Joe McGonegal: This is the Slice of MIT Alumni Books Podcast. I'm Joe McGonegal, writer for the MIT Alumni Association.

When the Affordable Care Act went into effect on October 15, it declared an opt-in deadline of December for Americans who wanted to enroll. This opt in requirement presume that the uninsured would be able to navigate their way to a website, read and digest the options there, and select the best insurance option for their family. We know how that plan unraveled in the somewhat controlled chaos that ensued.

It was amid this fray that our guest, Dr. Douglas Hough, class of '71, published *Irrationality in Health Care, What Behavioral Economics Reveals About What We Do and Why,* available through Stanford University Press. Hough, who studied economics under four Nobel laureates in his days at MIT, is now an associate professor in the Department of Health Policy and Management at the Bloomberg School of Public Health at Johns Hopkins University.

Dr. Hough has been a research economist at the American Medical Association and a consultant for three health strategy firms. And he frequently speaks on topics relating to health care and physicians. I talked to Dr. Hough via Skype, asking him what his new book explores that no other book to date has done.

Douglas Hough: Well, one thing is that it talks about behavioral economics, which is a really young field. Behavioral economics is only about 30 years old. And behavioral economists are beginning to apply the tools and concepts that they've been developing to a whole variety of areas, especially finance. Finance has seen a lot of work in behavioral economics, and some people are beginning to apply the concepts of behavioral economics to health care. But no one has done a full length book on that, so that was my purpose in writing the book.

McGonegal: The timing couldn't have been better with the rollout of healthcare.gov and this national conversation we've been having. Correct?

Hough: Yeah, no, no kidding. Sometimes the magic works. You know, it was kind of an interesting process, by which I wrote this book. I was a pretty standard, what you call, a neoclassical economist-- that is, the assumption that the world is ruled by rationality, and that people, for the most part, make rational decisions. And when I started teaching at Johns Hopkins University, I was teaching the standard health economics course using the standard mainstream neoclassical economics.

And my students were mostly physicians and nurses and other health care professionals. And they kind of tolerated my talking about neoclassical economics, you know, the standard economics. But they went, not quite sure it really applies here. And then I was starting to read some behavioral economics. And every so often I'd throw some behavioral economics concepts into the lectures. And my students would go, oh, yeah, that's great. Tell me more about that. That sounds exactly like the way my patients make decisions and what they do. And it seems like exactly the way my colleagues are operating. So tell us more about that.

So I started to learn more and more about behavioral economics. And sure enough, I agreed with them. It seems that the concepts of behavior economics really do apply to health care. And so I started looking at more and more instances in which standard neoclassical economics really failed to explain what was going on in health care. And it seemed that behavioral economics fit what's happening. And so that's how the book evolved.

McGonegal: The neoclassical economics did not satisfy or address these anomalies, which it seems to be how you organized the book, yes?

Hough: Exactly, that both patients and physicians do not always act rationally. They do not always use deliberate, rational kind of thinking that economists often expect.

McGonegal: In your talks, you referenced how we can change that through, it seems, one of three ways-- action bias, default, or framing. Can you expand a little bit on each of those?

Hough: Sure. Action bias is that it can be simply summarized-- don't just sit there, do something. And we see that a lot in health care. A patient comes into a physician's office thinking that she has either the flu or bronchitis or something like that. And the physician examines her, says, yes, indeed, it's bronchitis. The patient says, well, give me something. Give me a pill. Give me an antibiotic. Give me a shot. Give me something.

Well, every physician knows that most bronchitis is viral bronchitis, for which antibiotics do no good. The patient just got out of bed, dragged themselves into the office and all, and wants something. Otherwise, why do they bother? And for the physician to have a happy patient, often the physician's going to have to prescribe that antibiotic even though they know that it is nothing more than a placebo.

The second one you asked about was framing. Framing has to do with the fact that how an issue is presented often determines how a decision is made. Now, for standard economists, that makes no sense whatsoever because the assumption is that a decision maker is going to see through those frames and is going to go down to the nut of the issue, whereas behavioral economists have discovered time and time again that how you frame an issue really determines how people make decisions.

And in talking with physicians, they say that happens all the time. The patient has come in. The physician has diagnosed the problem and realizes that there are two ways to go about things. They either perhaps do surgery, or they'll do some medical treatment. And how the physician positions those two options really determines how a patient will make a decision as to which way to go.

If they present the risks to the patient first, the patient's pretty much going to say, oh, I'm not going to have that, whereas if they present the benefits first, then what happens is that the patient is thinking, oh, man, I have this knee surgery, I'm going to be able to walk again. I'm going to be able to play basketball. This is going to be great.

But then when they hear the downsides, the risks, they go, oh, yeah, yeah, yeah, we have those downsides. Yeah, I understand. I understand. I understand. But man, I can walk again. I can play basketball again.

McGonegal: Right. And default, it's an experiment we've gone through now in the last year with enrollments on healthcare.gov, no?

Hough: Yeah. That's a really interesting example. The problem with the Affordable Care Act, and in some sense with healthcare.gov, is that now, people are mandated to have insurance. But in order to have that insurance, they've had to go through the awful experience of trying to maneuver their way through healthcare.gov.

