

Holistic Suite of Healthcare Services

Jack wakes up with a horrible pain in his stomach on a day he knows he can't miss work. Anxious and irritated about the idea of a costly and time-consuming visit to the hospital emergency room, he throws caution to the wind and looks for a solution on a new web platform offered by his doctor's medical group. He was apprehensive that the Internet would not provide the best information or find a fix for his situation before he had to go to work. However, to his surprise, the new platform, a graphically enhanced, animated, and suite of healthcare services created by Simulocity, was just what he needed. When he accessed the site, he was greeted by an Intelligent Avatar who guided him into a virtual health platform where he was able to see a physician within a few minutes using the integrated telehealth technologies. His issue was addressed, next steps were planned, and the details of this virtual visit were electronically sent to Jack's medical record. All of this would have otherwise taken him hours, not to mention the time wasted in traveling to a nearby ER. Jack's medical issue was expeditiously managed through the use of Simulocity's innovative technologies. In our interview with the company's founder and CEO, Dr. Manny Dominguez, he talks about their suite of solutions, successful endeavors, differentiating factors, and roadmap of the organization.

Please give us a brief overview of the company:

While working for the U.S. Air Force, I was consulted on how to create a digital healthcare-focused collaborative and learning environment within the Department of Defense. I realized there was no solution at the time that would fit the requirements, which led me to develop a first of its kind virtual hospital that could help patients through education, peer group interaction and communication with the health care teams caring for them. The patients could share the challenges and problems related to common diseases such as diabetes, hypertension, anxiety, and PTSD, to name just a few. Clinicians across the world in Department of Defense facilities could also use the virtual hospital for their own professional development by sharing best practices, accessing library resources; and, attending virtual conferences and case management discussions. We understood that the potential of this virtual ecosystem



could have profound effects on patient satisfaction, health outcomes, overall quality of care and cost. Later when I started working with the U.S. Veterans' Health Administration, I helped develop and implement the virtual hospital to help our Veterans and the healthcare teams, to gain access to resources and activities anytime and anywhere.

In 2017, I retired from government services, but knew that the solution I had developed could benefit all healthcare delivery systems in many ways and give patients the care they deserve with unique access to information, support and providers while enhancing professional education and development for the healthcare team. This mission led me to create my own technology and simulation firm, Simulocity. The company has taken the original virtual hospital and made it more innovative, robust, technologically advanced, and accessible across devices and even low-bandwidth rural areas.

Could you elaborate on your portfolio of solutions?

The platform we have created (SIMCITA) delivers an online health suite accessible in both high and low bandwidth conditions. All users can access it via PC, tablets or phone, in a world-class touchscreen environment. In addition to live conferences and classes, linkage to home health monitoring equipment; telehealth visits; and, tracking of user activities for things like chronic disease management reimbursement and continuing education credits for providers are integral to the system. Robust video centers include searchable content for wellness topics as well as information about disease and other medical conditions. We also built a complete 3D virtual-world version, where a person can personalize their avatar to take advantage of all of SIMCITA's features, interact with other patients and clinicians as avatars- a fully immersive experience giving the user a sense of true presence in the virtual hospital.

We build the platform for patients and clinicians alike, where patients can collaborate with other patients to discuss various similar health issues

The system also provides virtual medical assistants that are intuitive and help patients do things like navigate the virtual hospital, answer questions about health and disease, schedule appointments, send medication reminders and track personal health information. They function as the user's personal health concierge.

We understand how important continuing professional education is to providers in this age of rapidly developing new treatments and guidelines for disease management. Simulocity virtual task trainers and human patient simulators can mimic many biological responses from dilated pupils to changes in pulse. We specialize in simulation-based training including gamification, standardized patient experiences and virtual patient cases that create immersive learning experiences for both patients and professionals.



Could you please cite one or two case studies on how you have enabled clients to overcome their hurdles and attain desired outcomes with your solutions?

We have a client in the Middle-East, who is ultra-innovative. Their vision is to be one of the world's best providers of virtual health services. They want to leverage our platform to provide connectivity for patients via phone or tablet to home monitoring devices, healthcare teams, wellness education, forums and prescription services. Additionally, they want a powerful eLearning platform to access medical simulation training in multiple languages. One of the main challenges our client wanted to address, was the cost, time, and resources wasted in patients visiting and waiting in Emergency Rooms for care that could be provided virtually or prevented with optimized personal health behaviors. The SIMCITA platform addresses these challenges by allowing patients to consult a doctor from the comfort of their homes or on the go, and learn how to manage their conditions.

What does the future hold for your organization? Any footprint expansion plans or platform enhancement strategies that you can shed light upon?

Our solution has received acclaim from the healthcare industry. We know that in order to create a more holistic solution, we need to listen to clients' needs and evolve. Many of our clients would like our solution to be their virtual headquarters. We also can align our applications to corporate strategies across geographic boundaries; and, to create learning and simulation centers for healthcare organizations on a larger scale. We are on the path to actualize the visions of our customers and create new realities for advancing healthcare and supporting health literacy, disease management and outcomes. CA