BACK TO SCHOOL: During 2007, DHMC's Office of Continuing Education logged 9,374 attendees from all over Northern New England at continuing medical education programs, as well as 6,923 attendees at continuing nursing education programs.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from *The Journal of William Tully*, an account kept during 1808–09 by a Dartmouth medical student:

"This morning, Dr. Smith was to perform the operation for an aneurism, but at 16 or 17 miles distance from Hanover. I felt desirous of seeing it; but to go so far for the purpose would have been . . . skinning a flint for three-pence and spoiling a knife that cost six-pence. Had the patient, however, been within half a mile, I should have felt somewhat sheepish at attending, with such a concourse of students as the good Doctor commonly has with him."

3,000+

Number of miles today's DMS students often travel for clinical rotations—including to California, Alaska, Arizona, and Florida

$6.8 million gift was inspired by donors' struggle

It's a little-known fact that researchers spend much of their time chasing money instead of actually doing research. "I used to spend six months of the year writing grants, and rewriting grants, and reviewing grants," says Dr. Robert Drake, the Andrew Thomson Professor of Psychiatry at DMS.

Addiction: A major focus for Drake and his team at the Dartmouth Psychiatric Research Center (PRC) is studying and developing ways to treat people afflicted with both mental illness and addiction. "Of course, if you spend half your year just doing the fund-raising, you get to spend only half your year doing the research and writing it up." That's why, Drake continues, "it's just so much better to work with private foundations."

One foundation has been especially generous in supporting Drake's work. Several years ago, the West Family Foundation donated $2.5 million to the PRC, and recently Alfred and Loralee West pledged $6.8 million more. The couple's struggle to help their own son is what has inspired their philanthropy.

"He is drug- and alcohol-addicted and he has schizophrenia," says Loralee West of her son. "Until we met Bob Drake seven or eight years ago, we didn't think there was any hope of ever getting treatment" for him.

Addiction is the most common co-occurring health problem among people who have severe mental illness. For example, nearly 90% of those with schizophrenia smoke cigarettes. Yet finding treatment programs that adequately address the combination of mental illness and addiction is difficult.

"Al and I felt [that] if we could save one person from going through what we had to go through, ping-ponging back and forth to nine different institutions, . . . that that would be worth it," says West. "Fortunately, our son is taking advantage of all the research that Bob and his group have done." She calls that "an added bonus" of their support for the PRC.

"Until we met Bob Drake, . . . we didn't think there was any hope."

Substance: The PRC's approach is unique. Its researchers study co-occurring substance and mental disorders at all levels—from animal studies to medication trials to psychosocial interventions to models for treatment.

The center is also committed to disseminating its work. The Wests' first major gift was combined with monies from the U.S. Department of Health and Human Services (DHHS), the Robert Wood Johnson Foundation, and other sources to develop educational and training "tool kits" to help providers in other states apply what Drake and his colleagues have discovered and developed.

Drake initially welcomed the DHHS involvement because the agency promised to print and disseminate the tool kits for free. "But I didn't realize that the federal review process would put a five- or six-year time lag into getting things out," says Drake. So he and his team used private funds, including from the Wests, to distribute the tool kits themselves electronically. "We're now publishing things that are two or three versions ahead of what the federal government has still been unable to get out."

The latest gift from the Wests will help the PRC study what interventions work best for people with co-occurring disorders and then incorporate that information into what Drake calls "electronic decision support systems." These software programs will help patients, as well as their families and healthcare providers, choose treatment options that best suit each individual's preferences.

Innovative: "It's very hard to work through government to do things that are really creative or innovative or even that need to get done quickly," says Drake. That's why he's so grateful to the Wests. "It's just been wonderful to partner with them," he says.

JENNIFER DURGIN

JON GILBERT FOX

Drake studies co-occurring disorders.

NOT BLOODY LIKELY: Dr. Larry Dumont, a DMS pathologist, leads the international BEST (Biomedical Excellence for Safer Transfusion) Collaborative; the group recently refuted some questionable research suggesting older units of blood aren't safe.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from the Fall 1981 issue of this magazine:

NBC-TV came to town when "cancer researchers from across the nation gathered in Hanover for three days in August to discuss their successes, their failures, and the future." Another article in the same issue pointed out that "cancer no longer invariably kills. More and more cancer patients across the nation are surviving—and leading active, productive lives."

1972
Year Dartmouth's Norris Cotton Cancer Center opened its doors

$54 million
Current annual research funding to the NCCC

165
Average number of open clinical trials at the NCCC

A prescription for doctors: Avoid medical jargon

The stories are heartbreaking. Take this one, for example: An elderly man goes to the emergency room because he thinks he has a kidney stone. He is treated and sent home after getting some x-rays. Not long after, he receives a letter stating that he has calcium overlying his kidneys. With the letter is a copy of the x-ray report, verified by a radiologist.

