THEN & NOW

A reminder of the pace of change, and of timeless truths, from the 1955 Mary Hitchcock Memorial Hospital annual report:

"Our professional, technical, and service staffs are well trained, competent, and loyal," wrote the president of the Board of Trustees. "The statistical data provided you will bear out the fact that adequate coverage has been provided in practically every field of medical science. This is as it should be, because the first duty of a hospital is of dedication to the sick and ailing who come seeking assistance."

55
M.D.'s practicing at Mary Hitchcock Memorial Hospital in 1955

888
M.D.'s (and equivalents) practicing at DHMC in 2010

Helping a Good Neighbor to do even better

For nearly 20 years, the Good Neighbor Health Clinic has been caring for uninsured and underserved patients in the Upper Valley with a few paid staff members—plus over 100 volunteers, including Dartmouth undergrads and medical students and DH physicians and nurses.

Now, thanks to the efforts of a Dartmouth '12 and a DMS '13, Good Neighbor's dental program is helping many more patients. The Red Logan Dental Clinic (RLDC) came into being in 1996, largely through the efforts of Dr. Robert Keene, an adjunct member of the DMS faculty and a local dentist who's now retired. Both Good Neighbor and the RLDC are housed in the former Gates Library on Main Street in White River Junction, Vt.

Care: "In 2010, there were 543 visits to the RLDC," says Hildegard Ojibway, Good Neighbor's executive director. The care that those patients received was provided by local volunteers—21 dentists and eight hygienists and assistants—and had a value of $400,329. Still, 400 to 500 people remained on the RLDC's waiting list.

Still, 400 to 500 people remained on the dental clinic's waiting list.

Then two Dartmouth students, with the support of fellowships, developed plans to tackle the patient backlog—one by increasing the RLDC's capacity and the other by reducing demand for its services.

Yang Wei Neo, a Dartmouth College junior, took on the first goal as a Class of 1982 Social Entrepreneurship Fellow—an initiative of Dartmouth's Tucker Foundation. His charge was to attract fourth-year dental students to the RLDC through externships, a required part of training for a D.M.D.

Fit: His challenge was the fact that there is not a single dental school in Maine, New Hampshire, or Vermont. So, says Neo, "I contacted dental schools in Boston to find a good fit, wrote a business plan, organized the local dentists, and helped raise $20,000 in funding to get that program off the ground."

Now, the RLDC has an agreement with the Harvard School of Dental Medicine to sponsor, three times a year, 12-week externships for two fourth-year dental students. They work under the supervision of local dentists, some of whom now have adjunct appointments at Harvard. The dental students also visit specialty practices in the region and at DHMC.

Neo is continuing to serve as a liaison between the RLDC and Harvard. With those extra hands in patients' mouths, Ojibway estimates that 200 additional people can be treated each year.

Need: Stephanie Pan, a second-year DMS student, took on the second part of the RLDC's goal—trying to prevent the need for dental care. Under the auspices of an Albert Schweitzer Fellowship, she developed a dental workshop for RLDC patients. Dental disease not only affects teeth, but can affect patients' self-esteem and cause a wide array of medical and mental-health problems as well.

JON GILBERT FOX

This free dental clinic is meeting more need now, thanks to Pan, left, and Neo.

There are many simple preventive measures, however, so Pan built them into her workshop. "I had to put together the material . . . from scratch," she says, and she decided that "for continuity, professional hygienists or assistants [would do] the actual teaching."

Miles: In what seemed an inauspicious start, the first workshop attracted just four patients—but one was a mother who'd walked two miles with her toddler daughter to get there. Her long trek had a good outcome: she received instruction in how to preserve her remaining teeth and how to prevent her daughter from the same fate. Workshops now typically attract 20 people each month.

Thanks to Neo and Pan, there will now be hundreds of brighter smiles throughout the Upper Valley for years to come.

Roger P. Smith, Ph.D.

HERE, TAKE THIS TABLET: Since September 2010, Dartmouth-Hitchcock Trustees have received their materials for board meetings on customized iPads. Despite the outlay for the tablets, DH will save over $4,000 a year on copying and postage.

Making clinical trials a lot less of a trial

At any given time, DH physicians, scientists, and administrators are involved in hundreds of clinical trials. Their efforts are essential to developing new treatments, but starting and carrying out a trial is not an easy undertaking. A new initiative is now making that process a little less difficult.

