

THEN & NOW

A reminder of the pace of change, and of timeless truths, from *Fifty Years of Service*, a 1943 history of Mary Hitchcock Memorial Hospital:

“The Hospital was one of the first in America to be built on the pavilion plan. . . . At the end of each corridor was a one-story domed ward, 28 by 36 feet, each accommodating 10 patients and each having projections to the north containing four private rooms. Further to the north . . . was the surgical unit, containing a high-domed operating theater.”



315

Number of surgical patients during the Hospital's first three years (1893-1896)

16,420

Number of surgeries at DHMC in 2006

25

Number of operating rooms at DHMC today

Dartmouth-Brookings partnership: A “do tank”

A group of Dartmouth researchers joined forces with the Brookings Institution in July in a partnership that was characterized as not a “think tank” but a “do tank.” It combines Brookings’s expertise in health-policy research and development with Dartmouth’s in population-based research programs.

“We’re trying to both sharpen the research that we do to make it directly relevant to policy-makers and . . . improve the policy that’s being crafted,” says DMS’s Dr. Elliott Fisher. He and Dr. Mark McClellan, former administrator of the Centers for Medicare and Medicaid Services and now a senior fellow at Brookings, are codirectors of the initiative.

“I view this as a ‘do tank,’” McClellan told *American Medical News* in announcing the project, “not a think tank . . . not a center for writing papers in an ivory tower.”

**Plague:** The partnership will bring together researchers, lawmakers, and regulators to develop and implement policies that address what Fisher calls “the rising costs and uneven quality that plague the United States” health-care system.

One of the first issues to be addressed will be the Medicare physician payment system—assessing the impact that modifying the system would have on practicing physicians and on the Medicare Trust Fund.

Much of the work involved in the project will be based on the health-care databases developed

and maintained by Dartmouth’s Institute for Health Policy and Clinical Practice (formerly the Center for the Evaluative Clinical Sciences, founded by Dr. John Wennberg—for more on the origin of the organization, see the feature starting on page 30 in this issue).

**Variations:** Research from these databases is the foundation for the *Dartmouth Atlas of Health Care*, which has highlighted striking geographic variations in the rates at which Americans use health-care resources and the influence that the local supply of resources (such as hospital beds) has on those rates. Fisher is the primary investigator for the *Dartmouth Atlas* as well as the lead author of a series of papers pointing out the paradoxical relationship between spending and quality in the U.S. health-care sys-

tem—the fact that more spending often results in worse outcomes. The Dartmouth-Brookings initiative is expected to help translate this research into policy reform.

“Dartmouth is not only leading the way in identifying shortfalls in quality and cost in the current health-care system [but also is] identifying and evaluating ways to fix the problems,” said McClellan at the public announcement of the partnership. “With all the Congressional attention around improving Medicare’s payment systems, now is the time to turn these ideas into policy action.”

“It’s a great opportunity for both” Brookings and Dartmouth, according to Fisher. “I think it speaks well to the center that Jack built, . . . to the faculty that Jack Wennberg has assembled, over the last 20 years.”

Laura Stephenson Carter

“I view this not . . . [as] a center for writing papers in an ivory tower.”



Elliott Fisher is the codirector of the new Dartmouth-Brookings partnership.

JON GILBERT FOX

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A reminder of the pace of change, and of timeless truths, from the 1937-38 DMS Bulletin:

“The railroad station known as ‘Norwich and Hanover’ . . . is seldom used as an approach to [Dartmouth]. Members of the community and visitors usually detrain at White River Junction, five miles south, where connections for all points via the Boston and Maine RR may be made. . . . Baggage may be checked through for delivery at any point in the village at a reasonable [fee].”



39

Average number of trains daily into White River Junction in 1937-38

2

Number today

4

Number of flights daily into Lebanon, N.H., Airport

Authors aim to bring clarity to health statistics

From drug companies to disease advocacy groups, everyone “is trying to grab your attention by making their disease sound as common or as dangerous as they can,” says Dr. Lisa Schwartz. But in the process, lots of messages get exaggerated. It can be tough for patients to cut through the hype and determine what—if any—accurate information remains.

So Schwartz and two other members of the DMS faculty—Drs. Steven Woloshin and Gilbert Welch—wrote a book to help people assess messages about health statistics.

**Claims:** For example, if an advertisement claims that a drug reduces the chance of heart attack by 50%, people should ask what their chance is of a heart attack if they don’t take the drug, and what their chance is if they do. Without those numbers, it’s impossible to know how well the drug works. For instance, the drug might reduce the chance from 20% to 10%—which would be a big deal. Or it might reduce it from 0.2% (meaning 2 in 1,000 people would have a heart attack) to 0.1% (1 in 1,000), which is still a 50% reduction but of a very small risk.

