

**Talks at GS**  
**Geoff Martha,**  
**Chairman and Chief Executive Officer, Medtronic**  
**John Waldron, Moderator**  
**Recorded: October 13, 2021**

**Geoff Martha:** We spent years building what we're saying is the best pipeline in Medtronic's history. And it's coming to fruition right now.

[MUSIC INTRO]

**John Waldron:** Hello everyone. And welcome to Talks at GS. We're very pleased to be joined by Geoff Martha, Chairman and Chief Executive Officer of Medtronic. Medtronic develops lifesaving products that treat more than 70 health conditions and is among the largest medical device companies in the world. The company invented the first battery powered pacemaker more than 60 years ago and is a global supplier of ventilators. Geoff joined Medtronic in 2011 and assumed the role of chief executive officer during the initial COVID wave last year. Geoff, thank you very much for taking the time to join us today.

**Geoff Martha:** Yeah, thanks John. Thanks for having me.

**John Waldron:** So, I have to start with the pandemic because you officially took the reins as CEO weeks into that first COVID surge last year when ventilators were in high demand as, obviously, a business that's important to Medtronic. And I read that in the span of one hour on a Sunday night in March 2020 you fielded calls from the White House, the President of Ireland, and several governors. What was going through your mind in that moment? And did it feel as though the weight of the entire global health crisis was resting on your shoulders as you were assuming the role of CEO of Medtronic?

**Geoff Martha:** Well, the first thing that went through my mind is how the heck did everybody get my number? You know? All of the sudden blocked numbers came up. And so, I guess the government has ways to get your number.

But, you know, once I got past that, yeah, it was a big

moment. It was one I'll never forget. We're one third of the world's critical care ventilators. And it was clear at that moment that demand-- and this kind of followed by something that happened in your backyard, John, in New York with at the time Governor Cuomo and Michael Dowling who is the CEO of Northwell said, "Hey, look, we need 500,000" or something like that, "ventilators just for New York City alone." And those statements are what caused a run on the bank, if you will, and all those calls. And it was clear that we were going to do something dramatic and really focus on this.

And the other thing that was going through my mind is once we realized how big the gap was between the demand and our ability to supply, how do you allocate what you have too? How do you decide who gets what? So, there were a lot of heavy questions going through my mind at that point.

**John Waldron:** So, that exorbitant demand for ventilators was something that the market, let alone Medtronic, had really never seen before. You took the unprecedented step of publishing the opensource design of

your ventilator, which led to some very creative and unexpected partnerships. If someone had told you that just a few short weeks into your term you'd be collaborating with SpaceX and Elon Musk, what would you have said?

**Geoff Martha:** I would have called BS on that one. I never thought in a million years. It's amazing, you know, when you take steps like that, what some might view as a scary step, because we're a technology company. And our IP and our know-how, it was more than our IP, we put all the drawings online. It took us over a day just to get everything online. It was the instruction manual how to make these things. And we did it for a couple reasons. Some of it was we just couldn't get certain parts.

Our ventilators, for example, our critical care one in particular, I think it's like 1,500 parts from 100 different suppliers in 14 different countries. Something like that. So, these traditionally have not been high volume machines. Hospitals buy them and hold onto them for seven - eight years. And it's one of our slower growth businesses, historically.

And so, we had some supply chain constraints. And there's one way to get around that. You know, you can increase the production of those suppliers. Or you redesign certain parts. And so, we had run out of ideas. We put all of the resources into it and said we needed some help. And so, we did get help. That's where Elon Musk came in. And it was actually interesting, it's a part on the ventilator-- you know, a ventilator is a life support system. There's gas around in precise amounts. Well, it turns out, so does a spacecraft have life support systems. And when I actually talked to him, he said, "Look, this particular part that you're looking for," called a proportional solenoid valve-- there's something else I never thought I'd know what that is, you know, they also use them in spacecraft. And he said the supply chain was not dependable, which we were seeing as well. And so, he insourced it and said, "Look, if we can help, we'll do it." He did. And so, that was one interesting partnership.

Intel was another. They helped us. Healthcare workers didn't want to go into the ICUs with all this aerosolized COVID in the air to change ventilator settings. So, we are able to do it now remotely and monitor the patients only

from outside the room. Intel helped us with the computing power necessary for that. Of course, the FDA worked with us on quick approvals. So, it really made-- yeah, we have a better product than we used to have. And reputationally, our employees were very proud of what we did. And it improved our standing with governments. And in healthcare, trust is a big thing. And other stakeholders now, it made us stronger.

**John Waldron:** That's terrific. So, Medtronic's long-held mission statement of embracing corporate citizenship and putting patients before profits is deeply ingrained in the company's culture. We know that well. We've been associated with you guys closely for a lot of years. And it's proven to be decades ahead of its time. Did that serve as the drive force behind the decision to open source and essentially give away the design of your ventilator?

