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Take Control of Your Health

How Doctors Are Incentivized and Brainwashed To Be Puppets

Analysis by Dr. Joseph Mercola ✔ Fact Checked | May 29, 2022

STORY AT-A-GLANCE

- The U.S. health care system is riddled with inefficiencies. With an annual budget of $3 trillion, it's the largest industry in the United States, so there's financial motivation to capitalize on expensive treatments, even if they don't work well
- Price gouging, overtreatment and fraud are yet other problems plaguing the U.S. health care system, contributing to its inefficiency
- Many prevention strategies and simple, inexpensive treatments are ignored and not used for the fact they do not generate income for the doctors
- Switching the incentive model is part of the answer. Hospitals that pay their doctors a salary and bonuses for patient health outcomes see significant improvements and have lower health care outlays
- Geisinger Health in Pennsylvania prescribed prediabetic and diabetic patients fresh, whole food, along with treatment and educational support. As a result, they reduced the annual cost for Type 2 diabetics by 80%

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Travis Christofferson — who has a premedical undergraduate degree and a master's degree in materials engineering and science — has written two excellent books about health. The first one, "Tripping Over the Truth: How the Metabolic Theory of Cancer Is

Overturning One of Medicine's Most Entrenched Paradigms," helped me understand the profound influence of diet in cancer.

Here, we discuss his latest book, "**Curable: How an Unlikely Group of Radical Innovators Is Trying to Transform Our Health Care System**," which addresses questions such as: "What has happened to American health care?" and "What are the foundational disruptions or corruptions in the system?"

His book, in some ways, is based on the theory promoted in the book and subsequent film, "Moneyball." It describes how you can use statistics to massively improve a flawed system. Christofferson explains:

> *"I'd been invited to speak at a small charity event in London. The speaker who went right after me was Dr. Ndabezinhle Mazibuko. He was at this startup clinic called Care Oncology in the U.K.*
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> *The idea behind this clinic was that there are drugs that have gone off patent that have [other uses], but they're unrealized. They're undervalued in the system. One of these drugs is metformin in the use for cancer.*
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> *There's this vast body of data to suggest it can improve cancer outcomes, but there's no good mechanism to get this on the prescription pads of doctors. It just doesn't happen. There's a flaw in the system.*
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> *To address this flaw or this underappreciated argument, they opened this clinic and then prescribed a combination of four drugs that showed they had synergy, very few side effects and the best chance to [improve] outcomes. The cost of the drugs is about $60 per month …*
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> *I agreed to open a clinic in the U.S. to help them start in the U.S. I opened it up in my small town, Rapid City. We started doing telemedicine as well to address the rest of the country. I arranged the time to speak at our local cancer center, to present what we were doing to the local oncologists.*

My hope was that they would see the value in it and refer patients to us, especially patients with dire cancers, like glioblastoma, where there are few good treatment options. This is such a low-risk intervention that it had a good potential to help …

Immediately when I was done … one of the oncologists just lit into me. He accused us of taking advantage of desperate patients. Then he brought up, 'Why would you prescribe a medication for Type 2 diabetes for cancer?' Another oncologist in the room in the corner said, 'Well, I do that.'

What struck me in that moment is you can have these medical doctors in the same room that have a profound disagreement on data that we have just gone through. If this is the case, what are the inefficiencies in the health care system? That was the original spark for the book."

Identifying the Inefficiencies Within the System

Michael Lewis' book, "Moneyball," showed how, within a simple game of baseball, you can have massive inefficiencies. By taking away the human biases and just applying statistics to find what is undervalued in that market, you can massively boost the performance of a team (in the book, it was the Oakland A's, which had a tiny budget).

"In health care, we have a massive disparity in valuation — how we value treatments," Christofferson says.

"As I said, metformin has got massive repositories of data to suggest you can ward off not only cancer but a plethora of chronic disease, but it's the price of a nickel a pill and very rarely gets prescribed for these other indications … ['Curable'] is an examination of these huge disparities in health care and why it's gotten so out of control in the U.S."

The health care system is the largest industry in the United States. It has an annual revenue of $3 trillion. So, there's a financial motivation to capitalize on expensive

treatments, even if they don't work well, and that's a significant part of the problem. Price gouging is another related problem. Overtreatment and plain fraud are yet others.

Christofferson suspects these issues may account for half of all health care costs. One answer is to focus more on undervalued treatments and low-cost prevention — both of which could help prevent cost escalation. In his book, Christofferson recounts a number of stories demonstrating this.

Drug-Free Treatments Save Money

One such example is Geisinger Health in Pennsylvania. For Type 2 diabetes, they introduced the Fresh Food Farmacy. In a nutshell, patients with prediabetes or Type 2 diabetes are given a prescription for fresh, whole foods. Patients are allowed two free meals a day and recipes, along with intensive care and educational support.