The book is the culmination of many years of research. When Schwartz and Woloshin first came to DMS in 1994, they were interested in how the presentation of risk statistics about breast cancer affected patients’ opinions about mammography. After surveying patients, “we realized [people] had no idea what we

were talking about,” Schwartz says. “They didn’t understand the numbers.” So she and Woloshin (who are married to each other) started to investigate what it was about risk and risk reduction that people didn’t understand. Plenty of studies have focused on how easily people can be confused by numbers.

**Risk:** For example, many people assume it’s worse to have a 1 in 20 chance of getting cancer than a 1 in 10 chance. The larger number seems to suggest a bigger threat—but 1 in 20 is a 5% risk, which is less than the 10% risk that a 1 in 10 chance represents. Many researchers have assumed that the problem is with people’s knowledge base. But “we think the problem is often with how the messages are stated,” Schwartz says. “Some ways of saying the same thing are much easier to understand than others.”

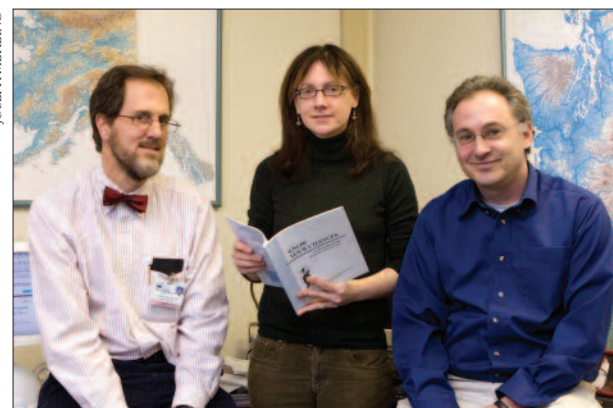
**Book:** The book “examines in a rational and helpful way what all the numbers mean,” explains publisher Stanley Holwitz of the University of California Press. The authors—who are all members of the VA Outcomes Group based in White River Junction,

Vt.—tested a prototype of the book with 555 people and published the results in the *Annals of Internal Medicine*. More than 90% of the subjects reported that the book was helpful.

**Scores:** And regardless of subjects’ educational background, the book improved their scores on a statistics quiz. With subjects of high socioeconomic status, 74% who read the book got a passing grade, compared to 56% of the people in a control group who read a government booklet on health. And with subjects of lower socioeconomic status, 44% of those who read the book passed the quiz, while 26% of the control group passed.

The book, which is expected to be out in 2008, is intended for a general audience. But the authors hope medical students will find it useful, too. It “isn’t meant to make you into a statistician or epidemiologist,” says Woloshin, but to “help people understand things that can be easily confusing but don’t have to be.”

AMANDA THORNTON



From the left, Welch, Schwartz (with the book), and Woloshin.

**WORLDLY WISE:** More than 1,400 people turned out to hear Dr. Paul Farmer, subject of the bestseller *Mountains Beyond Mountains*, speak at DMS in November. He gave the keynote address at a three-day symposium on global health and poverty.



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A reminder of the pace of change, and of timeless truths, from the Spring 1965 *DMS Quarterly*:

Dr. Philip Nice, DMS's associate dean, described a "remarkable change that has taken place [at] Dartmouth Medical School"—the fact that in 1959, an entering class of 24 students had been admitted from a pool of 285 applicants, whereas just five years later, in 1964, a class of 48 students was admitted from a pool of 697 applicants. "The number of students has been doubled without compromising quality," Nice emphasized, and "warm student-faculty relationships have endured this period of expansion."



76

Students in the M.D. class that entered DMS in 2006

>4,600

Applicants for that class

**New Yorkers experience skunks and starry skies**

I have a skunk living in my backyard, and somehow I've grown accustomed to the smell," says DMS third-year student Barry Ladizinski. Ladizinski is one of five longtime New Yorkers—all graduates of the city's Sophie Davis School of Biomedical Education—who are finishing up their M.D.'s at Dartmouth. And enjoying some of the quirks of rural living.

At Sophie Davis, students complete a B.S. degree and two years of medical school in five years, then transfer to a partner medical school to finish their M.D.'s. Dartmouth is the first partner school outside New York State for Sophie Davis, which encourages its students to pursue careers in primary care in underserved areas. The DMS affiliation gives the New Yorkers experience in a new locale and adds to the diversity at DMS.

**Turmoil:** Yasotha Rajeswaran, another member of the Sophie Davis group, is from Sri Lanka; she left that country with her family during the civil war there and moved to New York City when she was 13. The turmoil in her own life helps her empathize with the patients she is seeing at Dartmouth.

