

# PRHI in progress 2004 in review



The fifth anniversary of the publication of this IOM report has provided cause for reflection.

## Pittsburgh Regional Healthcare Initiative

The end of 2004 found the media marking the fifth anniversary of the seminal 1999 Institute of Medicine (IOM) report, “To Err is Human.” Of the thousands of reports issued by the IOM, this one caught the public’s attention like no other because of its claim that up to 98,000 Americans die each year due to medical error. (Other studies suggest that an additional 100,000 people die from hospital-acquired infections.)

At the same time the country is taking stock, so is PRHI. Our initiative was in its startup phase when the IOM report came out. So where are we five years later? What value have we added in the healthcare community? What have we learned from our problems? And where do we go from here?

Inspired by the successes of our healthcare partners across the region, we remain convinced that the Pittsburgh region could be the country’s learning laboratory for healthcare transformation.

Most important, we know that the conversation has changed. Less often do we hear terms like “preventable hospital-acquired infection” and “preventable error.” The public is more aware of patient safety as an issue; and the health care industry is responding. We are beginning to acknowledge and accept what other high-performance, high-risk industries have learned—that where continuous improvement systems are in place, errors can be prevented.

This report will discuss areas of work where measurable results were achieved in 2004, and areas

of great promise. It will talk about the emerging “business case”—the beginnings of proof that doing the right thing costs less.

And it will highlight the educational system PRHI has put in place to support and spread these changes, and the demand it has created across the region and the country.

PRHI is making plans for its own organizational transformation. Coming newsletters will describe the changes, which we believe will improve PRHI’s value to the region’s healthcare systems.

Five years from now, we believe the Pittsburgh region will be recognized as one of the places where American healthcare began its transformation, and where truly exceptional results were achieved.

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## Central line infections: regional success, national significance

*The Pittsburgh consortium has posted a 55% region-wide reduction in the number of central line-associated bloodstream infections, a very significant regional decline. These data challenge us to consider what may be possible in the area of infection control.*

—John Jernigan, MD, Medical Epidemiologist, Centers for Disease Control and Prevention

Beginning two years ago, infection control practitioners and others met with PRHI as the convener and began sharing information about how to reduce central line-associated bloodstream infections, or CLABs. The group established regional guidelines and recommended that hospitals invest in kits that contain exactly what a practitioner needs to insert a line. While the guidelines and the kits were tailored to each institution, the

goal remained consistent: unit by unit, hospital by hospital, to tailor the effort how ever necessary to achieve zero CLABs. Recently a group of healthcare leaders, convening as part of PRHI’s leadership obligation group, shared their stories about their notable reductions in CLABs. The very fact that leaders from competing healthcare organizations would share this information for the purposes of regional learning and →

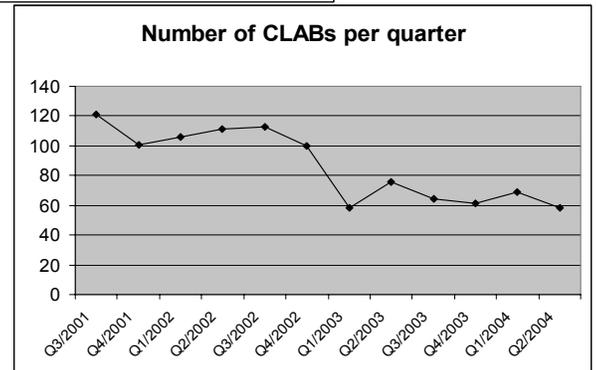
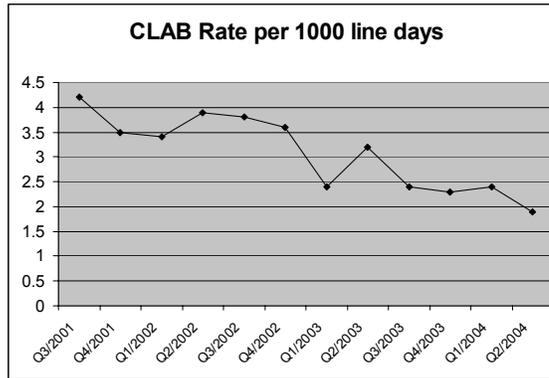
# PRHI in progress

