

Center for Health Studies

2008 Annual Report



## Group Health Research Institute

formerly the Center for Health Studies

2008 Annual Report

If a mammogram saved the life of someone you love



...you know us.

#### For more than 25 years, Group Health Center for Health Studies has been conducting research that improves health care—and helps people to stay healthy and active.

We've discovered innovative solutions to common health problems such as bike injuries, tobacco addiction, and chronic low back pain. We've found better ways to treat conditions that affect tens of millions of people and drive up health care costs including depression, diabetes, and Alzheimer's disease.

And we've learned how best to provide cancer screening, immunizations, and other preventive services to enhance the health of whole populations.

Whether or not you recognize the name "Center for Health Studies," chances are that you, or someone you love, has been helped by our research. In other words,

# you know us.

In 2008, the Center began a process to better define and articulate its mission and identity. Interviews with community stakeholders, Group Health leaders, funders, collaborators, and others taught us that our researchers' contributions to health and health care are recognized as significant.

We also learned that we could benefit by clarifying our place within Group Health—the Seattle-based, consumer-governed, nonprofit health care system. One of our greatest strengths is our scientists' relationship to the Group Health membership, their care providers, and their health plan. This relationship allows us to conduct independent studies on a large, stable population in everyday clinical and community settings.

This link, which lets us pursue our mission, should be no secret. It makes us who we are—a nonproprietary, public-interest research institute within Group Health.

So on September 8, 2009, with the support of our faculty, staff, and Group Health leaders, we will become **Group Health Research Institute.** 

#### Collaboration between researchers and clinicians makes Group Health a 'learning health care system.'

It defies belief: Americans spend the most per person on health care—only to have health outcomes worse than any other industrialized country. On average, we lead shorter lives than people in Canada, Japan, and Western Europe. Life expectancy here is about the same as in Cyprus, Costa Rica, and Chile.

What's wrong? According to an Institute of Medicine (IOM) panel, doctors often lack scientific evidence to make clinical decisions. Despite billions spent on research and technology, knowledge is not applied to make care more effective and efficient.

## What we need, the IOM panel concluded, is a new way to do research:

- Scientists and doctors should work together more closely, influencing each other's views.
- Research should be done in everyday clinics.
- Health systems need electronic medical records, linked and mined for research.
- We must recognize that clinical data exist for the public good.

In other words, we need "learning health care systems" like Group Health.

In 2008, the world began a severe economic downturn. As Americans lose jobs and health coverage, economists predict recovery hinges on reforming the nation's broken health care system. There are no quick fixes. We need sustainable improvements to expand access while controlling costs.

Much of Group Health research seeks to determine which care is effective—and which isn't. We rigorously compare treatments and medications for chronic illness and cancer.

We evaluate, refine, and share innovations like the Patient-Centered Medical Home—a primary care model that builds on our research in prevention, disease management, and health information technology. We are discovering ways to improve care with projects like "e-BP," which combines home monitoring with Web-based help for high blood pressure.

Through this work, Group Health is helping our country determine how best to use its health care resources. It's all part of our mission: to improve health and health care for everyone through leading-edge research, innovation, and dissemination.

The Bransm

Eric B. Larson, MD, MPH Executive Director, Group Health Research Institute



If you wore a bike helmet this week  $\dots$  you know us.



Secure e-mail with pharmacists helped patients in the e-BP study manage their condition at home.

### Online care for blood pressure control: Study shows success rates double.

"Life-saving medical research" evokes lab scientists inventing miracle drugs for deadly diseases. But for many serious illnesses, the problem isn't lack of knowledge or pills. It's the U.S. health care system's inefficiencies, soaring costs, and limited access. To save more lives, we need to redesign care, using available evidence, drugs, and technologies to help people manage chronic conditions.

That's the idea behind e-BP, a study of Web-based support involving more than 700 Group Health patients with uncontrolled hypertension. Nominated for the *British Medical Journal*'s "research paper of the year," e-BP was the first large randomized controlled trial to use Web-based care and a patient-shared electronic medical record to improve treatment outcomes of a chronic disease. The study aimed to shift health care from the doctor's office to where people live: at home and online.

Two thirds of the study participants were randomly assigned to receive home monitors to track their own blood pressure. Half of these also got e-mail support from pharmacists who helped them manage their medications and set lifestyle goals. The other third got usual care.

Results in the June 25, 2008 *Journal of the American Medical Association* showed Web-based care nearly doubled the percentage of people whose blood pressure was controlled. For those with the highest blood pressure—the hardest to control the intervention nearly tripled success rates. Now, as a learning health care system, Group Health is gradually putting elements of the e-BP intervention into routine practice.

e-BP was the first randomized controlled trial to use Web-based care and patient-shared electronic medical records to improve treatment outcomes of a chronic disease.

