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CEO Perspectives: COVID Impacts On Supply Chain, Digital, At-Home Care, And Medtech's Place In 'Food Chain'

by [Marion Webb](#)

CEOs of major medtechs Medtronic, BD, J&J/Ethicon, Edwards Lifesciences, Stryker and Olympus Corp. discuss how the pandemic has shaken up the industry and redefined their companies' strategies from supply chain and digital uptake to ambulatory and at-home care.

COVID-19 has presented no shortage of challenges for companies, but learnings from the experience should be leverageable moving forward in today's radically changed medtech landscape, industry-leading CEOs suggest.

In recent panel discussions, leaders at [Medtronic plc](#), [Edwards Lifesciences Corp.](#), [Becton Dickinson AB](#), [Johnson & Johnson \(Pty\) Ltd's Ethicon Inc.](#) business, [Stryker Corporation](#), Olympic Corp. of Americas, and [Teladoc Health, Inc.](#) agreed that the pandemic will have a lasting impact on the medtech industry.

Last year, the crisis slowed elective procedures to a crawl as hospitals prioritized COVID care, hamstringing medical device businesses, and it continues to tie the global supply chain in knots, among other impacts forcing companies in new directions.

It also has unleashed innovation at an unprecedented pace.

For Tom Polen, who took the helm at Becton Dickinson in January 2020 and had to steer the company through the biggest health crisis in recent history, the pandemic ushered in a new era of rethinking health care delivery. (Also see "[Medtech Investors Gain When The Compass Points To Patients](#)" - Medtech Insight, 4 Nov, 2021.)

"We were challenged to innovate in ways that we never have been challenged before," Polen said

during a session of AdvaMed's recent MedTech Conference. "For us, it was to develop a rapid test in 90 days and scale it to 10 times what you're used to making in that timeframe – and we did it."

Polen noted that while BD was already making the shift into the non-acute space before the pandemic, the public health crisis "opened up a number of apertures."

Polen gave the example of the company's first over-the-counter COVID-19 rapid antigen test that uses computer vision technology in a smartphone to interpret results. The test became available in October for online purchase in Amazon's store.

Polen said the at-home test, which received emergency use authorization from the US Food and Drug Administration, was a concept the company had talked about for years, but COVID-19 was what hastened it forth.

Now, "we'll be putting other assays on that same platform for over-the-counter," he said.

Geoff Martha, who succeeded Omar Ishrak as CEO of Medtronic last April, said the pandemic highlighted the importance of health care and the role of technology.



MEDTRONIC CEO GEOFF MARTHA TOOK THE HELM AT THE START OF THE 2020 CORONAVIRUS PANDEMIC. *Medtronic*

He expressed pride in Medtronic's role in making key components of ventilators during the early days of the pandemic. He said the speed of vaccine development – which normally takes years – was just amazing.

"We've seen more innovation right now than at least I've seen in the last 20 or 30 years," Martha said. "In medtech specifically – it's not just about biotech and diagnostics, but things in medtech like computational power, miniaturization, robotics, data, AI ... this is a huge opportunity for us, because technology is the only way forward." (Also see "[Medtronic 'Refreshes Brand,' Announces New Environmental, Social, and Governance Targets](#)" - Medtech Insight, 14 Oct, 2021.)

He stressed that this also marks an opportunity for medtech to "move up in the food chain, ahead of pharma." Medtechs, he said, can offer patients less invasive technologies with better outcomes and less side-effects.

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Reinventing Supply Chain

Among the ways medtech companies build a stronger foundation for the future is the creation of a more agile and resilient supply chain model, according to EY's Pulse of the Industry 2021 report. (Also see "[Leading Medtech CEOs Say Health Equity, Environmental Work Will Outlast Pandemic](#)" - Medtech Insight, 2 Nov, 2021.)

Industry leaders seem to agree.

Vlad Makatsaria, company group chairman for Johnson & Johnson Ethicon's business, which is known for its suture and wound care products, said the last 18 months, as elective procedures have been put on hold or delayed by patients sheltering from COVID, have made unpredictable what has traditionally been a very predictable business.

This has had a tremendous impact on the supply chain. To ensure against supply shortages, J&J/Ethicon elected to build inventory in "safety stocks."

"The big lesson for us is localizing your supply chain, making it much more flexible and much more adaptable," Makatsaria said.

