



Corey Siegel, MD, MS, confers with Jessica Caron, a patient with Crohn's disease, about her care. Caron is one of the patient leaders collaborating on IBD Qorus.

## COREY SIEGEL, MD, MS '09

# Rewriting the Rules of Patient Care

**C**OREY SIEGEL TELLS A TALE OF TWO PATIENTS. One was a 28-year-old man from Maine, the other a 20-year-old woman from Vermont. Both suffered from mild to moderate Crohn's disease, and both had found ways to manage their symptoms with modest success. If Siegel had followed the longstanding treatment plan for Crohn's disease, he'd have put these seemingly similar patients on a similar course of medication as practice guidelines suggest. But the patients and their needs were unique—and Siegel is one of the Dartmouth innovators working to rewrite the old rules of healthcare.

Siegel is section chief of gastroenterology and hepatology at Dartmouth-Hitchcock and codirector of its Inflammatory Bowel Disease (IBD) Center. At Geisel, he's an associate professor of medicine and of The Dartmouth Institute for Health Policy and Clinical Practice, where he earned a

master's in healthcare research in 2009. The seeds of the work he's doing today were planted while he was studying at The Dartmouth Institute.

"The idea of personalized medicine, shared decision making, and using evidence in a way that patients can really understand—all that came from my time at The Dartmouth Institute," Siegel says.

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—Corey Siegel, MD, MS '09  
Associate Professor of Medicine and of The Dartmouth Institute

## PERSONALIZED, PROACTIVE, PATIENT-CENTERED CARE

Siegel explains that Crohn's disease, which is a type of IBD, "is a very varied illness depending on who you are and the type of Crohn's you have. Some patients do fine on minimal or no medications and others are in the operating room within six to twelve months of diagnosis." It's a disease that can and should be treated before it becomes severe, yet can't be handled with a one-size-fits-all approach. By collaborating with fellow physicians and researchers from Geisel, Dartmouth-Hitchcock, and other institutions; working with health centers across the country; and, most importantly, partnering with patients, Siegel is creating tools to help doctors provide IBD treatment that's personalized, proactive, and patient-centered.

One of these—which Siegel created with his wife, Lori Siegel, PhD, a scientist with expertise in complex systems modeling—is a decision-making tool called PROSPECT. Currently being studied with over 200 patients nationally, PROSPECT is a web-based application that displays predicted outcomes for individuals with Crohn's disease based on clinical, genetic, and blood-based variables. In a clear chart, patients can see their risk of developing, over a three-year period, the types of complications that would require surgery. Turning complex clinical data into patient-friendly information, PROSPECT helps doctors communicate with their patients about specific risks and treatment options, and encourages patients to partner with their doctors in making treatment decisions. When the 28-year-old man from Maine saw that he had a high risk of developing complications, he decided to go on the most effective medications available. When the 20-year-old woman from Vermont saw that her risk of complications was low, she decided to maintain her regimen of diet and exercise.

Another web-based tool invites patients to report on the status of their symptoms and quality of life through a simple survey completed before an office visit. For Siegel, the most important question in that survey asks patients to state the number-one concern they'd like to discuss during the appointment. "Some information you just can't get from a chart," Siegel says. "Now, we're walking into a visit prepared with an understanding of what the patient is most concerned about. It allows the visit to be about the patient, not about their disease."

The survey is part of a larger program called IBD Qorus, which is led by Siegel and Gil Melmed, MD, of Cedars-Sinai Medical Center in Los Angeles in collaboration with the Crohn's and Colitis Foundation. The goal of IBD Qorus is to address high levels of variation in care for patients with Crohn's and ulcerative colitis, another form of IBD. "We built this initiative," Siegel says, "so we can measure how we're delivering care and then develop implementation programs to make improvements." Currently, 30 medical practices across the country are participating and the goal

is to recruit 60 more over the next three years. Patients not only provide feedback that encourages development of high-quality, patient-centered care but also participate in program leadership.

## TEAM EFFORT

As a graduate of and associate professor at The Dartmouth Institute, Siegel sees IBD Qorus "as a perfect example of how concepts about delivering healthcare developed there can spread nationally or even internationally." Siegel recently returned from conferences in Asia, Europe, and South America, where interest in IBD Qorus is high.

It takes teamwork to spread the concepts born and nurtured at The Dartmouth Institute, and Siegel treats all of his colleagues as part of the team—from the students, junior faculty, and research assistants he's mentored to physicians and nurses at Dartmouth-Hitchcock. "You can't do this work in isolation," Siegel says. "I've been extremely lucky to work with great collaborators."

And at the heart of this team are the patients with IBD: people with different beliefs, preferences, and needs. People like the man from Maine and the woman from Vermont, who chose drastically different approaches for their IBD treatment—and both achieved complete remission of Crohn's disease.

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LAUREN SEIDMAN

## Transform Healthcare

We will lead the discovery, evaluation, and dissemination of healthcare solutions that address the urgent problems of spiraling costs, inconsistent quality, and inequity. We will accelerate the creation of high-performing systems of care in which patients' values and goals guide decisions. Through our educational programs, our impact will be exponential—as we inspire physicians, nurses, business leaders, and policy makers to lead the change that's needed in healthcare.

**New philanthropic support totaling \$50 million** for The Dartmouth Institute for Health Policy and Clinical Practice will catalyze innovation, expand access to our educational programs, and enable greater advocacy and policy work to transform healthcare.