The Sophie Davis students, like their fellow DMS third-years, are working their way through a series of six-week clinical clerkships. During her family medicine clerkship, Rajeswaran shadowed a visiting nurse on a home hospice visit to a pa-

tient with Parkinson's. "He was a sculptor," she says, "and all his artwork was beautifully displayed throughout the house. Seeing him at his own home with his family reminded me what a major impact a terminal illness has on family members. . . . It is often easy to forget when we see a patient in clinic or hospital. It was enlightening to see the family members struggle to make decisions with the patient's best interest at heart."

Another member of the group, Shahla Syed, did a research project at Sophie Davis on health risk behaviors in American Muslim youths. She is interested in international

health and plans someday to work with Doctors Without Borders. She has taken medical Spanish, is interested in Hispanic populations, and did her DMS primary-care clerkship at one of the largest family-practice clinics in Florida's Middle Keys.

A physician she shadowed there saw up to 60 patients a day—many of them uninsured, like a construction worker with a pain in his eye. "It was pretty amazing to watch Dr. O'Connor remove this speck of metal by scraping part of the cornea . . . with [the patient] lying there wide awake," Sayed says.

**Triggers:** Back at Dartmouth for her psychiatry clerkship, Sayed enjoyed working with Dr. Donald West. He "cares about students and their situations," she says, and emphasizes "both

**She shadowed a nurse on a hospice visit to a patient with Parkinson's.**

LAUREN WOOL



Three of this year's five Sophie Davis transfers to DMS pause for a photo at DHMC—from the left, they are Lilian Chen, Yasotha Rajeswaran, and Katherine Walia.



**ON THE GRAVY TRAIN:** Any DHMC employees who must work on Thanksgiving Day or Christmas Day are invited to enjoy a free holiday meal in the Hospital dining room. No potatoes to peel or dishes to wash.



THEN & NOW

A reminder of the pace of change, and of timeless truths, from the 1977 Mary Hitchcock Memorial Hospital Annual Review:

“It is people who make the Hospital and, most importantly, *people who care*. Social change, political and economic pressures, miraculous technological developments, and public expectations have brought new and profound challenges to hospitals everywhere. These challenges are being met at [MHMH] by a dedicated, skilled, and compassionate group of people.”



169,825

Outpatient visits in 1976

1,700

MHMH workforce in 1976

1.7 million

Outpatient visits in 2006

6,414

DHMC workforce in 2006

Improving nutrition in the real world

Lisa Sutherland hangs out in some unusual places for a medical school faculty member—places like supermarket aisles and middle-school classrooms. For several years, she headed a project to analyze food labels for one of New England’s major grocery chains. Nowadays, she studies the influence TV and movies have on what kids eat. Nutrition science—Sutherland’s field—has moved out of academe and into the real world.

A research assistant professor at DMS, she came to academe by a circuitous route. After 10 years in marketing with the Gap, she finished her bachelor’s at Simmons, went to work at the Massachusetts Department of Public Health, and thought about becoming a pediatrician. In the end, public health and nutrition won her over, and she earned her Ph.D. at the University of North Carolina (UNC).

**Chain:** While on the faculty at UNC, Sutherland sat in on a meeting with some officials from Hannaford supermarkets, a Maine-based chain with 160 stores in the Northeast. Hannaford customers had been asking for a simple way to identify healthy foods, and management was looking at how they might comply with the request.

During the meeting, it came out that Sutherland not only possessed the required nutritional expertise but also hailed from Maine. When the company decided to proceed and was considering staffing, Sutherland recalls that “Hannaford said, ‘We’d

like the girl from Maine.’ I was in from day one.”

**Fat:** She and a UNC colleague headed the advisory panel that Hannaford set up. The panel devised a system called Guiding Stars. It’s based on an algorithm developed from eight dietary criteria, which Sutherland ticks off: “Transfat, fat-fat, cholesterol, added sodium, added sugar, vitamins, minerals, fiber, plus a whole-grain bonus point.” But all that customers see is a simple, shelf-edge label with one, two, or three bright gold stars—identifying good, better, and exceptional foods. Of the 32,000 food items in Hannaford stores, only a quarter earned any stars.

A few months ago, the *New York Times* reported that Han-

naford “declared success . . . for a year-old experiment in using a rating system to direct customers to healthier food items.” For example, said the paper, “sales of whole milk, which received no stars, declined by 4%, while sales of fat-free milk (three stars) increased 1%.” Sutherland, the *Times* said, was “thrilled.” She called the effect “pretty much what I would have expected with an objective system that wasn’t designed to promote or negate one food or another.”

