## Dr. Daniel Carlin, MD

## **Higher Callings**

On a day in late November in 1998, it was snowing in Boston, where Dr. Daniel Carlin lived. But his thoughts were far away, 900 miles off the Western Coast of South Africa, with a man sailing solo as part of the Around Alone sailboat race. Victor Yazykov had contracted a terrible infection in his arm, and his boat was damaged. Dan knew the man was in deep trouble and needed to operate on himself, but they had lost voice communication. In a last ditch effort, he turned to a mysterious new force in the world, the internet.

Dan had been working with a group of sailors on ways they could use shortwave radios to access email out at sea, developing some of the earliest theories of telehealth.

Now, those theories were being put to the ultimate test, and Dan's first challenge was to write the email clearly enough that Victor would operate on himself successfully. "I went to a well-worn paradigm for how to communicate, drafting it as a recipe," he says. "I had him lay out the supplies and follow twelve steps."

An email came back letting Dan know that Victor's arm was now lifeless. His hand was white, and he couldn't close his fingers. As an afterthought, Victor mentioned he takes Aspirin daily and that he had tied a shock cord around his arm to stop the excessive bleeding. "I immediately wrote back, telling him to remove the shock cord and apply pressure instead, because otherwise he could lose his arm," Dan recalls. "Unbeknownst to us, he couldn't communicate with the outside world at night because his solar batteries couldn't hold charge. The sun had gone down by that point, and I heard nothing back."

Powerless to do anything more, Dan joined his wife and kids at the Frog Pond, a little skating rink in the city. He remembers the surreal feeling of the snow on his face and the laughter of his family, all muted by the truth in the back of his

mind: he had no way to know whether Victor was alive or dead.

At 4:15 the next morning, Dan got a call from the sailboat race headquarters. The sun was back up in the South Atlantic, and Victor had received Dan's last message in time. The procedure had been successful. "For me, that was the shot heard 'round the world," Dan says. "It was also the fruition of a lot of theoretical thinking I had done about the power of the internet and the potential of telehealth. In that moment, I saw the

big picture. I knew in my heart that our world had reached a pivotal inflection point, and that I had found my higher calling."

A voracious student of history, Dan knew how the invention of the movable type printing press in the 1450s had revolutionized medicine. As books were printed and shared across wide geographical areas, Latin became the common language of medicine. Archaic, ineffective therapies were scrutinized and retired, while good therapies were

honed and embraced. "Because of that inflection point, we've had more medical progress in the past couple hundred years than we had in the whole history of our species combined," Dan says.

In the 1990s, as Dan poured through books like Being Digital by Nicholas Negroponte and The Discoverers by Daniel Boorstein, he followed closely the developments of the internet and saw the world on the precipice of another medical revolution. As medicine became digitized, its new language would be binary – easily instantaneously transmitted across geographic and linguistic divides. At the time, Dan was testing the limits of this new technological frontier at the New England Medical Center, where he was remotely managing a large telemedicine project in West Africa. "We were serving a workforce of 2,000 men at a construction site in Ghana," he explains. "There was a trailer



clinic and sick bay on the ground with a nurse practitioner who would send me cases by satellite phone and email."

As the project began to wrap up in 1998, one of the Medical Center's board members, Nancy Hawthorn, joined forces with Dan in raising \$2.5 million to launch WorldClinic Inc., originally conceived as a telemedicine practice for ships and other remote places. They hit the ground running in early 1999, building the care system and then working to establish the product-to-market fit. They succeeded in securing several clients, but by April of 2000, the dotcom bust had caused the markets to collapse and constrict. "We were depending on a second round of investment that never came," Dan recalls. "I was transitioning from the world of medicine and academia to the world of entrepreneurship—a steep learning curve rendered much steeper by those tough market forces."

One of the most powerful moments of his career came days before the investors were scheduled to close the company. Dan approached them personally and asked them to hand WorldClinic back to him so he could try to make it work with what he had. At first they said no, but Dan took a hardline approach, reminding them that keeping a promise to patients was nonnegotiable.

Finally, the investors agreed, setting up a compensation schedule in the event he went on to sell the company in the future. "When we closed the deal, I signed document after document and reflected on what it was like in the beginning, with so many people around offering support and encouragement," he says. "Boston isn't like Silicon Valley, where failure is a celebrated part of the process toward hitting it out of the park. It's a much more conservative atmosphere that expects immediate results. I thought about that expression—success has many fathers; failure but one. In that moment, I was the one father of this failure."