**Geoff Martha:** The mission, we use it to drive our day-to-day decisions. It's not just words on a wall or aspirational. And it's got these six tenets that cover everything from putting patients-- you know, talks about patient health or using biomedical engineering to alleviate

pain, restore health, extend life. It focuses us. So, just focus on what you're good at, not what you're not. Make a fair profit. You know, it's up to us to define what's fair. But it gets into corporate citizenship. It gets into wellness, the personal worth of employees.

Remember, this was written 60 years ago. And it was written, I'm sorry, in 1960. So, back then people weren't talking about corporate citizenship. It wasn't even a word. Yet that word is in our mission. And investing in communities and employees.

So, this has been an unbelievable tool for us. It's aspirational, but it's also operationalized in how we make decisions. And so, you know, I just literally, myself and the executive team, literally got the mission statement out and in the height of the crisis, read through it together and it was a guide. And it emboldened us to make these decisions.

**John Waldron:** After mobilizing your company, you said you didn't want to return to how it operates on a pre-COVID basis. How much of a challenge will it be for

companies, including Medtronic, to in that spirit of partnership and collaboration that we saw in COVID, how much of a challenge is it for that to extend in a post-COVID world when things are back to more business as usual, whatever that really means?

**Geoff Martha:** I do think some of it, I don't think, will be too challenge. Some of it will be. I want to give you an example. So, for example, for some of the innovation that accelerated in our world, using modern technology to, whether it be 5G or just the computing power that we've seen increase, augmented reality, virtual. All of these things, to do things more virtually.

Now a big part of what we do, it's not just to help patients, but we train physicians all over the world on these advanced procedures as they evolve. And so, now training virtually using the tools I just described. We're not going back. Physicians prefer this to face to face because they don't have to travel on the weekends and things like that. We still have some face to face, but it's going to be cut down dramatically.



The thing that's going to be harder is the partnership. Where during the pandemic, whether it was working with competitors or us working with hospitals and technology companies, we didn't sit there and, you guys know, you guys do a lot of deals at Goldman Sachs, facilitate a lot of deals, we didn't sit there and say, "Okay, let's cut the contract first and then do the work." You know, we did the work first. We said we'll worry about economics later.

We had the pandemic as an incentive to do this. But it was fun moving so fast and just assuming positive intent. And that, I think, is going to be a little trickier. But I'm optimistic. In meeting with hospitals, going to our customers, they said, "Hey look, we want to move away from a long list of vendors, and we want to go to a short list of partners." And for a variety of reasons. And I think this is going to play well for Medtronic. And for them as well. So, that's one element that I really hope stays.

**John Waldron:** Talk about your R & D pipeline. You know, you've kept your foot on the accelerator this whole time. I think you've launched, like, 200 products in the last year. So, you guys are moving with real speed, have a real

robust pipeline in various fields. Just talk about how you think about that. And can you keep that pace going?

**Geoff Martha:** Well, look, we've spent years building what we're saying is the best pipeline in Medtronic's history. And it's coming to fruition right now. We've got a lot of meaningful innovation across the company broadly. And then we've got sprinkled in with that is some disruptive innovation that's either disrupting existing markets or creating whole new markets.

An example of disrupting an existing market is, look, in surgery, there's one robotic player in general surgery and that's Intuitive Surgical, their DaVinci robot. Still though, a very small percentage of procedures, but growing fast. And we just got approval for our surgical robot. And look, DaVinci, Intuitive's market cap, I've looked at it recently, but it's well over 100 billion dollars on 5 billion dollars of revenue and growing fast. And you know, here we are as the next meaningful player here. And it's not going to be a big, long list of companies. It's us, Intuitive, and within a couple years I'd say J & J. And we're disrupting the surgical market with this robot.

And this robot, it's not just about the robot. It's everything that comes with it, including data and AI. And you think about self-driving cars, we're going to have, in time, self-driving surgical robots. Where today, you know, we're literally taking all the tapes of these surgeries, because a lot of them are done with endoscopic cameras, all of that video, and we're putting that in the Cloud and building algorithms that will provide real time feedback for surgeons and, eventually, automate surgery. So, this can democratize surgery, good surgery, around the world. That's an example of disruption.

We've got a novel hypertension therapy that we're waiting for our final clinical results back that, if they come back the way we think and anticipate, this is going to open up a brand-new market of hypertension therapy that's catheter based. So, it's a catheter that applies a small amount of energy to specific nerves and your renal nerves. That's a day procedure. No unknown safety side effects. No safety issues. And it materially lowers people's blood pressure in a six-month period, up by up to 10 mms of mercury, which results in, like, 20 - 28 - 30 percent less strokes, heart

attacks.