Polen noted that while the industry has always had private-public partnerships, these relationships "went to a whole other level during the pandemic." He stressed the importance of government and medtechs working hand-in-hand to strengthen supply chains and address long-term challenges.

"We were working closely with the State Department for example to keep companies and suppliers open in markets where every business had to shut down. ... The State Department and embassies around the world did an amazing job. ... Military planes [were] flying products from overseas to get to different geographies," he said.

Kevin Lobo, Stryker's CEO, also spoke to the strain COVID has imposed on supply chains worldwide.

"The nature of our global supply chains and the lack of redundant supply, you saw that

spotlighted by government officials, by hospitals.”

In the report, EY suggested that companies could embrace AI analytics for better forecasting and use innovative solutions, such as imaging tools to anticipate implant sizes in orthopedics, to downsize “redundant inventory,” among other methods.

Mike Mussallem, CEO of Edwards Lifesciences, expressed pride in Edwards employees for getting the job done, despite such challenges.

“We found a way to stay safe and continue supply,” Mussallem said.

He said that even smaller medtech companies with fewer resources need to be strategic when it comes to supply chain, adding facilities and suppliers and building redundancies where possible, and thinking about critical components, in particular, those used in clinical trials.

“The more that you can anticipate [supply chain issues] and potentially have back-ups for those things that are rare and critical, it puts you in a position to be able to withstand the shock. ... It’s a delicate balancing act, but it deserves to be on the agenda of the CEO,” Mussallem said.

Digital Future

The pandemic has greatly accelerated the use of digital technologies from telehealth consults, to remote monitoring, videoconferencing and web-based platforms that allow surgeons and clinical experts to collaborate virtually. Driven by regulatory flexibilities and readier adoption by physicians, patients and health systems, these solutions are expected to become permanent parts of health care. (Also see "[Market Intel: Lessons Learned From COVID-19: A Global Perspective On Digital Health Transformation](#)" - Medtech Insight, 21 Oct, 2021.)

The industry leaders agreed that the use of digital tools to connect with customers, educate surgeons on their products, and provide training through proctorships was a major shift during the pandemic, and one that has proven to be more efficient and economical.

Makatsaria noted that pre-COVID, the company would hold physical seminars to train surgeons and other health care professionals on new products.

“Typically, when we would have a training seminar, we would have anywhere from tens to hundreds of surgeons and nurses in the audience live. Now we can educate digitally and have tens of thousands of health care practitioners around the world,” he said.

Lobo also believes that medical education has transformed and will be completely different, largely virtual, in the future. He said while sales reps retain a vital role in the operating suite, remote proctoring “worked out exceptionally well – well beyond what we could have ever

imagined.”

By leveraging data and digital technologies, medical devices will become better connected and smarter, which, in turn, will also help surgeons become more consistent and improve outcomes, Lobo said.

At Edwards Lifesciences, leveraging data and digital “across the board in all functions and processes” will only go faster, Mussallem told the audience.

Some of the more significant challenges, Mussallem noted during a panel discussion moderated by *Medtech Insight*, were in trying to continue clinical research,

“There was just a lot of creativity, use of digital tools, finding ways of communicating with patients and closing the gap,” he said.

Bill Hawkins, senior advisor for EW Healthcare Partners and former CEO of Medtronic, also expects that clinical studies will be conducted very differently in the future.

“With the advances in data, artificial intelligence, we’re going to see much more efficient ways in screening of patients and determining patients that are candidates to be enrolled in clinical studies” and analysis of the results, he noted.

Mussallem said during Edwards’ third-quarter earnings call on 27 October that the company made headway this quarter enrolling patients in five pivotal trials supporting therapies for mitral and tricuspid regurgitation.

In-House Communication

Several panelists also commented on the future of work.

Hawkins said the Zoom boom has been “enlightening” by bringing together many different voices and getting “really good insights in a very short period of time.”

Lobo echoed the sentiment.

“This virtual Zoom format levels everybody and your voices are equal versus being in a room, if you’re American, you have a sort of larger presence than someone from another part of the world ... Suddenly everyone is on a level playing field and you get a better global voice,” he said.

He also noted that the pandemic helped “shrink our company” by doing a lot more communication.

“I did personally a lot more communications than I did normally, as did other businesses and even regions cross-collaborating,” Lobo said. “And I think that’s going to stay and we’re going to become a more connected company than we were prior to the pandemic.”