As a result of this program, Gelsinger Health was able to reduce its per-year outlays and cost for Type 2 diabetics by a whopping 80%. "It only cost them $2,600 a year," Christofferson says.

> *"What interests me about that is they didn't leave out the human component. They made sure that the patients' families [were] engaged. They gave free food to the families so they can all cook together. Pretty soon, when people have this level of engagement and feel like they're part of a system, they start asking questions.*
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> *'What else can I do? Can I exercise? How do I stop smoking?' Not only is it changing their health status, but it's changing the way their families view health and what they do about it. To me, there are these wonderful examples of places, these pockets that are doing extraordinarily good work.*
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> *The other one I focused on is Intermountain Health Care which, shockingly, if you … extrapolated their system to the rest of the U.S., we would see a 40% reduction in health care costs immediately."*

The Overwhelming Power of Incentives

Another fundamental issue that really needs to be addressed is the physicians. Most medical students pursue medicine for the right reasons. But then they get brainwashed into a single-minded focus on drugs and surgical intervention, and aren't given the education and tools to address the actual roots of disease.

What's more, once they're done with their schooling, they're a few hundred thousand dollars in debt, which they need to pay off. And then they go into a health care system where they're given just 10 to 15 minutes with each patient. It's a system that is designed to fail right out of the gate.

> *"As I wrote this book, what I kept coming back to was the overwhelming power of incentives,"* Christofferson says. *"Our system is so flawed with regard to incentives. The biggest offender of that, by far, is the fee-for-service system, where we demand our doctors get paid for every test and procedure that they do.*
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> *This creates a terrible incentive for them so that they have to think like businessmen … If there's a marginal procedure and you have a financial incentive to do it, perhaps you're going to do it. This leads to overtreatment.*
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> *There's a brilliant example of that in the book. This was actually done by Atul Gawande. He wrote about this in The New Yorker. McAllen, Texas, had two times the Medicare utilization compared to the national averages — $15,000 per person.*
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> *And it wasn't specific to that demographic region, because if you went to El Paso, up the border, it's the same demographics, but it was half the cost there. He flew down there to ask why. What had happened was the doctors had just developed this entrepreneurial culture where they almost competed with each other financially …*

Really, their focus was money. Just putting a pen to paper and writing that article had a sterilizing effect. Suddenly, the regulators came in. They looked at all the fraud that was going on. There was, I think, $20 million fines levied. The overutilization started to drop …

When you look at the high-quality providers, like Mayo Clinic, Cleveland Clinic, they put their physicians on a salary. The marketplace will reward that behavior because now you can see the data … [At] the Mayo Clinic … if they don't need surgery, they won't get one. The doctor has no financial incentive to operate.

So, the incentive structure is entirely backwards. That's the underlying theme of this book. We really have to take a look at human incentives and what drives human beings; how they make mistakes. We can design systems around that to do better."

The Success of Intermountain Health

Intermountain Health, for example, places their doctors on salary, and gives them bonuses based on health outcomes. They also assess the differences between treatments to see which works best.

For example, they discovered that inducing delivery in pregnant women led to more babies being born with respiratory problems. Guidelines for inducing labor were entered into the electronic medical record, which led to a drop in early inductions from 30% to less than 2%. This resulted in babies born with fewer respiratory problems.

Another example: Patients are always given antibiotics before surgery, but it's never been established when the optimal time to administer the drugs is. Intermountain compared medical records, finding the optimal time was two hours before surgery, which cut their surgical infection rate by over half.

The History of Medicine

Christofferson's book also addresses some of the history of medicine, and the advent of controlled clinical trials. Historically, the practice of medicine was largely dependent on the doctor's experience and personal ideas.

> *"Hippocrates said that a physician's judgment matters more than any external measurement. This really guided medicine in the beginning, in the 1700 or 1800s,"* Christofferson says.
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> *"I was shocked to learn that the first well-conducted trial was in the '40s … That's how far [medical science] lagged behind. And then all of a sudden, it kind of exploded because they shifted the patent structure to where over-the-counter drugs were separated from patented drugs.*
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> *This launched pharmaceutical companies into a for-profit venture. They took over the randomized control trials … That was the gold standard to determine if a therapy was good, if it was going to be approved by the regulatory bodies in the world.*
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> *Today … the pendulum has almost swung too far to where you have to have this randomized control trial and Food and Drug Administration approval for a therapy to be good."*

Novel Science That Might Extend Life Span

In the interview, we also discuss a few side tangents, such as cellular reprogramming therapies under investigation. David Sinclair, Ph.D., refers to the use of what's known as Yamanaka transcription factors, which can be used to reedit your genome to reset the epigenetic clock and the DNA methylation. As explained by Christofferson, who has looked into this research:

> *"I'm completely fascinated by it. I think it's not known as widely as it could be. Longevity science is focused on caloric restriction. That's the reliable way to extend mammalian lifespans … Epigenetic rejuvenation is outside of that …*

When you think about humans, about all life for that matter, we are essentially immortal in the fact that we take our aged germ line cells and we recombine them through the process of fertilization to create a new life. That life is biological age zero when it comes into being.

