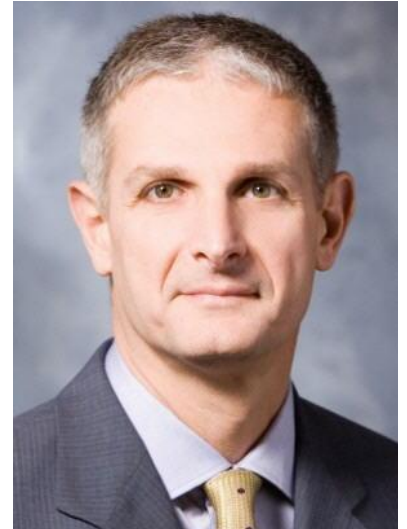


## Nicholas Augustinos

Senior Director, Global Healthcare Solutions

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Growing up in Athens, Greece, Nick Augustinos was the kind of child who spent 20 minutes playing with a new toy—and the next 20 hours taking it apart and putting it back together to see how it worked.

“There is a perfect logic in machines,” he says. “There is always a cause and effect. Understanding cause and effect allows me take complex issues, break them down into manageable pieces, and try to thread together why things happen as they do.”

Though he earned degrees in both industrial and mechanical engineering, Augustinos realized that engineering was not the right career for him. He was far more interested in the potential of computing, which he saw as opening a new chapter in the history of the human species. “I could see at the rate computers were evolving, the way we received, understood, and used information would be completely different within a few years’ time. I always wanted to be doing work that looks forward sensing trends and taking advantage of market transitions as they happened.”

After earning his MBA, Augustinos made his mark with Pacific Health Resources in Los Angeles, California, where he was asked—at the age of 28—to take over the day to day management of CliniShare, a division of UniHealth, in a turnaround situation. Immediately he realized that part of the solution was the introduction of new information systems to streamline the operations and revenue generation. Over the next few years his belief in the power of information technology was enforced. He continued to introduce new systems and in some cases piloting new capabilities converting what was a predominantly paper environment to one of the most information-savvy divisions of UniHealth. He then went into healthcare management consulting with APM, the leading



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healthcare consulting firm at the time, and then to Deloitte Consulting, where he built the firm's healthcare consulting practice in San Francisco from the ground up and run the Analyst Program for the entire firm.

Augustinos loved working with Deloitte, its people, and its clients. But the year he was up for partner at Deloitte, Augustinos left the firm for the center of the .com world in Silicon Valley. He joined what was then a small startup company in healthcare IT, Healtheon/WebMD. "While at Deloitte as much as I enjoyed the work I always had a nagging feeling telling me that the future is with companies such as Healtheon|WebMD. Healtheon was building an IP-based platform to facilitate healthcare transactions and information exchange over the Internet. The Healtheon platform connected patients, physicians, insurers, and the institutions of healthcare and it provided a platform for electronic medical records (EMRs). I needed to make this move because this is where the future of healthcare was going.

"There is a need to create a patient-centric view of the world in healthcare," Augustinos explains. "Healthcare should be a way of living, focusing on health more than care. Health is actually a shared responsibility among individuals, healthcare providers, and society. People need to be educated about how to make their own best possible decisions with the assistance of healthcare professionals who have the best possible knowledge systems at their fingertips, and society needs to create a culture of healthy behaviors and care for all. Of course information systems tailored for consumers and healthcare professionals are at the heart of such a world."

Following Healtheon|WebMD and while with CareScience, Augustinos worked with several communities pioneering Internet-based Healthcare Information Exchanges that used the power of the network to create a patient-centric view of the world. His work brought him to the attention of the head of the Healthcare Practice of Cisco Internet Business Solutions Group (IBSG), and in 2005, Augustinos joined IBSG.

At IBSG, Augustinos used his ability to sense market imperatives and transitions and started organizing Cisco resources globally to take concepts from the drawing board to prototypes and ultimately, pilots and marketable solutions for Cisco. Working from his basic conviction that existing healthcare models were failing to meet today's demands, he took on an entrepreneurial role in developing a visionary new approach to healthcare delivery: Cisco HealthPresence™. He created the concept, identified funding within Cisco, and with facts persuaded a business unit to prototype the solution, and ultimately worked with customers on several pilot projects to test the concept. Using the network as a platform, Cisco HealthPresence combines state-of-the-art video, audio, and medical information to create an experience similar to an in-person visit to a doctor or health specialist—though they may be hundreds or thousands of miles apart. Responses from pilot programs indicate extremely high patient satisfaction with HealthPresence sitting, ease of access, convenience, a safe environment, and comfort with the care received.

How did Augustinos come up with such a transformative means of delivering healthcare? “If one considers the reasons why ‘care at a distance,’ or telemedicine, did not deliver on its promise, one quickly comes to the conclusion that besides the fact that the technology was sub-optimal, it was a point-to-point solution or a non-scalable solution. By developing a network solution that optimizes the capacity of an ecosystem - however that is defined regionally, nationally, or globally for that matter - we can create completely new care models that offer care, quality, and contain cost. These alternative care models are not intended to supplant patient-physician relationships, but to augment them for the benefit of both. I am talking about disseminating expertise wherever it is needed. I am talking about creating the 21<sup>st</sup> century ‘house call’ of the family doctor.” Starting with the business architecture, and building the technical architecture based on the business imperatives, increases the chances of success by orders of magnitude.

Augustinos believes that current healthcare delivery models will be forced to evolve because of pressure from consumers, the desire for transparency, and the need to keep up with scientific developments in medicine and genetics. “We are looking at future where physiological, genetic, and demographic information will converge to create a true profile for each one of us,” he notes.

Having so much information at our fingertips will require new tools and analytical capabilities. “We are at a point where the human brain will not be able to absorb all that information. Consequently, the ability to treat someone effectively in the context of their physical, genetic predisposition and environmental conditions will only be possible with the use of extremely sophisticated and intelligent tools. By the very nature of those tools they are likely to be more in line with cloud computing than the current paradigm of localized processing tools. That’s why we are developing better network-based computational tools that can analyze data and deliver information in ways we can use to improve patient care,” Augustinos says.

Augustinos predicts that how we experience healthcare will change drastically in the future. “Someday, not in the very distant future, we will be able to design personalized treatments, drug regimens and protocols, and even test likely outcomes on a virtual replica of ourselves,” he speculates.

Augustinos continues to monitor trends in healthcare and to promote his vision of the network as the platform for the healthcare industry. He helped founding the Continua Alliance, a global alliance of about 200+ members companies and organizations, dedicated to establishing a system of interoperable, personal telehealth solutions to better manage health and wellness. He has been a Continua board member since its inception. He says, “Just as the creation of the IP protocol allowed anybody with a computer to get on the Internet from anywhere around the world and opened new horizons how we live, play and learn, we need just such an approach for wellness and medical devices. Good health and care is something that anybody, anywhere in the world, should be able to achieve.”