## CLABs, continued

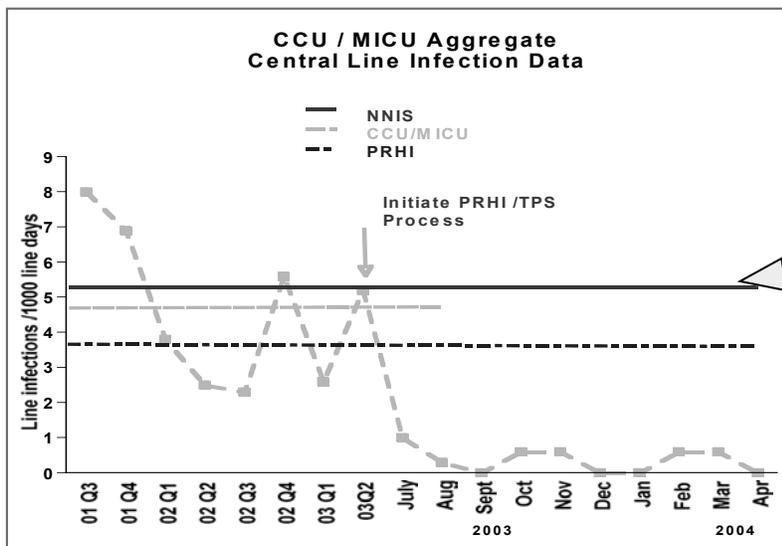
improvement, strikes practitioners in other regions of the country as remarkable.

The CDC is encouraged by these results and is supporting (conceptually and financially) a comprehensive evaluation of the results and methods.

Quarter/Year	# CLABs	# of Hospitals Submitting	Rate per 1000 line days
Q3/2001	121	27	4.2
Q4/2001	101	28	3.5
Q1/2002	106	27	3.4
Q2/2002	111	27	3.9
Q3/2002	113	27	3.8
Q4/2002	100	25	3.6
Q1/2003	58	23	2.4
Q2/2003	76	24	3.2
Q3/2003	64	23	2.4
Q4/2003	61	26	2.3
Q1/2004	69	28	2.4
Q2/2004	58	29	1.9



**RESULTS:** Across the region, CLABs are down by 55%. These devastating infections typically afflict patients who are already very sick, and result in death about half of the time. Furthermore, leaders from UPMC Health System, LifeCare, Monongahela Valley Hospital, the VA Pittsburgh Healthcare System and others shared how they achieved dramatic reductions in these infections.



Comparing against benchmarks creates a false sense that "We're OK," or "We're as good as anywhere else."

Results come quickly when the question becomes "How good can we get?"

In a notable example, CLAB rates were quickly driven to new lows is at Allegheny General Hospital's Medical Intensive Care Unit (MICU) and Coronary Care Unit (CCU). Using principles of the Perfecting Patient Care System™ taught in PRHI's University, the whole staff drove the rate to zero within 90 days and has held it near zero for a year. Midlines on the chart represent 'benchmarks' set by the CDC, the PRHI partnership, and the ICUs. Individual results like these and are challenging the region to reassess benchmarking and redefine 'what is possible.' See accompanying article on page 5.

January 2005

## Regional Learning: hospitals share infection data

### Allegheny General Hospital

- ✧ Zero CLABs within 90 days.
- ✧ Six CLABs reported within past year, a sustained 90% reduction with 95% reduction in mortality. Four of the CLABs were attributable to failure to follow a specific guideline.
- ✧ Past-year savings of \$1.4 million just in direct costs.

### LifeCare Hospitals of Pittsburgh

- ✧ In the past year, CLABs reduced 87% despite a 9.7% increase in the number of lines placed.
- ✧ Reduction gained momentum over time, going from 70 to 87% in the last 4 months.

### UPMC Healthcare System

- ✧ CLAB rate down to 1.2 infections per line days system wide (FY 04).

### VA Pittsburgh Healthcare System

- ✧ 85% reduction in the MRSA infection rate in the inpatient surgery unit. (*Chart, page 5*).
- ✧ Spreading MRSA reduction techniques throughout the hospital and long-term care facility.

### Monongahela Valley Hospital

- ✧ Since 2002 no CLABS in ICU, I in CCU
- ✧ Improvement toward eliminating surgical site infections in: colon resection, femoral popliteal bypass, total hip arthroplasty and total knee arthroplasty. Goals were as follows:
  - \* 100% of surgical patients receive antibiotic prophylaxis < or 1 hour prior to incision.
  - \* 98% of antibiotic agents selected will be appropriate according to published guidelines
  - \* Discontinued use of prophylactic antibiotics after surgery < or = to 24 hours in 100% of cases to prevent bacterial resistance

#### Improved compliance with antibiotic protocols

Improvement Measure	May 03	June 04
Antibiotic prophylaxis < or 1 hour prior to incision.	79%	93%
Appropriate antibiotic	83%	99%+
Antibiotics discontinued ,or = to 24 hours	35%	100%

#### Improved surgical site infection rates

Surgery	2002-2003	2003 – March 2004
Colectomy	4.49%	1.52%
Femoral Popliteal Bypass	15.69%	1.88%
Knee arthroplasty	0%	0%
Hip arthroplasty	4.54%	3.28%

## Stopping MRSA: awareness up, infections down

Methicillin resistant *Staphylococcus aureus*, or MRSA, is on the rise, and is associated with increased mortality, length of stay and hospital costs.