Devices: Clinical trials are research studies that involve humans. They are most often carried out to test the effectiveness of drugs, medical devices, or surgical procedures.

In January 2010, DH, in collaboration with Dartmouth College and DMS, created a central Clinical Trials Office (CTO) to help investigators with such studies. More recently, the CTO rolled out a unique regional coordination program dedicated to allowing all DH sites to participate in clinical research.

Matthew Hodgson, the interim director of the CTO, says the office relieves investigators of some of the administrative responsibilities associated with a study, allowing them to focus their efforts on the research. The regulations governing clinical trials are extensive and constantly in flux, making it hard for an investigator to stay on top of the changes and meet all the complex requirements.

Christopher O'Keefe is the administrative director of the psychopharmacology research group, which typically has four or five trials ongoing at any time, usually related either to schizophrenia or alcohol dependence.

The regional program is making it easier to enroll patients in studies.

Trials: He wishes the CTO had been around 12 years ago when he began working on clinical trials. "A lot of the support that the CTO provides in terms of infrastructure we kind of had to learn on our own," he says. "Physicians and their staff want to do the investigative part. They don't know about the regulations."

The regional program, which Hodgson leads, is now making it easier for researchers to enroll patients in studies—and is giving patients from throughout northern New England easier access to such studies.

Issue: "Patient recruitment is always an issue," says Dr. Corey Siegel, a specialist in gastrointestinal disorders. He has worked with the CTO on studies related to Crohn's disease and ulcerative colitis and is now in the early stages of a genetics study examining family members of patients with these diseases.

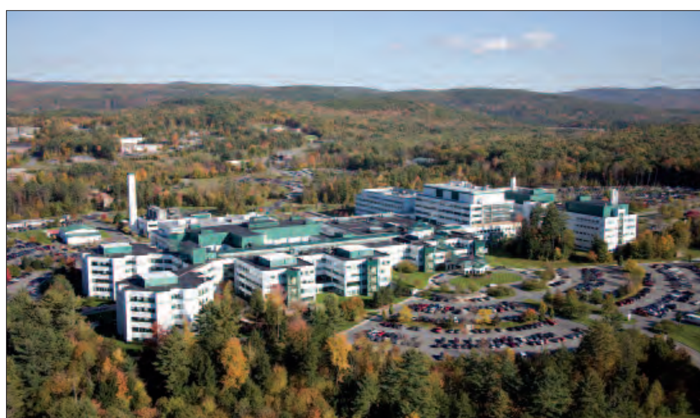
Siegel points out that studies often have narrow criteria for subjects, so many patients may need to be screened for every one who can be enrolled. "It's a lot of time and effort to find the right patients who are both appropriate for the study and also are interested in being part of a clinical trial," he says. So the CTO's regional effort "clearly expands our potential pool of patients dramatically."

The regional program also makes the CTO's services—including help with contracts, budgets, monitoring, Medicare coverage analysis, regulations, and training—available at all DH sites, not just the main campus in Lebanon, N.H.

Effort: Siegel believes that the CTO's effort to reach out to other DH sites will benefit everyone involved in clinical trials. Not only will it help researchers enroll enough subjects, he says, but they will now also be able to "offer these exciting new therapies to [more] patients."

Amos Esty

TOM MCNEILL

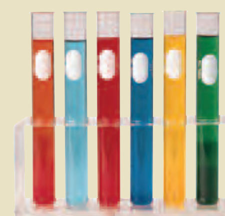


Dartmouth-Hitchcock's Clinical Trials Office has a regional coordination program that makes its services available far, far beyond the bounds of the Lebanon campus.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from the 1980 DMS Bulletin:

"Research extends the boundaries of knowledge and thereby defines the educational program. It is not separate from teaching, but is the means for educating both educators and students. . . . In 1979, the DMS faculty received approximately $4.4 million in research funds . . . from federal and private sources."



$160 million

Amount of research funding received by members of the DMS faculty in FY2010

85th percentile

DMS's ranking among all U.S. medical schools on the basis of National Institutes of Health funding per basic science faculty member

For a WEB EXTRA link to Michael Smyth's "charming, funny" video, see dartmed.dartmouth.edu/su11/we06.