And in that moment that his business was left for dead, something ignited in Dan—a deep, relentless drive to become un-killable. He taught himself finance, marketing, and management while working two jobs as an emergency physician to support his family. His resolve was reinforced along the way by experiences like one he had in 2000, when he received an email about a young pregnant woman in Russia who had been

diagnosed with a mysterious illness. She was told by her doctor that she had to abort her baby, but was desperate to find another way. Dan investigated, only to discover that the woman only had Lyme Disease. It posed no threat to her unborn child, and with a month of antibiotics, she would be fine. "I wrote the email in English and converted it to Cyrillic with a web translator," he recounts. "Because our communication was digital, the impossible was possible, and a life was saved."

With no money to pay employees, Dan looked at software that could help make his processes faster and cleaner. He didn't realize it at the time, but he was building a foundation for scalability. He was also undergoing the transformation from physician to entrepreneur—a mental paradigm shift that cast hard truths into nuanced ambiguities. "I had no particular desire to be a CEO, but it's the role I needed to assume, and I came to understand that it's a role of many dimensions," he says. "As a CEO, you must become adept at creating perception through information management, which was a totally new thing for me."

Dan's father grew up in Brooklyn as the son of a bar manager, fighting the odds and making it to medical school. Both of his parents taught him to be tough as nails, with no crying and no moral gray areas in life. "Their values helped get me through that trying time," Dan affirms.

Growing up in the 1960s in Dalton, a small town in the Berkshires of western Massachusetts, he learned the nuance and importance of bedside manner at an early age from his father, the town doctor. "For the average person, he was the beginning and the end of healthcare," Dan recounts. "At that time, so much of medicine was human-to-human, where it was the doctor's job to understand the patient's context, behavior, and thinking. By joining my father for house calls, I learned that being a doctor was about communicating expertly, listening closely, and being a great diagnostician without resorting to a lab or a CAT scan."

As a kid, Dan was struck by how important his father was to the people of Dalton, and how he treated everyone with the same respect and dignity, regardless of their stature in life. Farmers, mechanics, and the rural poor received the same treatment as the wealthy family that owned the paper mill in town. "The egalitarian ethos of his practice really impacted

me," Dan says.

Dan was the second of six children, and the only to take an interest in medicine. He took an early interest in science and reading. When he was in third grade, his father decided he wanted to switch from general medicine to neurology, so the family moved to Boston for his internship and residency. They settled in a gritty neighborhood where kids constantly picked fights, and Dan longed for Dalton until seventh grade, when his father landed a job in New Jersey. "From then on, growing up was idyllic," he remembers. "I made best friends with a group of ten kids, and we did everything together."

To make spending money, Dan cut grass and shoveled snow. He loved working and being active, and spent three summers working as a golf caddie until he got his driver's license and got a job as a delivery boy. Though he found school intellectually boring and preferred to read smart novels about adventurers who used science to travel the world, he did well academically and especially enjoyed his brazen and unconventional French teacher. "He constantly reminded us that you don't have to take the path you think you have to take in life," says Dan. "He urged us to take risks and live our own lives. I wrote him a letter from Afghanistan years later to thank him for that."

Dan had always planned to be a doctor and pursued college at Carnegie Mellon, an engineering school that shaped his outlook and taught him how to examine today through the lens of tomorrow. He majored in chemistry with a premed track—a demanding course load that grew more challenging when he decided to get a second degree in philosophy as well. He also joined the Pi Kappa Alpha fraternity, which provided an avenue to unwind and develop close friendships in the otherwise high-stress environment.

Compared to Carnegie Mellon, medical school at Tufts was relatively easy. Dan secured a Naval scholarship to help alleviate the financial burden, and he spent his third year working at Bay State Medical Center in Springfield, Massachusetts. He completed a general surgery internship at Bethesda Naval Hospital and went out on the *USS Mississippi*, providing care to sailors. His Chief Petty Officer at the time, Gary McLoud, drove home the point that he was now a role model for others. "Once I grasped that point, I became the officer we both wanted me to be," Dan laughs.

"Being a Naval officer was definitely one of the high points of my young life, clouded only by the passing of my father while I was at sea."

Dan left the Navy on June 21, 1998, and a couple days later set off for Peshawar, Pakistan. "After traveling the world with the Navy, I couldn't just get back to life as I had known it before," he recounts. "I decided to take a year off to do what I really wanted to do, which was becoming a refugee doctor. It was a total immersion into dirt, disease, violence, polio, leprosy, tuberculosis, and every parasite imaginable - very challenging, but incredibly rewarding. And on Friday nights we'd go to the American club in Peshawar, which attracted expats and civil servants from all over the region. It was an incredible experience."

