

A digital cure for health care

David Veillette brings his pioneering vision to Northwestern



"Health care is terminally ill not terminal yet, but getting close."

David Veillette's diagnosis is backed up by 40 years of clinical and leadership experience in the health care field first as hospital corpsman in the Navy (where he received his clinical education), then as an administrator in hospitals in Texas and Utah and later as president and CEO of the Oklahoma Heart Center, the Indiana Heart Hospital and, since 2005, of the Cancer Treatment Centers of America (CTCA) at Western Regional Medical Center in Goodyear, Arizona.

Veillette believes there is a cure for what ails the U.S. health care system and he is teaching it to students in the School of Continuing Studies. He believes a solution lies in medical informatics the field that seeks to bring medical care into the information age — and he is bringing his vision, expertise and considerable reputation to SCS's online Master of Science in Medical Informatics (MMI) Program.

Healing health care

"About 15 years ago I chose to stop doing just hospital operations and get involved in improving health care overall," says Veillette. "Like a lot of other people in the industry, I recognized that information technology and data could be helpful in health care — because if you can't measure it, you can't manage it. So I needed to find, manage and use information to improve the health care coverage and service we provide."

The result is what 15 years later has come to be called the digital hospital: A paperless, computerized, integrated system where all information about a given patient is stored electronically and is accessible to all who need it. The primary benefit of such a system is safety. No more indecipherable prescriptions, no more scurrying to find a patient chart, no more redundant questions ("Are you allergic to any medications?"). The digital hospital also provides users with technical safety nets, such as decision support systems, and promises improved efficiencies. It is also better able to deliver what is known as evidence-based medicine, an approach that aims to bring the work of researchers from labs and journal articles to patients more quickly.

Only 2 to 4 percent of hospitals are truly all digital, Veillette estimates. He has been at the helm of two of the most prominent. From 2001 to 2005 he oversaw the design, development, implementation and operation of the 88-bed, fully digital Indiana Heart Hospital. In the Goodyear, Arizona, facility — which opened in late 2008 — he helped create CTCA's first all-digital cancer hospital, a completely computerized clinical facility offering state-of-the-art therapies.

"I have had the privilege of being able to build a couple of digital hospitals from scratch," says Veillette, who is the author of *Hospitals in Crisis: A Digital Solution*. "We've been at the bleeding edge of this technology, but I think we are beginning to see it filter down to help more and more people."

One of the ways Veillette is ensuring that happens is by teaching at SCS. The story of how he came to the MMI program is an example of serendipity in our increasingly digital world.

Ken Woo is SCS's director of information technology and facilities and teaches a course introducing IT aspects of the MMI Program to students from a clinical background. (A parallel premed course is offered to students coming from the IT world.) Two years ago he was looking for a guest speaker with experience in the field, and one of his students (who dialed in from Arizona) said she worked for a man named David Veillette who might fill the bill.

"I had seen an article about Indiana Heart Hospital," recalls Woo. "Lo and behold, David was behind it. He spoke for my class — virtually — and the class truly enjoyed it, and we did it again a couple of times in other classes." Then, in 2008, when Woo learned the MMI Program was looking for instructors, he recommended Veillette for the position. Veillette agreed to teach the course Health Care Enterprise Operations — again, virtually, from Arizona — starting in January 2009.

Becoming virtual

Veillette joined a program that had boomed since its start in January 2007: from its initial enrollment of 140 students the online MMI Program had grown to 300 students in fall 2009. Veillette's involvement proved that this innovative online program could attract stellar faculty as well as excellent students from all parts of the nation. It was also the first time the program found faculty outside the Northwestern community. "This is a specialized field," says Woo, "so we cast our net wider."

"David Veillette is exactly the sort of person we were looking for," says Chris Bray, SCS's coordinator of graduate academic programs. "He has a very rich professional experience. We seek the experts in the field, and we were thrilled to get him."

"This is my first experience with distance teaching," says Veillette, who has logged considerable time at the front of a classroom during his career. "I really love the technology. We have a group of 20 or 30 people from across the country talking about what they do and what needs to be done. I have physicians, nurses, IT people, software people, engineers, hardware developers. It's exciting to have that mix of professionals."

Students concur. "That's one of the great things about the program," says Stephanie Altavilla, a clinical analyst at Children's Hospital Boston. "I worked on a project with the CIO of a hospital, and I learned so much from him. He learned from me, too — he said he'd never thought of the clinical side of issues. I have the best classmates in this field from all over the country."

Still, it is Veillette who most impresses students. "Right off the bat he had credibility," says Altavilla. "He shares his reallife experiences as a CEO — you don't get that from a textbook or journal articles."

"The way he told his story drove so much value in his instruction," says MMI student Amy Rosa, a registered nurse and care provider systems manager at Broward Health in Ft. Lauderdale, Florida. "He was realistic, approachable, understanding, encouraging and freely mentored us on becoming leaders in our field. It was as if we 'rounded' with him in his hospitals through the years and were able to tuck that in our hats for the future. He gave us a very real picture of the history of our field while coaching us for the future."

That's the whole point for Veillette. "I hope they take it and run 10 times farther than I have. We've gotten this far over the past 20 years, and these young people, in much shorter time, are going to be able to take us light years ahead of where we are now. They are still going to face obstacles. In health care if you try to change doctors and professional processes, it's very difficult. But I think people clearly understand that this is what has to happen."

Until it does, Veillette has no plans to slow down. "I love what I do — I've done it for 40 years. I tried retiring, and that didn't work." When he's not teaching or running a hospital, Veillette says he loves playing poker and spending time with his wife, Jill, and six children. "My last one is still living at home, and she is just a hoot and a pleasure. It makes life worthwhile. For me, working in health and now running a cancer program, it really puts into perspective what's important in life."

—Tom Fredrickson