The patient, unfamiliar with medical terminology, assumes that "calcium" is a code word for cancer and that a radiologist is a cancer specialist. Devastated, the man endures five sleepless nights until his next appointment with his primary-care physician, Dr. Nancy Cochran, who explains to him that he does not have cancer.

Stories: Cochran, an associate professor of medicine at DMS, sees patients at the VA Medical Center in White River Junction, Vt., and teaches DMS medical students. She can tell many stories like this because many patients have difficulty understanding basic medical information. According to the National Assessment of Adult Literacy, conducted in 2003, about a third of Americans have low health literacy, meaning they can't read basic charts or determine what time a prescription medication should be taken based on the drug label.

"Occasionally patients will literally burst into tears," says Cochran.

Low health literacy can lead to medication mistakes, missed appointments, and poor adherence to doctors' recommendations, to name just a few side effects. The lower people's health literacy, the poorer their health tends to be, the National Assessment found.

Virtuous: "I used to think I was so virtuous, talking to my patients about body mass indices and showing them charts," Cochran says. But, she later realized, "a significant number of them had no idea what I was talking about."

Now Cochran asks screening questions when she suspects a patient has low literacy and suggests that students and her colleagues at the VA do the same. "How comfortable are you with how you read?" she'll ask. Or "How often do you need help understanding materials that you take home from the hospital?"

"I've had fascinating conversations with people since I've started asking those questions," she says. "Occasionally patients will literally burst into tears and say, 'I'm so glad you asked, Doctor, because I don't understand anything you send home but I was afraid to admit it.'"

Plain: In the On Doctoring course for first-year medical students, Cochran teaches techniques for clear communication. She tells students to slow down, use plain language, show or draw pictures, limit the amount of information they provide, repeat important points, and use the teach-back approach. In teach-back, a doctor might say, "I know I've covered a lot and I want to make sure I was clear. When you get home, how are you going to explain what I've told you to your spouse?"

The techniques seem simple enough, but students—and practicing physicians—can have difficulty letting go of the fancy, precise terminology they spent so much time learning, says Cochran. To help them do that, she has them brainstorm simpler words that can be used instead of medical jargon and engage in other similar exercises.

Fancy: The ultimate test comes in the form of what's known—in that fancy terminology Cochran counsels against—as an objective structured clinical exam. The way it works is a student interviews a patient-actor, and the interaction is taped. Then the student gets feedback from a faculty observer and can later watch the tape.

At the White River VA, Cochran gives talks on health literacy to fellow physicians, as well as to nurses, clerks, technicians, social workers, and "anyone who will listen," she says. She also helped revise many of the written materials given to patients at the VA. Cochran has lectured on the topic regionally and nationally, too, in her role as a faculty member of the American Academy of Communication in Health Care.

Still, she'd like to be doing more to improve communication between providers and patients. "We really cause a lot of pain in patients by not communicating clearly," she says.

Jennifer Durgin

SPROUT'S HONOR: When a Johns Hopkins study showed that a broccoli sprout extract might ward off skin cancer, DMS's Dr. Michael Sporn, a pioneer in chemoprevention, was asked for his opinion. "It's very important work," he told the *Washington Post*.

Faculty are fond of a garden-variety avocation

Let's face it: Being a health-care provider is not a job for sissies. The hours are long and the decisions are often a matter, quite literally, of life and death.

Labors: So how do doctors and other caregivers unwind at the end of a stressful 10- or 12-hour day? Some find relaxation in a cold beer and ESPN. Others recharge their batteries by hoeing and weeding and, later, gathering the fruits—or flowers—of their labors. Gardening, some DHMC providers have found, can be a great way to relax.

Dr. Peter Mogielnicki and his wife, Nancy, number among the dedicated gardeners on the DMS faculty; he was longtime chief of medicine at the VA Medical Center in White River Junction, Vt., and she's a pediatric physician assistant at DHMC. Back in 1977, they bought a house in Plainfield, N.H., that came with an attached greenhouse.

Peter Mogielnicki starts seedlings there in the late winter—some 1,000 to 3,000 of them each year. He cultivates not only vegetables, but also annual and perennial flowers. Eventually, they started a small cut-flower business that they ran for 12 years, selling to restaurants and florists.

"I think of myself as a Darwinian gardener," says Dr. Pat Glowa.

More hours: Nancy Mogielnicki struck a deal with DHMC some years ago: she'd work more hours in the winter—when flu and pneumonia are prevalent—if she could work fewer in the summer. As for her husband, he finds there are about three weeks of the growing season when there's a conflict between doctoring and gardening. In early spring, he must rush home at noon to move his seedlings out of the greenhouse so they don't fry.

The Mogielnickis both find gardening a perfect way to unwind. "I don't think of weeding [as] a chore—it's a way to channel my aggression in a productive way," he says. For her part, she sees gardening as a "blend between science and physical labor and art and other forms of creativity and business and nutrition and mental health. Flowers make people happy."