After six months, Dan came home to the United States with plans to head to Pakistan, when he crossed paths with a remarkable young woman named Lisa. "She was happy, excited about her work, and plugged into a big world, with this gentle and kind touch," Dan remembers. "I thought she was impressive as hell." They immediately hit it off, and because she was slated to leave for a project in Kenya, he signed up for a project in South Sudan. They lived together happily in Mombasa until one day in February of 1989, when Dan boarded a small twin engine highwing aircraft headed to Juba, Sudan. There, he was to join a UN food convoy headed to a town that had been captured by rebels and was teetering on the brink of a humanitarian crisis.

As the plane crossed the border into South Sudan, Dan looked out the port side window and saw oil hemorrhaging from the engine. They made an emergency landing in the middle of nowhere and replaced the oil return hose, which had come off the engine block. Just then, a small speck appeared on the horizon and began heading toward them. They held their breath, knowing the approaching van was either benign friend or deadly foe. Fortunately, it was a group of allies willing to drive them the rest of the way to Juba while the pilot took the plane home. Before the pilot took off, however, Dan was struck with a feeling and decided to check the other engine, just to be safe. It, too, had a loose oil return hose, and the men realized that someone had tried to kill them.

The incident had caused a substantial delay, and by the time they reached Juba by van,

the convoy had left without them. Much to their surprise, however, it came tearing back several hours later. The convoy had been ambushed, with two people killed and several more wounded. One man died as Dan was administering medical care. "I think about that day sometimes, and how there's no point in trying to predict why bad things happen or how they might have been avoided," he says. "One near-death experience saved me from an almost-certain-death experience, and I'm just grateful to be here today. It keeps things in perspective, and I feel incredibly lucky."

After four months in East Africa, Dan and Lisa moved back to the United States and got married. Dan completed a three-year emergency medicine residency with Columbia in Morristown, New Jersey, and then took a job in Watsonville, California, only to realize he much preferred the East Coast. They moved back in 1995, and Dan worked as a conventional community emergency room physician until restlessness compelled him to start a medical practice for people who spent substantial periods of time at sea. "I convinced my hospital to act as a call center for me, and I started writing medical columns for sailor publications," he recounts. "I opened my first business as Voyager Medicine, providing care to people as they traveled all over the world. That effort eventually became WorldClinic."

Today, WorldClinic provides reliable medical care to globetrotting families and business executives. While the broken state of U.S. healthcare erodes the doctor-patient relationship by undermining meaningful primary care, WorldClinic embraces thoughtful, accountable, data-driven medicine, and makes it available to people anywhere in the world. The company is now transitioning from a virtual emergency room to a cutting-edge primary care practice that serves as a connected longevity platform in its ability to identify and stave off health risks. Acting as a proof-of-concept, WorldClinic is an affirmation of what's possible in the brave new world of digital medicine. "With a person's genome, I can quickly determine their lifetime plan and the things I should be monitoring, tracking, and managing so they can avoid the heart attack they would otherwise get at age 61," he says. "The future of digital medicine is absolutely transformative, and it's a future I can attest to because I've lived it."

In advising young people entering the working world today, Dan observes that most

truly successful people never stop learning. With rigorous intellectual curiosity, they remain open to everything and are willing to take on even dry, dense material if they believe it's essential. "In this world that's constantly evolving, find a place where you can do your thing to your best possible expression," he encourages. "Try to find work that can't be automated or outsourced overseas, and remember that what you do is an expression of the divinity and God within you. There's spectacular stuff in all of us, and it's important to get in touch with it if you want to have a great life."

Dan also reminds us that, while jobs are certainly important, family is ultimately the most important thing in life. He and Lisa now have four daughters. "Lisa taught me how to be a good father to girls, since I grew up one of five boys," he laughs. "She rounded out my hard edges and taught me that there are times to be tough, and times to enjoy life. Thanks to her, I'm more complete in all it is to be human. We just do better when we're with someone we love."

Beyond that, Dan's work reminds us that the pursuit of a higher calling does more than change your life-it can change your world. In smartphones, leveraging technology, advancing understanding of the human genome, he is proving that healthcare must be more than just responding to health problems-it must be about preventing them. "I'm a person of deep, abiding faith," he says. "I'm constantly driven by a sense of purpose. If I didn't have that level of spiritual, emotional, and intellectual commitment, I don't think I could do what I do. In my darkest moment, I reminded myself that if I gave up, the idea would die, along with countless people in the coming years who wouldn't get the life-saving benefit of the treatments it enables. A higher calling will carry you through the ups and downs, and ultimately into the better world you help to build with your own two hands."

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About Gordon I. Bernhardt

President and founder of Bernhardt Wealth Management and author of Profiles in Success: Inspiration from Executive Leaders in the Washington D.C. Area, Gordon provides financial planning and wealth management services to affluent individuals, families and business-owners throughout the Washington, DC area. Since establishing his firm in 1994, he and his team have been focused on

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