You know, hypertension is the leading cause of death in the world. And today it's treated with a regimen of pharmacological products that have pretty nasty side effects. So, this would be a whole new market that we're creating.

And we are testing right now something we've been working on for a decade now being in a clinical trial in the UK. The NHS is using it. It's colonoscopy in the pill. So, you know, you're probably familiar with the historic colonoscopy procedure. It's not the most pleasant. And by the way, it's expensive for the healthcare system. And it takes highly trained physicians to do this. And you've got to be anaesthetized. And many countries don't have that kind of infrastructure to do that for all the people that are eligible for the screening. So, that saves a lot of time and money. And these are things that are all possible with the innovation that's happening around us. It's very exciting.

**John Waldron:** That's pretty extraordinary. So, you hold an annual patient day where patients actually visit the

company and speak about how your products have changed their lives. Has there been a patient who said something that really made an impression with you and kind of stayed with you through the years?

**Geoff Martha:** You know, just this last one was a big one for me. It's the last week in December we do this, before Christmas, before people break for the holiday. And it's usually on a Friday afternoon and we take the rest of the day off. [UNINTEL] a couple hours. We're very generous like that.

And you know, patients come in from all over the world. And this year it was virtual because of COVID. But we had an employee who was an engineer, actually, in our transcatheter heart valve business. And he was working at his home a few months ago. Was on a Zoom call, ironically, with his manager back here in Minneapolis. He's in Tennessee. And he suffered a cardiac arrest right on the phone, sudden cardiac arrest. Very traumatic situation. And he was in a coma for a number of weeks. And barely lived. He has young kids. He's a young guy. Young kids. Wife. Like I said, young, young family. And he almost died.

So, he goes to the hospital. They say he needs an implant of a defibrillator. Of course, he gets Medtronic, who wouldn't in that situation? And you know, he's back on another Zoom call and he has another cardiac arrest a few months later. And the difference, though, is he passes out for maybe 30 seconds. The implantable defibrillator does its thing. He's back up and he's fine. You know? And he actually gets back on calls. This is a dedicated employee, this guy. Later that day-- the difference between that first incident where he was in a coma for a couple of weeks and didn't know if he was going to make it and the second one, right, because he had that therapy and he bounced back up within less than a minute and, you know, was back, literally back at work. I'm not sure I recommend that. But the dichotomy of those two things is really compelling.

And then he said, "We sit here, and we have all our town hall meetings, and we talk about product quality and patient safety." He says, "Now, having experienced this firsthand, those words are more meaningful to me." And it just hit me hard in terms of what we do everyday. And the impact it has on people's lives.

**John Waldron:** First of all, it's great that you do that. That you have patients come in and speak to you firsthand, that's a pretty extraordinary story. I just commend you for the overall willingness and time and effort it must take to do that properly. I think it's terrific.

**Geoff Martha:** It's very inspirational for our employees. You know, all the way up to the top. I mean, it's my favorite day of the year. And we say it's the most important day on our calendar because it reminds everybody in a very dramatic way how important what we do is.

**John Waldron:** Yeah, it's great.

**Geoff Martha:** Even our former bankers cry a little bit.

**John Waldron:** Well, maybe we should attend one of those. It sounds like it would be an extraordinary day.

So, you've talked about how innovation and data can democratize healthcare. Maybe just expand. What does that mean and how expansive can that be?

**Geoff Martha:** Well, I think it's quite profound, you know, in terms of what the impact data and AI is having. And you know, we're spending a lot of time with some of the big tech companies too in different potential partnerships. We talked about pacemakers, inflatable defibrillators. We put little sensors just under the skin that are like the size of a paper clip, and we can monitor patients in a pretty robust way. So, you see all of this. We're collecting lots and lots of data. And starting to apply AI and ML to it.

And AI and ML isn't the secret sauce. It's just the data that you have. The amount of data that you have is, I believe, the rate limiter on our innovation. The more data we have, the more we're going to be able to innovate because this data is allowing us to, first of all, monitor more patients, diagnose, and personalize the therapy to the patients.

**John Waldron:** Just continuing to talk about data, you know, the flipside of aggregating all the data is protecting the data. And we've had, you know, in the last year I think a record number of hacks for corporations, not healthcare



only, but just broadly defined. Certainly, in financial services we continue to see a lot of cyber threat. Maybe you can talk a bit about what you think needs to be done to create the balance between enabling the broad aggregation and sharing of data that you're referring to, while safeguarding the security and privacy for patients.

**Geoff Martha:** So, one, look, consumers are skeptical, right, because of some of the experiences they've had with some of the big tech companies and how their data is used. So, one, first and foremost, we've got to build trust with consumers. And they need to understand what we're using the data for. And it's not for marketing purposes. In our case, it's for customizing the therapy. Personalizing the therapy to that patient. It's for safety. So, we monitor the safety of the products ongoing. And it's also to help us innovate to that next product. And we're very clear about that. And we have to protect that privacy, come up with industry standards of how we're protecting patients' privacy, and build that trust up with them. That's key.