Consider:

- ✧ In the Netherlands, Scandinavia and western Australia, MRSA is uncommon.
- ✧ In Belgium and France, MRSA has been stabilized and confined.
- ✧ The United States has the world's second highest MRSA rate. (Only Japan has more.) 30-50% of clinical cultures that are positive for *Staphylococcus*

*aureus* are now methicillin resistant.

#### How is MRSA spread?

MRSA is spread primarily through transmission from one patient to another via the hands of healthcare workers.

Active infections are just the tip of the iceberg. People can be colonized with MRSA—that is, have the organism present in their bodies but show no symptoms—and spread it to others. (Once colonized, 25% of people will

develop an active MRSA infection.)

All people with MRSA—infected or colonized—must be isolated, and all who come in contact with them must use precautions such as gloves, gowns and masks. The items used in the care of these patients, such as blood pressure cuffs and stethoscopes, must be decontaminated or disposed of.

#### The hands of healthcare workers

MRSA represents the intersection of patient safety and worker safety. While the healthcare worker has little to fear



# PRHI in progress

## Stopping MRSA, cont'd

in contracting a CLAB, the story is different with MRSA. Preliminary data at local pilot sites show that about 10% of patients being admitted carry MRSA—and it's mostly unrecognized. For patients, workers and hospitals, MRSA is a lose-lose-lose proposition.

### Hope at the VA

In conjunction with PRHI and the CDC, the study unit at the VA has significantly reduced MRSA transmission. Now, the main VA hospital and long-term care facility, and units elsewhere in region, are aiming to eliminate MRSA transmission. Some units have begun to screen all patients upon admission (to determine who needs to be isolated) and on discharge (to determine whether the patient was colonized or infected with MRSA during hospitalization).

"What if you thought a patient had TB or SARS?" asked Dr. Richard Shannon of Allegheny General Hospital. "Wouldn't you pull out all the stops, gloving and gowning and washing up all the time?"

Well, we haven't seen TB in years, and we've never seen SARS, but we have MRSA silently stalking us every day. We can stop it, keep our patients and ourselves from becoming infected if we wash our hands and glove and gown. Our job is to do what they've done at the VA: make sure our workers have everything they need, every time they need it, to adhere to known hygiene requirements with every encounter."

### No longer just in hospitals

Can MRSA jump hospital walls? The strain of MRSA in these community outbreaks is different than that in most hospital settings, but the mechanisms for stopping the spread are the same.

In 2003, more than 900 prisoners in the Los Angeles County jail came down with methicillin-resistant boils and rashes. A young athlete in Seattle died from a lesion. Smaller outbreaks have recently affected a Colorado fencing team, Texas school children, and several young, healthy high school athletes right here in Pittsburgh.



MRSA is spread primarily from one patient to another via the hands of healthcare workers. Good news: adequate hand hygiene and appropriate use of gowns, gloves, masks and hats can halt the spread of MRSA.

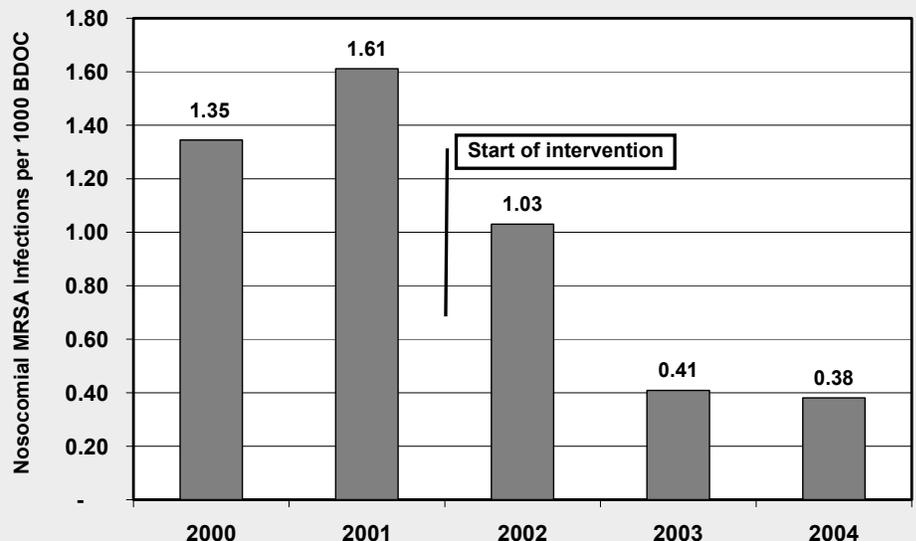
### Can we stop MRSA in Pittsburgh?

The CDC/PRHI project at the VA will conclude in 2005; however, the work will continue. Persuading other units to adopt the practices has been difficult, and spreading the work through the community harder still. Yet, three years after the start of the VA program, hospitals and healthcare workers across the region are taking note. We will watch with interest the community-based efforts that are beginning to take root.

