A family medicine physician with the Community Health Centers of Burlington, HEATHER STEIN, M.D., sees patients for the full range of medical complaints, ones that Vermont primary care physicians have treated for generations: chronic conditions like diabetes and heart disease, allergy woes, stomach pain, and everything in between.

But in one crucial aspect, Stein’s caseload is different than what Vermont’s doctors have faced in the past. Today, about 40 of her patients also suffer from addiction to prescription painkillers or heroin. They walk in the front door of the health center just like everyone else. She treats them with a medication called buprenorphine, which blocks the effects of the drugs they had been using, reducing cravings and withdrawal symptoms. For some, this allows them to start careers, rekindle relationships with family, or simply reconnect with the self they were before addiction took hold. Stein treats their substance use but she also goes beyond this one aspect of their lives: She refers them to CHCB’s Dental Center, prescribes birth control, and helps to manage high blood pressure. For her, they’re patients just like any other — complicated and multifaceted, defined not by their diseases but by their potential.

“It’s very rewarding work,” says Stein, who is also a clinical assistant professor of family medicine at the UVM Larner College of Medicine, and medical director at CHCB. “I’ve seen people move up to managerial positions, get married, buy houses. It’s fun to see people succeed and be part of that process.”

Stein is at the vanguard of a new way of treating addiction, in a state that is a national leader in its innovative approach to a public health crisis.

Vermonters craft the “hub and spoke” — the first effective clinical approach to treating widespread opioid addiction.
UVM Professor of Psychiatry Richard Ramson ’79, Ph.D., a native Vermonter who returned to the state in 2018 after a storied career in addiction treatment research at UCLA, characterizes Vermont as the leader of a paradigm shift. In December of 2017 he completed a federally funded assessment of the hub and spoke system, conducting interviews with providers and patients over the course of one year.

“I was surprised and inspired by the treatment going on in primary care settings,” he says. “This new treatment paradigm will change the course of opioid addiction and recovery.”

In creating this new system, Vermont physicians and health policy leaders have altered public perception of addiction. Instead of shunting patients labeled as “addicts” into a category separate from other disease sufferers, they’ve welcomed an effective treatment backed by decades of research, although the medication is itself addictive. Buprenorphine, on the other hand, blocks the effects of opioids without the risk of addiction, allowing patients relief from cravings and withdrawal with less worry about medication diversion or overdose. UVM was one of the first institutions nationwide to study buprenorphine’s clinical applications.

Vermont was also an early leader in providing treatment for pregnant women suffering from opioid addiction. The Children and Recovering Mothers Collaborative (CHARM) began providing access to methadone in the late 1990s, well before the state offered it more broadly. CHARM, which includes social service agencies as well as obstetricians and neonatal specialists, has served as an example for other states. It also helped to break the political logjam around Vermont enrolling pregnant patients in a methadone clinic, which came online just as the opioid epidemic began to take shape.

When Vermont’s first methadone clinic — called the Chittenden Clinic — opened in 2002 with Brooklyn as medical director, the waiting list quickly ballooned. In 2003, Vermont introduced buprenorphine as an office-based treatment, which in theory should have expanded treatment capacity. But concerns about managing complex patients without adequate support, the lack of social and mental health services for patients, and the possibility for medication diversion meant many primary care physicians only saw a handful of patients or less. So despite Vermont boasting a high number of office-based treatment providers per capita, many still lacked care. The wait list at the Chittenden Clinic extended to two years.

Brooklyn, who was also treating patients at the Community Health Centers of Burlington, saw the struggling primary care physicians to take a fresh look at care. “I think this new treatment paradigm will change the course of opioid addiction and recovery,” he says. “I was surprised and inspired by the treatment going on in primary care settings. I think this new treatment paradigm will change the course of opioid addiction and recovery.”

— Richard Ramson ’79, Ph.D.

“DOCS IN THE COMMUNITY NEED TO KNOW THAT WE HAVE THEIR BACK. BECAUSE IF YOU’RE GOING TO TAKE ON PRESCRIBING FOR PEOPLE WHO ARE FAIRLY COMPLEX, YOU NEED TO KNOW THAT THERE’S A REGIONAL EXPERT YOU CAN CALL AT ANY TIME.”

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This feedback—and more specific comments were in favor of them as they were rolled out. with UVM’s Area Health Education Centers, the over 400 Vermont prescribers to assess their evaluating the rules. and increasingly these recommendations are for prescribing according to pain severity level patients using opioids for chronic pain. Guidelines or problems. They provide specific scenarios when possible, using the lowest effective dose the most comprehensive. They are consistent the books, MacLean says Vermont’s are among that took effect in July of 2017. Although 23 the supply of opioids is tightly controlled. that meet the needs of patients while ensuring system is leading the way in treatment. new ground, much like the hub and spoke—called Project ECHO. This virtual mentoring education and support to primary care offices people’s experiences are so different.” To this settings for chronically painful conditions. changed since the rules went into effect. data from studies like theirs to standardize use after surgery was just 27 percent of the 2018 American Public Health Association annual conference. Another study—published online in February of 2018 in the Journal of the American College of Physicians with Larner College of Medicine alum Moyo Fujii, M.D. ’13 as first author—stands to inform post-operative prescribing practices. When a patient arrives, the doctors of Project ECHO can access the patient’s medical history, choose a case scenario, and receive real-time feedback. vermontmed.vermontmedicine.org

When it comes to stemming the tide of opioid addiction, tightening rules around prescribing these powerful painkillers is an important part of the solution. In this, Vermont is breaking new ground, much like the hub and spoke system, at the forefront in its way. in this way is that appropriate for their needs.

In this, Vermont has set the stage for more innovation to come. After gathering data from patients and providers across Vermont, Richard Rawson, Ph.D., says there’s no doubt the hub and spoke system is changing lives, even as the state continues to work on improvements like the integration of mental health care and additional support for families. The data tell one part of the story: Patients in both hub- and spoke settings reported a 96 percent decrease in opioid use, including a 92 percent drop in injection drug use. Patients’ lived experiences tell the rest of the story.

“The dynamic for many of these patients is about their relationship with their doctor,” says Rawson. “Everything else is nice. Even the medicine gets rated as less important than the relationship they have with their physician. That’s different. We’ve never seen that before.”

“Treating patients at the Community Health Centers of Burlington, Heather Stoic, M.D., understands the value of these relationships. Not only is she helping patients, she is introducing medical students entering their family medicine clerkship to this new way of treating opioid addiction as part of primary care. In this, she sees their leadership potential as they go on to practice medicine across the country. “They have this incredible ability to be ambassadors,” she says. “As the doctors here, they may go on to other places and start a fire.”

UVM has also been at the frontlines of testing long-lasting formulations of buprenorphine, including an implant that delivers the drug for up to six months. The device, approved by the FDA two years ago, has “huge potential for rural areas,” says Sigmon. The goal is to get treatment to patients who need it, in a way that is appropriate for their needs.