REEL-Y FUN: DH employee Michael Smyth made a video about his participation in the Prouty—a fund-raiser for Dartmouth's Norris Cotton Cancer Center—that was hailed by a national PR firm, Ragan, as being "charming, funny" and "delightfully awkward."

THEN & NOW

A reminder of the pace of change, and of timeless truths, from the 1970 Mary Hitchcock Memorial Hospital Annual Review:

"We find ourselves gearing up for a totally new era of service," wrote MHMH's executive director. "A unique partnership with the Hitchcock Clinic and Dartmouth Medical School [is] resulting in what is known as the Dartmouth-Hitchcock Medical Center. . . . It may be expected that the Hospital will become the base for a number of community-oriented health services."

158,108
Outpatient visits in 1980

1.79 million
Outpatient visits in 2010

515,592
2010 visits in Lebanon

1.27 million
2010 visits at other DH sites

Ashes, ashes . . . cessation counseling rises

A few years ago, DHMC wasn't making the grade when it came to helping patients stop smoking. In 2004 and 2005, for example, only 39% of patients who smoked and had been hospitalized for heart failure (a condition exacerbated by smoking) received counseling and support to help them quit.

The situation is very different today, thanks to an effort spearheaded by Dr. John Butterly, Dartmouth-Hitchcock's executive vice president of medical affairs. Smoking cessation counseling is now a routine part of care for all hospitalized patients—and 96% of smokers hospitalized for heart failure receive cessation counseling.

The counseling rate for heart-failure patients rose from 39% to 96%.

Cues: "A hospitalization represents a 'teachable moment,'" wrote Butterly, DHMC hospitalist Dr. Stephen Liu, and others in a September 2010 paper published in the *Journal of Cancer Education*. "Admission to a hospital removes smokers from daily cues associated with smoking" and provides easy access to counseling and medications that can help them quit.

The first steps in that direction began in late 2005, with the formation of a tobacco improvement group led by Butterly. Soon after, Liu led an effort to partner with the New Hampshire Department of Health and Human Services to train 150 clinicians from seven inpatient units in tobacco cessation counseling. But the group quickly realized that most doctors and nurses did not have time in their already hectic schedules to provide the intensive counseling that was necessary. So they recruited about 50 frontline caregivers who were eager to help, including physical therapists, social workers, and some nurses and doctors. That group underwent further training and became known as the Tobacco Treatment Team (TTT). The effect was immediate.

After the implementation of the TTT, the documentation in patients' medical records of tobacco use and of cessation counseling rose steadily—from 1% of patients in January 2006 to 85% in December 2009.

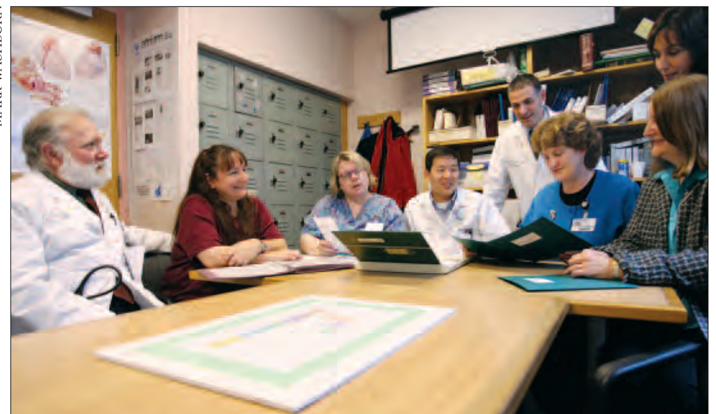
More importantly, the rates of tobacco cessation counseling improved for patients admitted with several conditions aggravated by smoking. Not only did the rate for heart-failure patients rise from 39% to 96%, but for patients admitted with pneumonia the rate improved from 52% to 82%. And although patients diagnosed with a heart attack had already been receiving counseling at a high rate of 93% in 2006, even that rate improved to 98% by 2009.

Better: In recent years, both the federal agency that administers Medicaid and Medicare and the national organization that accredits hospitals have been pressuring health-care providers to do a better job at combating tobacco use, explains nurse Ellen Prior, DH's tobacco treatment coordinator.