While the Hannaford project consumed much of Sutherland’s time for two years, her current school-based projects better reflect her interests. “I really, really enjoy kids,” she says. “So my work here in New Hampshire and Vermont is just schools.” Her focus is on “twens”—9- to

**“I really, really enjoy kids,” says nutrition researcher Sutherland.**

MARK WASHBURN



Sutherland, who came to DMS in 2006, headed a national nutrition panel.



**COMING OF AGE:** Given that Vermont is the fastest-aging state in the nation and New Hampshire is the fourth-fastest, the Health Resources and Services Administration is giving Dartmouth \$1.24 million over three years to develop a geriatric education center.

the U.S. Skinner was recognized for his research on the economic impact of geographic variations in health-care expenditures. He is affiliated with the Dartmouth Institute for Health Policy and Clinical Practice (formerly CECS).

**Ambrose Cheung, M.D.**, a professor of microbiology and immunology, was elected a fellow of the American Association for the Advancement of Science in the biological sciences section, for his contributions to the understanding of bacterial virulence and molecular pathogenesis.



**Kris Strohbehn, M.D.**, an associate professor of obstetrics and gynecology, was elected president of the American Urogynecologic Society.

**Joseph O'Donnell, M.D.**, a professor of medicine and senior advising dean for Dartmouth Medical School, was recently presented with the 2007 Margaret Hay Edwards medal by the American Association for Cancer Education.



**William Hickey, M.D.**, a professor of pathology, has been appointed a member of the board of governors of the College of American Pathologists.

**Bruce Stanton, Ph.D.**, a professor of physiology, was elected to the board of trustees of the Mount Desert Island Biological Labora-

tory. He studies the molecular mechanisms of cystic fibrosis.

**Joel Lazar, M.D.**, an assistant professor of community and family medicine, received the top prize in the prose category of the Family Medicine Education Consortium's Creative Writing Competition. His winning entry was a short story titled "Ceremony."



**Timothy Lahey, M.D.**, an assistant professor of medicine, received the 2007 Astellas Young Investigator Award from the Infectious Disease Society of America. He studies HIV infection.

Three members of the faculty—**Joseph O'Donnell, M.D.**, a professor of medicine and senior advising dean; **Seddon Savage, M.D.**, an adjunct associate professor of anesthesiology and director of the Dartmouth Center on Addiction, Recovery, and Education; and **William Cooley, M.D.**, an adjunct associate professor of pediatrics—were inducted into the National Academy of Practice in Medicine.

**Catherine Pipas, M.D.**, an associate professor of community and family medicine and assistant dean of medical education, received a presidential commendation from the Society of Teachers of Family Medicine for her contributions to the organization's Predoctoral Directors Development Institute.



**Gerald O'Connor, Sc.D., Ph.D.**, a professor of medicine and one of the founders of the Northern New England Cystic Fibrosis Foundation, was presented with the Richard C. Talamo Distinguished Clinical Achievement Award. And **Hebe Quinton, M.S.**, a research associate in medicine, received the inaugural Cystic Fibrosis Foundation Quality Improvement Award. Both are also affiliated with the Dartmouth Institute for Health Policy and Clinical Practice.

**Therese Stukel, Ph.D.**, an adjunct professor of community and family medicine, was named a fellow of the American Statistical Association.

Four DHMC residents in internal medicine were recently honored by the New Hampshire-Vermont American College of Physicians. Second-year resident **Anthony Yin, M.D.**, and third-year resident **Elizabeth Cogbill, M.D.**, received the associate member presentation grand prize; their presentation was titled "Heralded by the Nose." And second-year resident **Felicita Thol, M.D.**, and third-year resident **Annette Beyea, M.D.**, received first prize for "A Case of Hemoptysis."

The Northern Mountain Branch of the American Association for Laboratory Animal Science recognized two DHMC staff members with 2007 awards: **Darlene Royce**, a research assistant in the Department of Pharmacology and Toxicology, was named Technologist of the Year; and **Nina Bishop**, a lead laboratory animal technician in the Animal Resources Center, received the group's Horizon Award. ■

## THEN & NOW

A reminder of the pace of change, and of timeless truths, from the Spring 1984 issue of this magazine:

That issue's cover story was written by Dr. John Wennberg, the subject of *this* issue's cover story. Almost 24 years ago, he wrote: "My colleagues and I have conducted a series of studies of variations in the use of medical services. . . . These have provided many examples of uncertainty in medical decision-making of which practicing physicians have been unaware. . . . The attention paid to our findings encourages us to feel that we are at grips with problems of major importance to the future of medicine. We hope we can help to resolve them."



2007

Year Wennberg was named "the most influential health-policy researcher of the past 25 years" by *Health Affairs*