**YES WE CAN** stop MRSA from spreading. This chart shows MRSA infection rates at the inpatient surgery unit at the VA Pittsburgh Healthcare System's main hospital. After two years of implementing the Perfecting Patient Care System™, with help from a grant from the CDC, the rate holds near zero (0.38 per 1000 patient days). This continued decline was accomplished despite an increase in patient acuity from a 50% increase in the number of Surgical Enhanced Care beds (12 versus 8 last year). The MRSA elimination effort is being rolled out in other units:

- ✧ Hand hygiene and personal protective equipment supplies have been reconfigured to improve compliance in the Surgical and Medical Intensive Care Units and at the Heinz long-term care facility.
- ✧ Soap and sanitizer consumption in the SICU increased 50% over the last year.
- ✧ At Heinz, 100% of the nursing staff has received training on the preventing transmission of pathogens that cause infection.

**VA Pittsburgh Healthcare System 4-West Inpatient Surgery: Nosocomial MRSA Infection Rates Pre- and Post-Intervention (By Fiscal Year October 1- September 30)**



## The business case for doing the right thing

Dr. Richard Shannon galvanized the staff at Allegheny General's Medical Intensive Care Unit and Cardiac Care Unit. Working together, fueled by the occasional staff-inclusive Chinese lunch, the group was able to do something that conventional wisdom had deemed "impossible:" they virtually wiped out central line-associated bloodstream infections (CLABs) in 90 days.

The most important outcome was that 37 people (or more) did not become infected as the group sustained the gain over the last year. Previously, half of those who sustained CLABs died. This year, nobody has.

What did it cost to accomplish this for patients? Often the argument against improving quality is that doing so is too expensive. But the AGH crew exposed this as an inaccurate premise.

Employing several brilliant interns from local universities, Dr. Shannon created a mini-forensic accounting team that dissected each of the prior year's 37 CLAB cases to discern the actual cost. The result has created a clear and exciting "business case" for the elimination of CLABs—and by extension, all infection.



Each infection cost an average of \$30,277 in variable costs per person in the MICU and CCU. That is, when two ICUs in one big-city hospital eliminated one class of infection, the hospital saved \$1.12 million. The CDC conservatively estimates that over 80,000 CLABs occur in the intensive care units of American hospitals annually, which may translate into at least \$2 billion. How much money could be saved if all hospital-acquired infections were wiped out?

Dr. Shannon's team at Allegheny General is uncovering other even more substantial collateral savings that accrue when patients do not contract hospital-acquired infections. The research seems to expose as another urban legend the notion that patients with complications bring in higher reimbursements and hence, profit. By digging in to what things actually cost, the Allegheny General team is proving that the cost of treating hospital-acquired infections almost always exceeds even the most generous insurance reimbursement. Conversely, profits accrue, albeit sometimes very small profits, when a normal course of treatment is administered and the patient stays infection-free.

Again, drawing from industry, it should come as no surprise that it costs less to get it right the first time. And again, quality is the key to improvement—even in the bottom line.

Quality IS the business case.

### How much could a big-city hospital save by eliminating three types of hospital-acquired infection?

(How much could it save by eliminating them?)

Type of infection?	Gains or losses?
CLAB (N=72)	(-\$1,049,184)
VAP (n=33)	(-\$567,171)
MRSA (n=188)	(-\$8,127,428)
Total loss/opportunity	(-\$9,743,783)

# PRHI in progress

## Education: curriculum gains in national acceptance

PRHI has created nationally recognized Perfecting Patient Care training programs, giving healthcare leaders and staff “new eyes to see” their organizations. Teaching the principles that can be used to redesign work systems to produce major improvements in quality and efficiency.

Despite being operated on a shoe-string budget, with staff borrowed from other PRHI functions on an ad-hoc basis, more than 1500 local and national healthcare leaders have been exposed to PPC training programs. The programs range from a five-day University modeled on training programs created by Toyota and Alcoa but adapted by PRHI for health care applications, to one-day “PPC 101” sessions that orient participants to systems thinking in health care.

These training sessions have inspired leaders to begin change efforts in their own institutions, and have been used to help advance on-site collaborations between PRHI and institutions to transform performance. Increasingly, PRHI is being asked to customize training programs to the needs of particular local and national institutions.