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Nina Goodheart, senior VP and president of Structural Heart & Aortic at Medtronic, agreed there has been a lot of discussion about how to bring people back to work, but believes the ability to work remotely will open up new opportunities.

“We’re going to be thinking about talent and how we go back to work very differently than we did before this pandemic,” she said.

Data-Driven At-Home Care

The hospital-at-home model has gained significant traction during the pandemic, but it remains to be seen whether Congress will support the permanent expansion of telehealth amid ongoing concerns about reimbursement rates, fraud, waste and abuse, according to the EY report.

One of the key players in this space, Teladoc Health, which made headlines with the \$14bn acquisition of [Livongo Health, Inc.](#) last October, wants to continue empowering patients through virtual care and take advantage of the push from hospital to at-home care. (Also see "[HLTH 2020: Teladoc And Livongo Say Clients, Doctors Excited About Merger, Cross-Selling Deal With Florida Blue](#)" - Medtech Insight, 13 Oct, 2020.)

Teladoc, whose clients include employers, health plans and insurers, on 28 October reported third-quarter revenues of \$521.7m, a 81% year-over-year jump and rise of nearly 4% from the previous quarter. Total visits rose 37% year-over-year to nearly 3.9 million, up from 3.5 million visits in the second quarter.

Joseph DeVivo, who leads the hospital and health system business for Teladoc and sat on a panel with Martha and Polen, noted that “things get distorted” because many people think virtual care consists only in video conferences.

“If there are 10 stories to the virtual care building, that’s the first story,” DeVivo said. “What we’re trying to do is deliver care virtually where you can be more efficient and not have to go to a high-cost setting for a low-cost, easy transaction.”

Hawkins said with all the changes taking place, the most profound change will be the dramatic shift from the acute care setting to ambulatory care or the home.

Polen predicts that in the next five to 10 years, hospitals will narrow their focus on caring for more critically ill patients. This will require hospitals to adopt digital technologies and data science to become more efficient and deliver higher quality of care.

“I think the whole digital transformation of medical technologies, consumables, smart devices will exist not only to enable the non-acute care delivery [but also in the acute care setting],” he said. Regarding the rising trend of home ICUs, he said, “I think you’re going to see an explosion of that in the next five years. It’s just getting started.”

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Lobo said he has seen an acceleration of knee and hip replacements being done in ambulatory care centers since the start of the pandemic and expects that trend to continue. That, in turn, will require innovations to adapt to that new site of care. He noted excitement about the “healthy pipeline of young companies that were able to get through the pandemic.”

But this move also poses new challenges for the industry, as Makatsaria pointed out.

“As the delivery of health care is going to change from the hospital to potentially home, how do we think about innovating in terms of new products that are going to be patient-friendly in terms of self-use. And I think that’s probably going to be one of the big topics for the industry.”

Omnichannel Expansion

Many medtech companies are not only adopting digital and analytical tools to enhance productivity, but are also adding channels to interact with health care providers, payers and other stakeholders. Many believe that the omnichannel model can augment the role of the sales

reps by adding tools that will improve their engagement with customers and other stakeholders.

For BD's Polen, the pandemic provided the impetus to step back and really look at their go-to-market model and revise it using digital tools and a broader set of channels.

"What we learned through the pandemic is there's new ways from a digital perspective and omnichannel perspective," said Polen, noting that the medtech industry lagged far behind the pharmaceutical industry, among other industries. He said through the pandemic, customers started to engage with the organization online, through video, virtual symposiums and forums, which has spurred investments into more sophisticated omnichannel go-to-market strategies.

"It's really something that we see as an ongoing evolution," he said. "While it has made significant progress over the last year and a half, it's still in the first couple innings of the journey and has a long road to go."

Hawkins agreed that the medtech industry lags behind other industries which have embraced the omnichannel model, but foresees that medtechs are ripe for change and will adopt that model at an accelerated pace.

"The way we innovate is going to continue to be challenged and there's going to be opportunities to work in different ways," he said.

Nacho Abia, CEO of Olympus Corp of Americas, told the audience that the company's use of multiple channels to communicate with customers – including through email, digital campaigns, and face-to-face exchanges – was not only well received by clients, but also more efficient and able to better meet their needs.

"It's not only quantity, it's the quality and the content of the communication with our customer which is going to change, and hopefully we'll do those interactions more efficiently for everybody," he said.