How does that happen? The way that happens is it takes 23 chromosomes from the mom, 23 from the dad. There's a process in the egg that wipes off the processing of the software. The software in the genome is the epigenome. There's molecular tags on our DNA that are wiped clean and new ones are put on. This kicks off the process of embryogenesis.

In the process, it resets the aging clock. Now we're starting to learn that you can do this, you can take a cell … and put it in a Petri dish, add these factors — there are four factors involved in this process — and you will reset the epigenome back to age zero … Potentially, now it's a therapy. You can inject this back into them."

The Influence of Lifestyle and Social Connection

Christofferson also points out science showing that inherited genetics account for a rather small portion of our health and longevity potential — about 20%. The remaining 80% is predicated on environmental variables, factors such as toxic exposures, certainly, but also love and interpersonal relationships.

"All of these things we experience day to day have an impact … Our epigenome changes the way genes are expressed. This has a massive impact on our health.

We know this because of identical twin studies … When you track them over time, their destinies are very different. They very rarely die of the same diseases. This nurture aspect, this 80%, that's the part we have control over …

I looked at that in the book. What misconceptions do we have under these kinds of medical biases? What are our misconceptions as individuals about our own

health? … What are the most important factors to stay healthy and live a long life?

We always think of diet, exercise and genetics … [but] the biggest factor is your social life and how engaged you are in the world — the number of close friends you have, social integration. How many people have you talked to throughout the day? Did you say hi to the mailman? Did you talk or chat with people at the gym? That's got a massive influence on your immune system.

When you're lonely, you have this sort of corrosive inflammatory response. But when you're not lonely, your immune system has a more targeted response. Inflammation, as we know, is the root cause of so many cardiovascular disease, cancer and so many chronic diseases.

That's kind of why these blue zones get so much attention. That's the constant variable … People are connected and they're surrounded by each other all the time. [The blue zones] is where you have … 10 times the number of centenarians than you do in North America."

Indeed, epigenetic programming, which is dependent on environmental factors, far outweigh the influence of your genetics, and it does this in a very specific way. It's usually through transcription factors that either methylate the DNA (put small one-carbon molecules on the DNA), which essentially silences that specific genome, or they acetylate it, which activates those genes.

Depending on the combination of shutting off and turning on of genes, you get the expression of the genome. So, it's not what you've inherited, but your expression of the genome that's so important, and this is really how these lifestyle factors influence your genes.

"The good news about the epigenome is it's able to be manipulated," Christofferson says. "We can change it, from lifestyle factors all the way to these Yamanaka factors that kind of reset it back to a younger age."

More Information

In short, the fact that epigenetic factors control so much of your health and longevity potential is powerful motivation to make simple, inexpensive lifestyle changes. Basics include sleeping well, choosing the right foods, choosing when not to eat (time-restriction eating), exercising, getting plenty of sunshine, and addressing loneliness and stress.

These are simple basics that pretty much everyone could apply to radically improve their health and avoid the medical care system, which is fraught with hazards. While medical mistakes are a leading cause of death in the U.S., the greatest hazard is the fact that so many doctors fail to understand what the foundational cause of disease is.

By failing to address the root of disease, they are causing premature death and needless pain and suffering in a majority of the population. As noted by Christofferson:

> *"The numbers are scary. I think it's 200,000 die every year from medical error. I learned that 7,000 people die from sloppy physician handwriting. If you're in the hospital for four weeks, you have about a coin-flip chance of developing C. diff, which is a horrible, horrible intestinal infection.*
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> *Anytime you can stay out of that system, [you avoid] not just the financial but the very real health risks. We didn't even touch on the overtreatment and cancer that is so rampant …*
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> *We've had such a focus on early detection for cancer. We've gotten much better at it. However, that hasn't changed the death rates at all. But it's led to an incredible amount of overtreatment, unnecessary treatment, because most of these tumors are not dangerous at that point.*
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> *If you are diagnosed with prostate cancer from a prostate-specific antigen (PSA) test, you're 47 times more likely to receive damaging treatment — chemotherapy, surgery or radiation — than you are to have your life extended …*

> *My editor said something to me while I was writing the book that I thought was beautiful. You can be your own culture of one when it comes to health. Just do these very simple things … and just being with other people. That, in and of itself, is health care."*

To learn more, I highly recommend picking up a copy of "**Curable: How an Unlikely Group of Radical Innovators Is Trying to Transform Our Health Care System**." I really enjoy the way he tells the story and makes it a very readable book.