The following are just a few of the local institutions that have put their senior management teams through PPC training:

- ✧ Shadyside Hospital (24 top leaders have attended the University)
- ✧ AGH (70 leaders from CEO down through University; 20 more scheduled)

- ✧ Veteran’s Administration Hospitals (2 universities for the senior staff teams)
- ✧ Southside Hospital (leadership team through University)
- ✧ Forbes Hospital (24 senior leaders from CEO down; request for 24 more)
- ✧ Lifecare (leadership team through University)
- ✧ Mercy Hospital (leadership team through introductory case training)
- ✧ Western Psychiatric Institute (leadership team through introductory case training)
- ✧ Magee Women’s Hospital (leadership team through introductory case training)
- ✧ Asbury Heights senior care (entire leadership team for PPC 101)
- ✧ Jewish Association on Aging (nurse managers and CEO)
- ✧ JHF AIDS grantees (specialized training)

Increasingly, PRHI is being asked to train the leadership of institutions from across the country. The following are just a few examples of national quality leaders who have traveled to Pittsburgh or sponsored PRHI training at their sites:

- ✧ Dartmouth University Medical Center (3 batches of leaders and staff)
- ✧ East Texas Medical Center, Tyler Texas (entire leadership team for PPC 101)

The leaders of a number of Medicare-sponsored Quality Improvement Organizations (QIOs), including Ohio, Nevada, and Montana.

- ✧ Robert Wood Johnson Foundation senior staff (2 training days)
- ✧ RAND
- ✧ Institute for Healthcare Improvement (3 senior staff)
- ✧ US Health and Human Services chronic disease staff
- ✧ Centers for Disease Control (CDC) quality improvement staff
- ✧ Physician leaders inspired by press accounts, such as an OB leader from San Diego who paid his way to attend a full University last month.

The former head of the Ohio Quality Improvement Organization has recommended PRHI’s training as “among the best in the nation” at national meetings and touted her own use of PRHI principles. The director of clinical improvement at Dartmouth-Hitchcock Medical Center said:

“I cannot thank you enough for your support and organization of the ‘special’ visit for Dartmouth. I have heard early reports and all of them are so enthusiastic and ‘re-charged’ to come back to Dartmouth.”

In addition, PPC training and training personnel have been used to directly support a number of successful programs offered by Jewish Healthcare Foundation -- including the JHF Health Sciences Fellowship and Perfecting Patient Care in community-based organizations -- and other education institutions in the region, including the University of Pittsburgh’s Graduate School of Public

*I appreciate all the work you put into the week. Thanks for making it so interesting.*

—Alan Spector, M.D.  
San Diego, CA

January 2005

Health, law and nursing schools; Carnegie Mellon University's Masters of Medical Management program and School of Business; and Duquesne University's School of Health Sciences. We have also trained at Purdue University. Discussions are under way with Community College of

Allegheny County for expansion into their health careers programs.



**Hands-on training and team-building enhance PPC 101 and university courses**

## PRHI in progress

### *Truth in Medicine* By Paul H. O'Neill

Special to the *Washington Post* December 24, 2004, Page A-17

If the president and Congress want to accomplish something truly important over the next four years, how about this: a fundamental change in the playing field for health care.

I have a few suggestions. They are based on 40 years of work on health care policy and operations, including my current role as leader of a community effort in Pittsburgh to set the world benchmark for safety, quality and efficiency in health care delivery. My thoughts are also based on leading a major company, Alcoa, to become the world's safest place to work.

First, the government should create powerful incentives for medical care providers to immediately tell the truth about errors and poor outcomes ~ tell it to patients, families

and colleagues around the country. The purpose is not to punish but to learn rapidly from mistakes, something that is required in any high-risk, high-performing industry. The benefit won't just be safer, clinically superior health care but less expensive health care. Why? Because safety is realized only when organizations focus on their customers and constantly improve the quality and efficiency

of the processes that serve them.

Today we don't report and disclose even the tip of the iceberg of things gone wrong in health care, dooming ourselves to repeat the mistakes, without ever rooting out the broken processes that are producing them in the first place. For example, the nation's leading researchers estimate that less than 1 percent of medication errors are identified.

To address the issue, we ought to have society assume the cost of things gone wrong, in the interest of creating a genuine learning system. Victims of errors would be paid fair compensation, and doctors would not have to pay for malpractice insurance. But if doctors didn't openly and immediately detail errors or poor outcomes to patients and to a national learning system, they would be subject to large, personal financial penalties or loss of license.

At Alcoa, the first principle I had to ingrain throughout the company was this: Every person was responsible for sharing details of things that went wrong, immediately, so that we didn't have to learn the same lesson over and over again. We are far from that standard in health care, but if we stop fighting the wrong battle over medical malpractice, we

can get there. Our objective should be to get lawyers out of the medical system, not to cap the money they are taking.

Second, the president should appoint a commission with a tight deadline to redesign the health care reimbursement system with the goal of making it pro-patient. Today, in many corners of even our most significant federal payment systems, we still pay clinicians and facilities for activity, not for the quality of the job they did for the patient. The way to use payment to drive improvement is beginning to emerge in a few experiments around the country, but the status quo will prevail unless the president puts his weight behind rapid change.