And here is something they want in health insurance, but you know, they want to buy it with about as much difficulty as they have buying a book on Amazon. Well, you know, one way in which this whole process could have been made easier is through a default that says, you are automatically insured. And we're going to randomly assign you to an insurance company. You can have that insurance company. If you want to keep it, fine. But if you want to change it, then it's going to be pretty easy to change it.

But that way, everybody would know that they have insurance starting January 1st. They may not have exactly the policy they want, but they have the right and the ability and supposedly the ease to change that in a very short period of time. If we had done that, then I think most of the sturm und drang with the rollout would have been dissipated dramatically.

McGonegal: What about challenges writing this book, or now that it's published, challenges from within the field that you've gotten back from colleagues or behavior economists, or just economists in general?

Hough: The response has actually been pretty good. One of the challenges here is that, again, behavioral economics is a young field. And we've only have about 30 years of history. And as a result, behavioral economists have only begun to apply the tools and concepts to health care. So my challenges, what I had to do, was summarize the theory of behavioral economics and its applications to decision-making in other fields. Then I had to think about, if you will speculate, about how that would apply to health care.

Now, I would say that what I was doing was, in a sense, setting up hypotheses for a behavioral economist to test. So in a sense, what I've done is put a stake in the ground that says, here's what I think's going to happen. Here's how I think behavioral economics can apply to health care. I would love it for others to go out and either prove me right or prove me wrong.

McGonegal: How was your MIT education put to good use in this book?

Hough: I went to MIT over 40 years ago. In a sense, what MIT did was it taught me to question everything. Now, the economics I learned at MIT was the standard neoclassical approach. There are four faculty in the economics department at the time who went on to win Nobel Prizes in economics-- you know, Paul Samuelson, and Robert Solow, and Franco Modigliani, and Peter Diamond, who taught me Intermediate Micro, by the way.

And they were teaching the standard neoclassical stuff. But none of them was dogmatic. They would say, yeah, here's the standard approach, but they encouraged us to never take this is the given-- this is the cannon. Know it and live it. Rather, what they said was, here is the cannon. Make it better. Question everything. So that's just in my blood from MIT.

McGonegal: Sounds like a pedagogy you espouse yourself in your teaching.

Hough: I certainly hope so. Well, I love Marshall McLuhan's line that I don't always agree with everything I say.

McGonegal: Tell me about what you're reading right now. What's on your nightstand right now, or your e-reader?

Hough: One of the ironies of having written this book is that I now find it difficult to read a lot of books because now, when I read, especially nonfiction, I can see how an author has constructed her book. I can sense where each chapter is going from the very beginning. So in some sense, books have lost some of the magic of discovery to me. It's kind of like looking at a beautiful man or woman, but all you can see is the skeleton.

Nevertheless, there are a couple of weird things that I'm reading at this moment. One is something called *The Limit, Life and Death on the 1961 Grand Prix Circuit* by Michael Cannell. I'm also reading Joshua Knobe's book on *Experimental Philosophy,* which sounds like an oxymoron, but it's really interesting. And finally, a little book by Cass Sunstein called *Going to Extremes, How Like Minds Unite* and *Divide,* in which he's trying to explain why we're getting such extreme views expressed in the political sphere these days.

I have to shill for somebody's book. And that is Daniel Kahneman's intellectual memoir, *Thinking Fast and Slow.* Now, Kahneman's a behavioral-- actually, he's a behavioral psychologist. But he's written this intellectual memoir that has a true masterwork. It is just a beautifully written book.

McGonegal: There are many other prestigious fellow MIT alums, of course, out there. What would you like to see an MIT alum tackle in a book, either economists or about another field?

Hough: Yeah. The first one-- I got two. One is Larry Summers. I didn't know Larry when he was at MIT. He was two years behind me. But he is just one of most peripatetic minds I've ever seen. And he's done such really interesting work. And he's obviously applied it.

And I would love for him to sit down and write a serious treatise. That would be a true unified theory of macroeconomics tied to fiscal policy. Now, this is not going to be a bestseller. This is going to not make him a whole lot of money. But the area of macroeconomics really needs some serious work so that we can understand what's going on and what the effective policy levers are.

And the other one is Peter Diamond. He has been starting to look at behavioral economics. Now, it would be wonderful if he could be the one to lay out a formal rigorous theory of behavioral economics. And somebody has to sit down and write that. That's not me. That's not the book-- the next book that's in me. For Peter Diamond, beautiful capstone to his career.

McGonegal: Great. So you who dwell in micro-economics dream of the great macroeconomic book from Larry Summers.

Hough: Yes.

McGonegal: And you want one of your early mentors to give you some new reading, new assigned reading to do.

Hough: Exactly right, yes. We need those two books.

McGonegal: So let me thank Professor Doug Hough for your time today. And I encourage everybody to check out *Irrationality in Healthcare.*

Hough: It's my pleasure, Joe. Great talking with you.

McGonegal: Douglas Hough's book, *Irrationality in Healthcare, What Behavioral Economics Reveals About What We Do and Why,* is available through Stanford University Press, on amazon.com, and at your favorite local bookstore. Tune into our Slice of MIT Alumni Books Podcast by searching for MIT alumni on iTunes. Follow us on Twitter at @MIT_alumni, and read other alumni news and profiles on our blog at alum.mit.edu. Thanks for listening.