And then on the security side, look, with broken it down into two work streams here. There's the device security,

right, making sure our devices are cyber proof. And there we're working very closely with the FDA. I actually, personally, meet with the FDA on a quarterly basis. And one of the standing topics with the highest level of the FDA is cyber. And we've put a dedicated team around that inside Medtronic. But we've brought others from our industry together as well to work on this.

And we're actually hiring hackers. The politically correct term now is researchers. But we hire these researchers to try to breach our devices on a regular basis. And educate us. And so, look, it's tough to stay ahead. But we're putting a lot of resources into this and collaborating with others in our industry and outside of our industry, as well as the regulators around the world.

**John Waldron:** You've previously spoken about lessons learned, low points in your professional career. Maybe just give us a window into some of those takeaways and how you've sort of built yourself as a leader and what your underlying philosophy is.

**Geoff Martha:** Well, a lot of my philosophy, I grew up

playing sports. I grew up in a sports family too. Both my dad and my uncle played in the NFL. You know, I was more of a hockey guy myself. And played hockey, it was a big part of my life growing up and through college. So, a lot of my philosophy is guided around teams and the importance of teams. And so, that's a big piece of it.

And things that I'm kind of looking for and inspire to be myself are, I'd say, three things. One is clarity of thought. And that's a little different than just being smart. You know? There are a lot of smart people that are scatterbrains sometimes, right? You do have to have a certain level of IQ thing a clear thinker. But the ability to take all of this information and distill it down to the critical things, I've learned a lot of that. And I'm always striving to improve. But I've learned a lot of that doing M&A work at GE Capital.

A second would be a sense of purpose. I mean, you can strive for a title or pay. But that kind of burns out after a while. You really need to care about what you're doing and really be striving for some sort of impact to be, in my mind, a top performer on a consistent basis. So, clarity of

thought. A sense of purpose.

And then the last one is humility. Because you know, there's always somebody out there with a better idea. You've always got to be learning. You've always got to be looking for that. Versus, you know, trying to apply your old tapes to new scenarios. And so, these are things that I've looked for.

And I mentioned one time, you know, one of the toughest moments of my career was when I was 15 years at GE Capital, it was during the go, go years. I got great ratings and things like that. And then one day I find out as we're consolidating businesses, you know, I'm out of a job. I get laid off. I had a young family. I didn't even have the courage to tell my wife. And that, I wouldn't recommend that though, I carried this around for a while. I was able to land another job in another division at GE. But, you know, I had 60 days and I was out.

And I look back on that and I said, how did this happen? And I really think, you know, that humility piece of it, I really wasn't at my best at that point. And I was upset at

GE, and I still am a little bit over that, but you know, I also have to hold myself accountable to that. And I was probably more focused on-- that sense of purpose wasn't there. That humility wasn't there. I was more focused on, you know, getting that next job versus my impact. And that's when I said it's time for a change. And I want to do something where I can really have an impact that inspires me.

That's when, for me, healthcare has been that. And it's been the best move I made, was moving into healthcare.

**John Waldron:** Geoff, you've been very generous with your time. We really enjoyed the conversation. We also enjoy a close partnership with Medtronic. And it's an extraordinary company led by an extraordinary leader. We appreciate it very much. And we wish you much success in the future. Thank you.

**Geoff Martha:** Thank you for that. And I was happy to be here and hope some people took away some nuggets over the last hour or so.

**John Waldron:** Absolutely did. I look forward to seeing you in person. Take care of yourself. Be well.

**Geoff Martha:** You too.

**John Waldron:** Bye, bye.

*This transcript should not be copied, distributed, published or reproduced, in whole or in part, or disclosed by any recipient to any other person. The information contained in this transcript does not constitute a recommendation from any Goldman Sachs entity to the recipient. Neither Goldman Sachs nor any of its affiliates makes any representation or warranty, express or implied, as to the accuracy or completeness of the statements or any information contained in this transcript and any liability therefore (including in respect of direct, indirect or consequential loss or damage) is expressly disclaimed. The views expressed in this transcript are not necessarily those of Goldman Sachs, and Goldman Sachs is not providing any financial, economic, legal, accounting or tax advice or recommendations in this transcript. In addition, the receipt of this transcript by any recipient is not to be taken as constituting the giving of investment advice by Goldman Sachs to that recipient, nor to constitute such person a client of any Goldman Sachs entity. This transcript is provided in conjunction with the associated video/audio content for convenience. The content of this transcript may differ from the associated video/audio, please consult the original content as the definitive source. Goldman Sachs is not responsible for any errors in the transcript.*