We also need a better map of how to achieve dramatic improvements in cost and quality. The federal government should start the mapmaking by commissioning a detailed, three-month analysis of the nation's leading hospitals to fully document not only the cost of errors but also the wasted time, effort and resources embedded in much of health care delivery. Such a study could be accomplished for \$10 million and would make the case for change in a management framework that couldn't be ignored. The team of experienced industrial engineers and health care leaders I work with in Pittsburgh has yet to encounter a health care process that could not provide higher quality at half the current cost.

That map can be brought to life if the government then joins with a single major medical complex that declares its intention to be the best in the world ~ measured by objective data ~ at every single thing it does. Across the American health care landscape, improved performance has occurred only in parts of organizations. When we have a place that's "done it," we'll have a model that others can see and learn from. We'll also have taken away the age-old excuse that "nobody's done it, so how can we?"

Apart from these federal priorities, the industry itself has its own set of solemn obligations to act on. The 30 to 50 percent of national medical care spending that is currently paying for waste and errors can be captured only through deliberate action at the local level. With the health care industry and the government playing their parts, hundreds of billions of dollars can be freed up. This would make it easy to solve the so-called "access" problem of uninsured Americans and still leave large amounts for other important needs.



## Cardiac Registry: from “reporting” to a learning system

Four years since its inception, PRHI's Cardiac Working Group (CWG) has begun to:

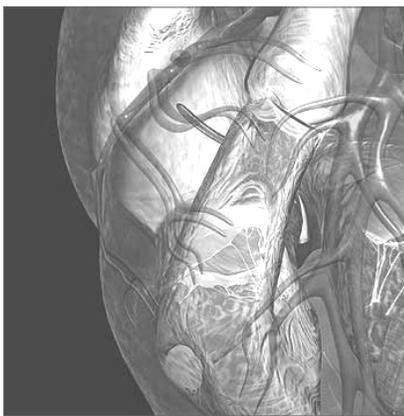
- ✧ *Create a 'safe' environment for the cardiac centers to work together towards this regional goal.*
- ✧ *Collect standardized data in order to evaluate processes and outcomes around cardiac care.*
- ✧ *Use the standardized data, direct patient observations and real-time problem solving to identify areas where system redesign is necessary to support the desired outcomes.*
- ✧ *Share experiences and learnings among CWG members.*

The PRHI CWG was modeled after the Northern New England Cardiovascular Disease Study Group (NNE)—a group of four cardiac surgery centers. PRHI's CWG includes 11 of 13 cardiac centers in the six-county region, and one center from outside the region. Two more are expected to join.

CWG members share their experiences, processes and outcomes without the pressure of competition or public release of information. Based on a strong recommendation from the NNE, data were reported at the regional level only. While facilities were able to see their own individual results, comparative results across facilities were not generated.

However, members began to request unidentified, facility-level comparative data. Many members believe this to be the primary benefit of regional collaboration. This trust among members is a clear indication that PRHI has been successful in creating a 'safe' environment to motivate improvement. The power of a regional collaborative derives from

individual facilities sharing their experiences and learnings (both positive and negative). The CWG continues to host regular forums—two in 2004—for this purpose. The CWG developed a registry of all coronary artery bypass graft (CABG) surgeries in the member facilities. Now with data on over 7,500 isolated CABG surgery cases, the registry is



helping to develop new knowledge in the effectiveness of cardiac care and providing feedback to institutions about the quality, safety and effectiveness of their cardiac care. Through the registry, the CWG confirmed in our area the NNE findings of the following four factors known to improve CABG outcomes:

- ✧ *Adequate use of pre-operative beta blockers*
- ✧ *Pre-operative aspirin use.*
- ✧ *Avoiding anemia due to blood dilution during surgery.*
- ✧ *Use of the internal mammary artery as harvest site.*

Our region has improved in all four target areas.

Registry results also identify areas for improvement. Direct patient observations and real-time problem solving are then necessary to redesign the systems and processes to achieve the desired outcomes.

Although just beginning, the CWG is moving beyond what information the registry can provide. In an effort to understand the root cause of in-hospital mortalities, cardiothoracic surgeons in the CWG are developing a “CABG M&M” report, a collaborative review of detailed clinical information for all in-hospital mortalities from July 2003 through June 2004.

Other future discussions will include:

- ✧ *Further examination of perfusion processes during surgery, which vary widely throughout the region. The CWG seeks to link those processes to outcomes.*

See page 11  
for Cardiac  
Forum info

### **Blood glucose control: the word is spreading**

*Any patient undergoing surgery has an increased risk of infection and organ failure unless blood glucose is maintained within strict limits. (Blood glucose control is important whether or not the patient is diabetic.) Hospital units are becoming more aware of the problem, yet while every institution has strict insulin protocols, they are often complex and not implemented as intended. Creating useful, clear insulin protocols are top priorities for partners in the Cardiac Working Group and at other units in the region.*

- ✧ *The CWG has begun to share experiences and learnings in the optimal control of blood glucose levels both during and after CABG surgery. Some units have*

