



**MARK SPYKERMAN** is Chief Information Officer of AmerisourceBergen, a Fortune 8 global healthcare company with a foundation in pharmaceutical distribution and solutions for manufacturers, pharmacies, and providers. As CIO, he is focused on leveraging technology to create value for customers and foster a positive impact on the health of people and communities around the world.



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## How One CIO Turned the Pandemic into 'Tech for the Greater Good'

How do you leverage technology to potentially save the world? When the pandemic paralyzed the globe, AmerisourceBergen had to step up its supply chain concerns from national to international. CIO Mark Spykerman explains how AI and machine learning are transforming lives and creating more secure medicine, and addresses some of the biggest challenges in the post-COVID-19 world.

**Q. It's been a revolutionary year. What are the top three challenges pharmaceutical distributors are facing now, and how can tech help?**

**Spykerman:** First, there's the COVID effect. We've had to lean more heavily into digital-enabled tools since we've been working remotely. Second, we are focused on taking care of team members, better defining the necessary meetings, communication skills, and bonding opportunities. Lastly, there is scale — what our industry can do as part of a global supply chain and healthcare community.

If you look at the Pharma supply chain, we've been fortunate enough to be the distributor of choice for COVID-19 therapies. We're making sure they get to the right site of care as quickly and as efficiently as possible.

In the U.S., navigating COVID-19 reinforced our purpose. However, we looked across the globe and wondered, "Is there a broader calling?" We acquired Alliance Healthcare in June, connecting us with countries across the globe. With that acquisition, we are now thinking about how we scale processes globally — how we can create enterprise systems that allow data to flow easily across the world. It's really exciting.

**Q. What impact have AI and machine learning had on pharmaceutical services? And how will they shape the future of Pharma services?**

**Spykerman:** Machine learning and AI work with scale. It's not useful if you have a data set with just a couple hundred rows or even a couple thousand rows. You need super scale, and that's where the tech is useful — the ability to scale with the cloud.

A great example is the patient service industry, like verifying patient benefits, which is time-consuming. But we developed an AI process that automates the benefits verifications. We can see the patterns because of scale.

**Q. How are data and analytics making the supply chain more secure and efficient?**

**Spykerman:** The bigger issue is the idea of counterfeit or illegitimate drugs: What you don't want is a patient thinking they're getting a dose of an effective medicine but it's actually a fake.

We helped develop a system to support Track and Trace. Since we're in the middle as a distributor we can see what drugs are coming in and have information on the lot level and, by 2023, on the SKU level. The quality of the pharma supply chain will increase dramatically.

For more information, visit [www.amerisourcebergen.com](http://www.amerisourcebergen.com).



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Nitin is responsible for managing and growing TCS Health-Care Business globally as the P&L owner. He has been part of TCS' growth journey for over 23 years and has played leadership roles across various industries including Healthcare, Life Sciences, Energy and Finance Services.

## Personalization, Customer Expectations Accelerate Healthcare Evolution

To say healthcare has evolved in the last two years would be an understatement. One of the most impacted areas is the medical supply chain.

Nitin Kumar, Vice President & Global Business Head of Healthcare, Tata Consultancy Services, Ltd., says the evolution of healthcare has been rapid, but inevitable. He shares how companies can adapt, why personalization matters more than ever, and what technology can help leaders meet new customer expectations.

### Q. How are data and analytics making the supply chain more secure and efficient?

**Kumar:** Pharma distribution is consolidated, highly optimized and effective in the United States. Data and analytics play a pivotal role now more than earlier as we need more agility, resilience and transparency in this critical supply chain. Pharma distributors have huge amounts of data across the healthcare value chain, with availability of cloud technology and AI they have an opportunity to predict events ahead of time. These include early warning signals for potential disruptions to the supply chain, simulating scenario-based decision making, tracking expensive lifesaving specialized medication and controlled substances as well as adjusting to a rapidly changing demand and supply environment.

### Q. The past year has had many unexpected challenges. What potential trends or disruptions do you see happening in the pharma distribution industry?

**Kumar:** The past year has been an incredibly difficult and trying time. The year has significantly accelerated innovation, transformation and adoption of digital technologies across the healthcare and life sciences industry. We have all seen the speed of adoption and effectiveness of telemedicine during these times.

Customer Experience has become a much higher priority. Care settings have expanded considerably including home care. These increase last mile requirements from the distributors while providing them an opportunity to get closer to the patients. Bidirectional data exchange to and from the Distributor to Patient opens new business opportunities in the specialty and personalized medicine. Delivering a simple, effective and consistent patient experience will be key.

### Q. How have the Internet of Things, cloud, and other emerging tech evolved your strategy?

**Kumar:** Now we're talking more about collaboration and (data) interoperability — a shared responsibility to care for the customer, not just of one entity.

The pandemic has increased the focus on wellness, not just prescriptive care. When you want to be well, your expectations increase to all the providers, and to that extent it requires a strong, more collaborative health ecosystem. That can't be done without IoT, cloud, and AI.

Cloud-based solutions are being used to make healthcare more accessible with consistent, real-time data across the business. Pharma distribution companies can combat counterfeiting with use of technologies such as blockchain, machine learning and advanced analytics by bringing Digital Traceability.

IoT-based systems powered by intelligent technologies create exponential value by augmenting the capabilities of physical objects with digital intelligence such as chip enabled vials, monitoring substances with limited shelf life like organs and tissues.

TCS DigiFleet™, an IoT based end-to-end smart logistics and smart mobility solution assimilates telematics and environmental data to provide impactful business insights to companies on fleet and cargo on the move.

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