Uncontrolled hypertension puts people at risk for stroke, heart attack, heart failure, and kidney disease. With one in three U.S. adults diagnosed with hypertension—and less than half of them controlling their blood pressure—programs like e-BP can potentially save many lives.

#### Using innovations pioneered at Group Health, MacColl team takes Medical Home to safety-net clinics nationwide.

"How do we get unaffiliated entities—like hospitals, community health centers, and Medicaid—to function like an integrated health plan? And if we do, can that improve care and reduce health disparities between rich and poor?"

That's how Katie Coleman, MSPH, describes the Safety Net Medical Home Initiative—a five-year, \$6 million project sponsored by the Commonwealth Fund and other partners. The first of its kind, its goal is to help 68 community health centers, free clinics, and rural health centers become "Patient-Centered Medical Homes."

If successful, the initiative could show how to strengthen the nation's "safety net"— the doctors and clinics who keep the poor and uninsured from "falling through the cracks" in our nation's broken health system. That's because the Medical Home model of primary care aims to provide continuous, coordinated, comprehensive care.

Coleman and team at Group Health's MacColl Institute are helping to design and support the initiative, which is led by Qualis, a Seattle-based guality improvement organization. Coleman is training coaches at regional coordinating centers in Oregon, Pennsylvania, Massachusetts, Colorado, and Idaho. The coaches will then use their new skills to train doctors, nurses, and administrative staff at clinics in their own regions.

It's a familiar role for MacColl, a unit within Group Health Research Institute whose interests go beyond health services research to effecting policy change and large-scale system improvement. Directed by Ed Wagner, MD, MPH, they have

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Brian Austin, Ed Wagner, Katie Coleman, and Judith Schaefer (above) of GHRI's MacColl Institute discuto train staff at 68 community health centers, free clinics, and rural health centers.

developed and disseminated the Chronic Care Model to more than 1,500 U.S. and European practices over the past decade.

Most U.S. care is provided outside integrated plans in practices of five doctors or fewer. "We can't remake American medicine by focusing only on organizations like Group Health," says Brian Austin, MacColl Institute's associate director, "We have to look further to have real impact."

A review of some 80 studies shows the Chronic Care Model improves care for people with chronic illness using registries, selfmanagement support, and planning. But it can't fix persistent problems with access, coordination, and reimbursement.

"The Medical Home model may help, because it spells out features of good primary care that we take for granted in integrated systems," says Coleman, who is also helping to evaluate a successful Medical Home model at Group Health.



If your doctor helps you set goals to exercise



ss strategy. The team is designing and supporting a project

#### Elements of the Safety-Net Medical Home model

Various organizations define the Patient-Centered Medical Home differently, but all have certain things in common. They:

- make primary care providers the first contact for care that's accessible, comprehensive, coordinated, and continuous
- tailor care so it's centered on patients' needs and preferences
- plan care using evidence, self-management support, population-based care management, performance measures for improvement, and support and information for decision-making
- advocate for payment reform to promote better care

But making the model work for these safety-net clinics is harder. Unlike Group Health, many lack electronic medical records, secure e-mail systems, and ready ties to specialty services.

"We have to introduce the very idea of patient panels—that practices are responsible for a specific population, even when those patients don't come for visits," explains Austin. "That's a hard sell for a lot of American medicine." Still, Austin says there's much to learn from the safety-net practices—like how to build better links to community resources.

"It remains to be seen whether a model that works well in an insured population like Group Health can improve care for those who need help so badly—the uninsured and the poor," says Coleman. "But we're hoping to find out." "We have to introduce the very idea of patient panels—that practices are responsible for a specific patient population, even when those patients don't come in for visits."



#### Medical Home Model



#### New projects reflect national priorities for transforming health care

Among Group Health Research Institute's (GHRI's) 240 active research grants and contracts are many new projects that seek answers to some of our country's most pressing health care cost and quality problems.

**Comparing effectiveness:** GHRI research focuses on comparing tests, treatments, and preventive actions to determine which approaches work best in real-world clinical settings. Current examples include studies of breast cancer screening and care, immunization, and the treatment and prevention of chronic conditions such as diabetes, back pain, depression, and bothersome symptoms of menopause.

**Testing innovations in care:** Researchers are evaluating the Medical Home model of primary care in Group Health's 26 medical centers. Several studies of health information technology to improve health and health care are also underway. For example, one is evaluating secure e-mail messaging to help patients with depression. Another is developing and testing

information technology to help people with HIV to better manage their medications.

Researchers also collaborate with the Group Health Foundation and Group Health care providers on the Partnership for Innovation—an initiative that provides funding and technical support to care-delivery pilot projects designed to reduce costs and improve quality.

**Evaluating shared decision-making:** Researchers are examining the strength of Group Health's new shared decision-making initiative. Patients with conditions like low back pain or prostate cancer—where there's little scientific evidence to predict that one choice of care will be better for them than another—are offered decision aids. These DVDs, Web-based videos, or booklets give patients information to help clarify their preferences, weigh options, and choose the course that's right for them. The project is tracking how the program affects procedure rates and costs.