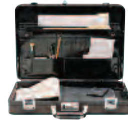
In addition to helping inpatients kick the habit, Butterly's group has also focused on employees and visitors. DHMC became a smoke-free/tobacco-free campus—outside as well as inside—in 2008 and since then has been helping other hospitals and businesses in the region do the same.

Now, visitors to DHMC who are 18 or over and not pregnant can obtain free nicotine lozenges from nurses to help them abstain from smoking while they're at

MARK WASHBURN



John Butterly, far left, and Steven Liu, fourth from the left, were among the DHMC staff members participating in this early meeting of the Tobacco Treatment Team.



CASE IN POINT: A team of Dartmouth students—three undergrads, an M.D. student, and an M.D.-M.B.A. student—finished in the top four in a global health case competition at Emory. The 20 teams had to develop recommendations for a fictional scenario involving refugees in Africa.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from a 1991 history of Mary Hitchcock Hospital:

"Hospital births—which had declined during the depths of the Depression, as women had fewer babies and delivered those they had at home—rose from 177 in 1936 to 316 in 1940." In 1946, a 41% increase in the number of births at MHMH signaled the start of the baby boom.

1,108
Births at DHMC in 2010

1940
Year Hitchcock acquired its first incubator

1974
Year DHMC opened a neonatal intensive care unit

30
Number of beds in DHMC's NICU today

Play is an opening act for alcohol initiative

"In 1898, I left home for Dartmouth College. Drink soon cured my shyness. I had an enormous capacity for the stuff!"

Those are among the opening lines spoken by a character named Dr. Bob in the play *Bill W. and Dr. Bob*, which recently came to Dartmouth. A play about two alcoholics from the early 1900s may seem like an odd way to kick off a 2011 initiative to combat binge drinking. But the themes in *Bill W. and Dr. Bob* resonate even today.

The play is about addiction and also "the healing power of connection."

Sober: Despite being an alcoholic, the real Dr. Bob—Robert Smith, a 1902 Dartmouth graduate—became a surgeon and practiced in Akron, Ohio. He struggled with his addiction for years until, one day in 1935, he met Bill Wilson, also an alcoholic. Together, the two discovered they could stay sober by sharing their stories with each other and with other alcoholics. Soon after, they founded Alcoholics Anonymous.

But the play isn't just about addiction; it's also about "the danger of isolation and the healing power of connection," says one of its authors, Dr. Stephen Bergman. Bergman, a psychiatrist, writes under the pen name Samuel Shem and is best known for the 1978 novel *House of God*, an exposé of residency training at one of Boston's top teaching hospitals.

People drink to feel connected, Bergman argues, to feel like they belong. But alcohol creates "only the illusion of connection," he says, "and can lead to all kinds of trouble."

About 1,800 college students in the U.S. die each year from alcohol-related injuries, and an estimated 600,000 are injured, according to the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Close to 40% of college students engage in binge drinking (that is, having more than five drinks on at least one occasion in the past month), almost 30% admit to driving drunk, and 2% report being sexually assaulted or date raped by another drinking college student, according to a 2009 NIAAA study in the *Journal of Studies on Alcohol and Drugs*.

Binge: "People ask me all the time what keeps me up at night as president," Dr. Jim Yong Kim, the president of Dartmouth College, recently told the *Wall Street Journal*. "My answer is really pretty straightforward: I think a lot about the possibility of losing one of our students to binge drinking, and I think about all the harms that can happen, everything from injuries to sexual assaults."

Instead of just worrying about binge drinking, Kim decided to join forces with 13 other universities around the country. The schools have formed a group called the Learning Collaborative on High-Risk Drinking, which will study, implement, and test the most effective ways to curb excessive drinking on college campuses.

Evaluate: The Learning Collaborative will draw on the evaluation and measurement expertise of the Dartmouth Institute for Health Policy and Clinical Practice. It will also use techniques developed by the Institute for Healthcare Improvement (IHI) that have been used repeatedly to make improvements in clinical medicine, public health, and other fields. In keeping with IHI methodology, any efforts that are tried will be evaluated based on their ability to produce measurable changes. The collaborative expects to publish its findings sometime after 2012.

Given Kim's background as a

BROADWAY PALM DINNER THEATER

The fact that alcohol creates "only the illusion of connection" is a key point of this play, which recently came to Dartmouth.