*expressed interest in eliminating mediastinitis, a devastating, complicated post-surgical infection of the sternum.*

- ✧ *The VA's Surgical Intensive Care Unit implemented a glucose control protocol, which was developed by problem solving one-by-one the glucose control histories of patients. Key to the protocol's effectiveness is the use of an MS Excel program to transform patient data in instructions for glucose regulation and monitoring. This program enables endocrinologists to define rules sophisticated enough to deal with complex glucose problems, and yet be easy enough to implement by the busy nursing staff.*

# PRHI in progress

## Chronic Care

*The Pittsburgh Health Information Network (PHIN) has benefited from grants from the Agency for Healthcare Research and Quality (AHRQ), the Fisher Fund and Pittsburgh Foundation.*

The documentation is overwhelming: growing numbers of people are suffering from chronic illness, vastly increasing complications and costs. American health care, with its emphasis on acute care, does not handle chronic disease consistently.

Rather than focusing separately on diabetes and depression, PRHI decided to fuse them into a single Chronic Care Model Action Group (CCMAG). The group bases its work on the model created by Seattle physician Edward Wagner. The “Wagner model” emphasizes highly coordinated preventive care to decrease complications and hospitalizations.

### **PHIN Steering Committee**

A primary focus has been the year-long effort on the Pittsburgh Health Information Network (PHIN), a community-wide chronic disease registry designed to give participating physicians secure instant access to relevant data on their patients. The Fisher Fund and an AHRQ grant partially support the PHIN.

The Centers for Medicare and Medicaid Services (CMS) has asked communities launching such registries to make sure they conform to a national standard for interface: we’re working to make sure the PHIN does so.

By January 2005 we will launch the technical feasibility pilot using data from two health plans (Highmark and Gateway), and two commercial labs (Quest and LabCorp). Three practices (Ralph Schmeltz, endocrinology; Alan Axelson, psychiatry; and Bruce

Block, general family practice) have agreed to test the registry for accuracy and utility.

### **Care for the Economically Disadvantaged Task Force (CED)**

This group, chaired by Dr. Bruce Block, has allied with Will Payne and the Federally Qualified Health Centers (FQHCs) to apply for joint funding to implement the federally mandated Health Disparities Collaborative in the private sector as well as the FQHCs. The goal is to become a regional showcase for office redesign in support of chronic care. On December 1, Will Payne’s FQHCs were accepted as an independent mini-cluster in the 2005 Health Disparities Collaborative, so in 2005 this will become an active project.

### **Current Condition Task Force**

The goal of this task force is to design and implement direct observations of experiences of patients with chronic disease as they move through the healthcare system. These observations will examine transitions between caregivers and resources. We hope to identify system breakdowns and better understand how patients assimilate information about disease management.

### **Additional task forces**

With data from the Current Condition task force, we will activate two proposed task forces:

- ✦ EDUCATION—improving provider-

patient communication and helping create more involved consumers.

- ✦ REIMBURSEMENT—working for a rational reimbursement system that supports excellent chronic care.

### **The potential to improve care**

The CCMAG is evaluating the following goals for 2005:

- ✦ Create a methodology for using direct observation to learn about chronic care across multiple care-giving and community sites;
- ✦ Identify system breakdowns in chronic care, particularly in hand-offs between caregivers and in patient education.
- ✦ Identify practices in the region ready and willing to evaluate their own processes of care and to redesign them to improve clinical outcomes.
- ✦ Gathering data to build concrete business cases for rational reimbursement of effective chronic care.



**Hospitalization for long-term complications of diabetes increased 28% in Southwestern Pennsylvania between 1996-2000. Such hospitalizations are thought to represent failure of adequate chronic disease management.**

## Shared results: Other system improvements

### LifeCare Hospitals

LifeCare has instituted a system for rapid reporting of medication errors and sharing of the information. The hospital has increased error reporting, including errors in the “A” and “B” categories, which do not touch the patient. As the error reports have increased, the number of errors reaching the patient has decreased.

The hospital has also teamed with Allegheny General and the VA of Pittsburgh to work on central line infections and MRSA. Both infections are on the decline at this hospital. Dozens of employees have now been trained in the Perfecting Patient Care system, and LifeCare remains an important educational partner with PRHI.

