharmaceutical and the rehab in a way there isn't about the doctors and hospitals.

MCGONEGAL: Tell me what you've learned in writing these case studies in this book about UK health care, about the French, the Italians, what they do right and wrong versus Canada.

DEBER: They're different models of care. So you can make the distinction between, how do you handle the payments, the financing, and how do you handle the delivery and the mix between public and private?

So in the book, I use, as examples, the US, the UK, and Germany, as three of the other key models in terms of this public, private mix. And I don't think there's any one right way to do it. All of them have advantages and disadvantages. And part of the trick is doing the trade-off about, what are you willing to sacrifice in order to get what sorts of benefits?

There's certain things that are no-brainers, that are what they call dominated alternatives, which is no, this makes no sense. You get higher cost for worse outcomes. That we know you don't want to go. But when you're talking about the trade-offs, it becomes trickier.

MCGONEGAL: In chapter 5, a nice chart describing all of the minutiae.

DEBER: A bunch of them, many.

MCGONEGAL: Right. In 2015, I think the year a lot of those metrics were drawn, Canada's health care costs were around 10% of GDP. In the per capita cost, around 4600 bucks, both about half of US. And what do you see in US policy since 2015? Are things getting better, or are things getting worse?

DEBER: Things are getting enormously worse. It's because you have a number of people, if you're going to policy goals on it, saying, I don't see any reason why I should have to pay for you. But the whole point of an insurance model is that you're pooling costs. And if you don't have a way of allowing high risk people into the pool, then it's not going to work very well.

So in the United States, by this-- if you're born with a genetic disease, it's not your fault that you got that disease. But who is going to want to insure you?

So one of the problems that we've run into is this assumption that health care is a market good like other market goods. If you make this assumption that it's a market good and it's, uh, no, because you have supply and demand.

I often use in my class, four examples. I say, OK. What happens if I offer you a free trip for two, all expenses paid, to a destination of your choosing, at any time in your convenience in the next year? Would you accept?

MCGONEGAL: Of course.

DEBER: And then I say, OK, same conditions. Anywhere you choose, time of your choosing, within the next year. I'm offering you free open heart surgery at the hospital of your choice. Yeah, so I mean, no. You know?

And a similar thing, I say, OK. It's raining. I'd like to take a taxi. I don't have any money. Should the taxi take me anyway? And people say, no. And then I say, OK. I've collapsed. I've just ruptured my appendix. I don't have any money. Should the hospital treat me anyway? And most people say, yes.

So because health care, ideally, is based on need, not demand, if I need it, should I get it? If I don't need it, I shouldn't get it. And that's totally different from market forces.

So most good health economists I know say, look. The market force stuff does not work. Supply and demand theory does not work in health care. It's staggering to see people thinking it does. This moral hazard, oh, if you're fully insured, you're going to go get unnecessary care.

Well, how many people do you know who want to go get open heart surgery they don't need? Or who say, well, I've got nothing to do today. I think I'll go see my doctor. This assumption that people want things they don't need-- part of what you need is good education about what you do and don't need.

MCGONEGAL: And you write about incentives. Talk about incentives that have worked for Canada.

DEBER: Well, I think one of the key things-- the big debate we're having now is what to do about what they call the determinants of health, which is to make sure that people have shelter, and food, clothing, and other things like that, so that they don't get as sick. So there's a whole big question about how to move these things upstream and try to keep people as healthy as we can.

There's other debates about how much it's worth paying for different pharmaceuticals. So those are some of the whole big arguments we're having. Another big argument we're having is how much you should be paying the providers. Because doctors are a little bit up against it because they have a single payer.

So it's like dealing with Walmart if Walmart says, this is all we're going to pay you for this product. And you say, wait a second. I want more. You're up against it. So we're having a lot of battles with doctors, nurses, et cetera, about what they should be paid.

MCGONEGAL: You've spoken to nurses and doctors. A general discontent?

DEBER: Depends where. I mean, Ontario, there is enormous discontent because they've been having a real head to head battle with the provincial government. And the provincial minister of health also happens to be a doctor. They've been really battling. In other provinces, it works more smoothly. So there's not a one size fits all.

MCGONEGAL: Ontario being the largest, population-wise, the largest province?

DEBER: Yeah. But because-- they were work it on a province by province basis-- so there's a whole bunch of ways that the designing it on a province by province basis doesn't make a whole lot of sense these days. Like, it's been a real barrier for Telehealth because if I'm going to try to provide health care to somebody in another jurisdiction, I have to be licensed to practice there.

Not trying to say, this is the way to do it. But I'm trying to give people the tool kit they need to

understand it.

MCGONEGAL: Speaking of Telehealth, how much faith do you have in-- or optimism do you have for tech companies coming along and solving a lot of problems, or disrupting current models of policy or practice? Will big data and machine learning do anything to move this along?