Interdisciplinary scientific teams seek solutions to common problems through research in many fields:						
Aging & geriatrics	Cancer control	Health informatics	Mental health			
Alternative approaches to healing	Cardiovascular health	Health services & economics	Obesity			
Behavior change	Child & adolescent health	Immunization & infectious diseases	Preventive medicine			
Biostatistics	Chronic illness management	Medication use & patient safety	Women's health			





#### Commitment to mission brings higher productivity and growth

Number of grants submitted









#### Active grants

#### GHRI revenue by sponsor



Group Health

\$26,325,268 4,376,171 3,421,017 <b>\$34,122,456</b>
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#### The Group Health Research Advisory Board assesses the quality, innovation, and relevance of Group Health research in enhancing quality of care and consumer value.

Ruth Ballweg, MPA, board chair; director, MEDEX Northwest Physician Assistant Program, University of Washington (UW); and Group Health trustee

Mary L. "Nora" Disis, MD, professor of medicine; and associate dean, Translational Science, School of Medicine, UW

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Pam MacEwan, executive vice president, Public Affairs and Governance, Group Health

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John Slattery, PhD, vice dean, Research & Graduate Education, School of Medicine; and professor, Pharmacology and Medicine, UW

Michael Soman, MD, executive medical director, Group Health; and president, Group Health Permanente

Walter F. "Buzz" Stewart, PhD, MPH, associate chief research officer, Center for Health Research, Geisinger Health System

Michael Wanderer, MD, family practitioner, Group Health's Capitol Hill Family Health Center; and chair, Group Health Permanente Board of Directors

#### Selected major findings Group Health researchers published 197 articles in 2008, including these:

#### Aging

Elderly people who get flu vaccination are just as likely to get pneumonia as those who don't. *(Lancet)* 

Memory loss and thinking problems are becoming rarer in older Americans, likely due to more education, prosperity, and control of vascular risk factors. *(Alzheimer's and Dementia)* 

#### Behavior change

Smokers getting tailored Web-based treatment plus nicotine patches quit more successfully when the overall tailoring is deeper, uses highly tailored success stories, and comes from a more personalized message source. (American Journal of Preventive Medicine)

Standard eight-week nicotine replacement therapy plus quit-line counseling is more effective—and more cost-effective—than a two-week starter course of medication plus counseling. (*American Journal of Preventive Medicine*)

#### Cancer control

At Group Health, the percentage of positive fecal occult blood tests followed by complete diagnostic evaluation within a year rose from 57–64 percent in 1993–1996 to 82–86 percent in 2000–2005. (*Medical Care*)

How accurately mammograms are interpreted varies widely among 53 facilities. *(Journal of the National Cancer Institute)* 

Advanced estrogen-receptor-positive breast cancers are significantly more common in postmenopausal women who are overweight or obese than in those who weigh less. *(Journal of the National Cancer Institute)* 

How to improve cancer care? Standardize care, adhere to guidelines, and use "patient navigators" and an electronic medical record that both patients and providers can see. *(Cancer)* 

#### Drug safety

Reporting to the Food and Drug Administration, Merck may have overstated the safety of Vioxx in clinical trials of patients with Alzheimer's disease. (Journal of the American Medical Association) Women who have used the osteoporosis drug Fosamax may be nearly twice as likely to develop atrial fibrillation as those who have never used it. (Archives of Internal Medicine)

#### Health information technology

Web-based care, the Chronic Care Model, and checking blood pressure at home help control hypertension, nearly doubling how many patients' blood pressure is successfully controlled. (Journal of the American Medical Association)

#### Health services and economics

In the first study to track imaging over time in managed care, numbers of CT scans doubled while MRI scans tripled over 10 years. Total diagnostic imaging costs rose to \$463 per enrollee in 2006, up from \$229 in 1997. (*Health Affairs*)

A review of 82 studies since 2000 shows using the Chronic Care Model can help people stay healthier and get better care. (*Health Affairs*)

Integrating oral health into routine well-child checkups is a practical new way to prevent dental disease. (*Health Affairs*)

Full insurance coverage and financial incentives for weight management may raise interest in obesity treatment programs among people with the metabolic syndrome. *(Obesity)* 

#### Mental health

Collaborative care for depression improves outcomes for people with diabetes—without raising long-term costs. *(Diabetes Care)* 

Enhanced depression outreach and care programs for employees improve depression outcomes, work retention, and hours worked in large corporations' staff. (Journal of Occupational and Environmental Medicine)

#### Women's health

Health care costs are up to a third higher for middle-aged women who were abused physically or sexually as children. *(Journal of General Internal Medicine)* 

Postmenopausal women on antidepressants tend to have more fractures of the spine and other sites. (Journal of General Internal Medicine)

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