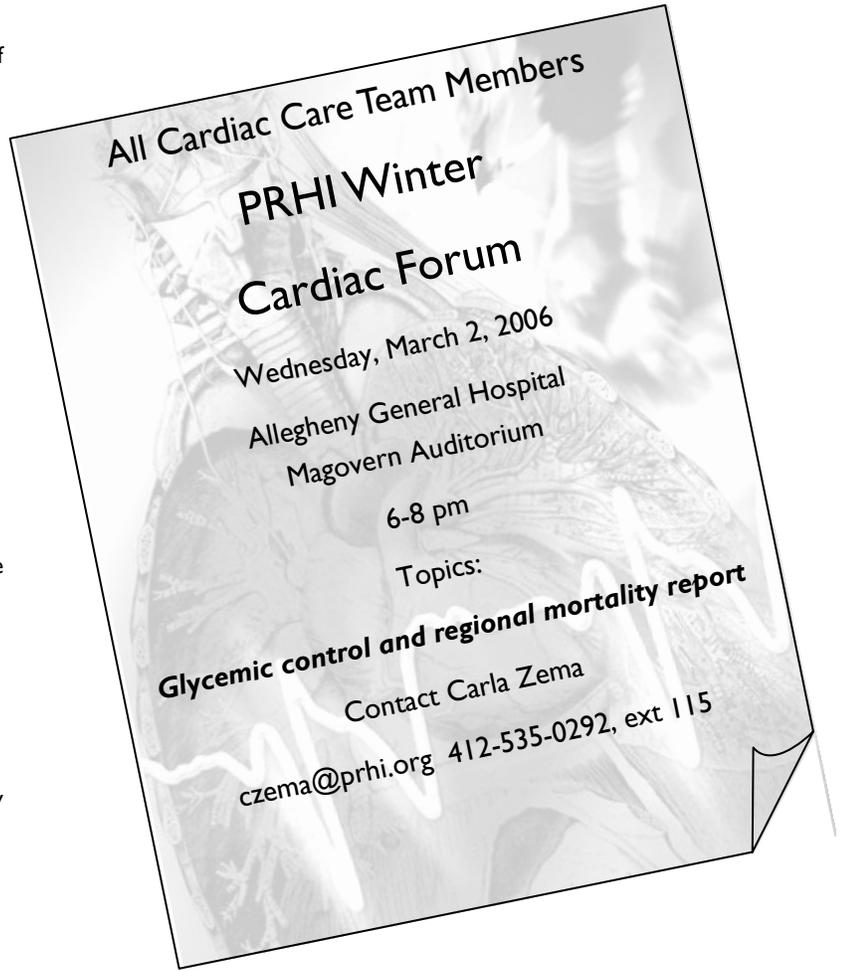
### Allegheny General Hospital

Patient wait times in the Ambulatory Care Center (ACC) have decreased by 1 to 1.5 hours by applying Perfecting Patient Care methodology. Rather than processing all first cases at 5 am, which causes long waits for patients, bottlenecks in the system, and chaos for staff, patients are processed according to the time of their surgery and a

set of specific priorities. As a result, the number of cases that arrived to the OR on time each day climbed from 54.5% to 98.5% within weeks, and has been sustained for months.

### VA Pittsburgh Healthcare System

Collaborative Rounding was instituted on the inpatient surgery unit. Doctors, nurses, social workers, home healthcare nurses and occasionally physical therapists round together in the morning to review each patient case and agree on a plan of care for the day. Much work was done to identify and overcome barriers to active participation in the rounding. Long-term benefits to collaborative rounding include a reduction in length of stay by ensuring key steps in surgery recovery are started at the right time in patient care and the transition to discharge is completed on time. A form of collaborative rounding has also spread to the two other inpatient units.



First cases on time to the O.R.	
November 2003 (beginning of PPC work)	54.5%
June 2004	98.5%
Average on-time since November 2003	88.6%

Registration within 10 minutes of ACC check-in	
Before Feb 2004, start of PPC work	>10%
Feb-May 2004, average	91.4%

# PRHI Calendar

- Monday, February 21 5:30-7:30 p  
Chronic Care Model Action Group (CCMAG) Centre City Tower, 5th floor  
(Contact: Tania Lyon, tlyon@prhi.org)
- Monday, February 28 8-9 p  
Critical Care Medicine/Emergency Medicine (CCM-ED) Working Group meetings  
Allegheny County Medical Society Offices  
Ridge Road, Northside  
(Contact: Carla Zema, czema@prhi.org)
- Wednesday, March 2 6-8 p  
SPRING CARDIAC FORUM  
Allegheny General Hospital, Magovern Auditorium  
(Contact: Carla Zema, czema@prhi.org)
- Tuesday, March 2 6-9 p  
PPC 101\*, Centre City Tower, 5th floor  
Centre City Tower, 5th floor  
Information Session, PRHI Offices  
Go and See\*, Allegheny General Hospital  
8a-noon  
(\*CEUs available. Contact: Leslie Smith, lsmith@prhi.org)
- Wednesday, March 3 8a-noon  
Go and See\*, Allegheny General Hospital  
Information Session, PRHI Offices  
Centre City Tower, 5th floor  
Go and See\*, Allegheny General Hospital  
8a-noon  
(\*CEUs available. Contact: Leslie Smith, lsmith@prhi.org)

## Contact Us

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*PRHI Executive Summary is also posted monthly at [www.prhi.org](http://www.prhi.org)*  
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