Dr. Patricia Glowa, a family physician, states unequivocally, "I consider gardening to be good therapy. It's wonderful to watch things grow and develop." Glowa grows both flowers and vegetables but does not regard herself as a compulsive gardener. "I think of myself as a Darwinian gardener. If [the plants] make it, great. If they don't, I'm not responsible."

Love: Glowa began gardening in Springfield, Vt., at age nine when she discovered a volunteer squash plant growing in the family's compost pile. "It was mine. I had to love it," she recalls. Now she grows a little of everything. "If I let myself walk out the back door, I won't come back for half an hour—or two."

The one thing that Glowa does not have—even though she is one of the few physicians in DHMC's family medicine group who still delivers babies—is a cabbage patch.

And, she adds, "I don't have any storks' nests either."

HENRY HOMEYER

JON GILBERT FOX

Family physician Pat Glowa considers digging in the dirt "to be good therapy."

THEN & NOW

A reminder of the pace of change, and of timeless truths, from the Mary Hitchcock Memorial Hospital 1978 Annual Review:

"Good medical care is no longer viewed as a luxury of those who can afford it, but as a service to be provided to all who want it. Wide public concern with the provision of health care, a product of that changing viewpoint, has resulted in significant responses on both the federal and state levels. These responses are concerned with the quality and cost of health care and [its] accessibility and availability."

$3.3 million
Uncompensated and charitable care provided by Hitchcock in 1978

$63.0 million
Uncompensated and charitable care provided by Hitchcock in 2007

CRUISE CONTROL: This summer's issue of *Cruise Travel* magazine will profile DHMC medical transcriptionist Andrea Peterson. Certified in wilderness emergency medicine, she once lent a hand on a cruise when the weather turned wild.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from a book titled *Hiram Hitchcock's Legacy*:

When Mary Hitchcock Memorial Hospital opened in 1893, "many citizens were skeptical. Thirty-six beds seemed excessive! . . . There was also a certain amount of fear regarding hospitals—after all, people often went there and died! . . . Others were pleased and impressed with such a large and modern facility. . . . [It] also had gas and electricity."

22
Number of fireplaces in the 1893 MHMH building

14,000
Number of light fixtures in DHMC's Lebanon facility when it opened in 1991

4,000
Approximate number converted to use compact fluorescent bulbs by 2007

Website asks patients: "How's your health?"

Thousands of patients in Chicago, Ill.; Long Beach, Calif.; and other cities across the country may not know it, but they're being cared for, in part, by a member of the Dartmouth faculty. Those are among the cities where large numbers of doctors have asked their patients to go online and, before their next appointment, fill out a survey at **www.howsyourhealth.org**.

The site was the brainchild of DMS's Dr. John Wasson, a nationally recognized leader in health-care quality improvement; several of his colleagues in DMS's Department of Community and Family Medicine; and Dr. Regina Benjamin, founder of a rural clinic in Alabama.

Specific: The survey is deceptively simple. After answering a number of basic questions, the patient gets back a summary of findings plus a list of sources of further information about his or her own specific health situation. An individual of average intelligence and health may at about that point be thinking, "So what? This isn't telling me anything I didn't already know—after all, who supplied the information in the first place?"

But there is much more to the site than meets the eye. It is only a small part of a system that has been 10 years in the making and is now improving the quality of care delivered all over the U.S. First, the website is a place where patients can collect and easily retrieve their own health information and concerns; 100,000 patients have now filled out the survey. Second, it provides patients with tools to inspire confidence in themselves so that, as Wasson puts it, they "can and should take control of [their] own health and health care."

Anyone can use the site—not just those whose doctors have adopted it as a tool. For example, this writer filled out the survey and was told that at my next appointment I should ask my doctor, "What medications am I taking, in what doses, what are they for, and how much do they cost?" I was reminded to include nonprescription drugs, herbal medications, and nutritional supplements. And I was told to ask, "What vaccinations do I need to keep track of? And where can I get reliable information in a form I can understand so I can talk about my health in an informed way?" And that, the site's creators feel, can't help but improve outcomes.

The site is deceptively simple. There is more to it than meets the eye.

Wasson and his team have recruited cities and organizations from all across the U.S. to sign on to use the site—at no charge. For example, in Chicago and Long Beach, they worked with the Chambers of Commerce. In Chicago, Mayor Richard Daley taped TV spots asking, "How's your health, Chicago?" A sizeable segment of the population then went on the website and filled out the survey.

Innovative: Then comes an even more innovative and useful part of the system. When enough people in a city have filled out the survey, the aggregate information—stripped of personal identifiers—goes into a database that allows public-health officials to make informed decisions about the quality and delivery of care. The state of New Jersey and the city of Milwaukee, Wisc., have been particularly enthusiastic about this capability.

In addition, once enough of a

TIM HALL

Even on a clear day, it's not possible to see the Chicago skyline from Dartmouth. But the Dartmouth experts behind an innovative website can see aggregate health information on 100,000 patients—in Chicago and other cities across the country.