DEBER: Well, I think some of it can be extremely helpful. For example, let's say I want to monitor my blood pressure or my diabetes. It can be helpful to have ways to do it that I don't have to keep going in to the hospital labs to do it. And particularly, if I'm in a more rural outlying area, it can be-- so there are ways rather than disrupt, there can be ways that they're working together.

MCGONEGAL: And, like, wearables and so forth, that do better for personal monitoring?

DEBER: Yeah. But what you don't want to get into is too many false positives in which I'm saying, oh, you've got x when you don't have x. And then there can be a lot of really negative consequences.

Look at the battle they've had about screening for prostate cancer with PSA. They had the same thing with breast cancer. How many perfectly healthy women should have their breasts cut off because you don't want to miss one case?

So one of the things you have to worry about with the disruptive technology is to what extent, if you're going to people with lower and lower rates of the actual disease, most of your positives are false positives.

MCGONEGAL: We're all over diagnosed.

DEBER: Yeah. And I have some charts in there, showing sensitivity, specificity, prevalence, and what happens if you do it. Because if I start going into lower risk populations, most of my positives are false positives. And then at a certain point, I'm doing more harm than good. So this is my lose-lose. It's costing a lot of money to do damage to people. And at a certain point, this doesn't make sense.

MCGONEGAL: How much is an influential government leader, like a prime minister or a president, important in solving these problems? And tell us about Tommy Douglas in Canadian history.

DEBER: Tommy Douglas was a premier, a provincial premier. Basically realized that it made more sense to try to have universal coverage. And he went that route, and it actually was extremely

successful.

But one of the things is, and this is, again, a thing to recognize how much of this was all party approval. Because all of our attempts to bring in health care passed with all party approval. Some of them were brought in-- the national payment was brought in by a conservative prime minister. So this was not something that was seen as being one or the other. We had all party support for most of what we did on these things.

MCGONEGAL: Bipartisan, as we would say.

DEBER: Yes. Which is a very useful thing to recognize. This was not, we're fighting you on this. Most of the changes that we've had, all the parties have agreed that this is something to do. Because it's been so popular that there's very few politicians that will say, no, we don't want to do that.

MCGONEGAL: Tell me what else needs to be written on the subject. I think it would be incredibly helpful in the US context to recognize what are we talking about when we're talking about health care and health care reform, and stop trying to do things that just don't make any sense.

One of the things that I found striking-- I've been at various conferences and things like that, and if you take kids with chronic disease, the life expectancy is way worse in the United States than it is in Canada. And here, you have the US, one of the richest countries in the world. Why do you have a thing where the kids are more likely to die of diseases because they can't get treatment for it?

One of the things I quote in my book is I quote Ebenezer Scrooge when he says, are there no prisons? Are there no workhouses? And the guys say, yes, but some people would rather die. And he says, if they would rather die, let them do so and decrease the surplus population.

You have too many policy makers now who seem to think that that is a good policy. Let's let them die and decrease the surplus population.

MCGONEGAL: You do end on a positive note. You are optimistic--

DEBER: Yeah. Yeah.

MCGONEGAL: --that things will change. And we'll end there, too. But what are you most hopeful about in terms of what you see right now in trends in health care in Canada?

DEBER: What I'm most hopeful is that nobody is arguing to get rid of the system we have, for the most

part. And there's more and more people arguing for the need to expand it. And there's also a movement that is also in the US that I think is extremely helpful, which is called Choosing Wisely. And the idea behind it is to say, let's figure out what works and what doesn't work, and not do things that are going to give us worse outcomes for more money.

So can we figure out ways to make sure that the money we spend is being used well, to try to give optimal results to the population? And I find that sort of approach to be an extremely useful one.

MCGONEGAL: Tell me how your MIT education is put to good use in this book.

DEBER: Well, one of the things that I learned at MIT, how to do analysis. I get teased a lot by my colleagues here, because I am not particularly good at theory for the sake of theory. What I use theory for is to try to understand why I pick the variables that I pick.

What I think my MIT training taught me to do is to say, think these things through. See what makes sense, see what doesn't make sense, and see how the evidence takes you there. And I will tell my students, or tell the people that I work with, it's not my job to tell you what you should want. But it is my job to tell you whether particular approaches will or won't take you there.

MCGONEGAL: Tell me, what else are you reading right now?

DEBER: Oh. I'm reading lots of stuff. I'm reading a number of things about the US election. One of the other things that my MIT training taught me to do was understand how come the election turned out the way it did. Because what my PhD was was nothing to do with health care. It was American politics.

MCGONEGAL: The book is *Treating Health Care: How the Canadian System Works and How It Could Work Better,* by Raisa Deber, '71, PhD class of '77. Published by University of Toronto Press and available now wherever you buy your favorite books. Raisa, thanks for joining me.

DEBER: Thank you.

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