Pittsburgh Regional Healthcare Initiative

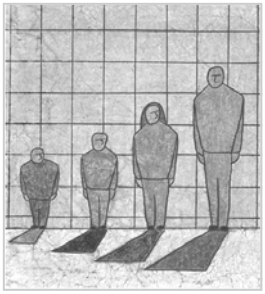
PRHI Executive Summary

Information leads to improvement

UPMC Passavant transforms data into action

As UPMC Passavant's new CEO and President, Teresa G. Petrick noticed a certain emphasis in hospital meetings.

"The financial information was always detailed and complete," said Petrick. "Information about operations and quality—less so."



She posed two questions to her colleagues on the medical staff, the Board and senior management: *How could this hospital develop equally comprehensive information in the areas of quality, operations and finance? How can we track enough of the right kind of information to make sure we're doing what's best for patients and workers?* The answer gave rise to the hospital's unique, real-time quality tool, the UPMC Passavant Dashboard.

To drive a car safely from place to place, drivers need more than just a speedometer. Their dashboards must have easy-to-read fuel gauges, tachometers, engine temperature indicators and so on, that give readings in real-time. A hospital requires information from many sources, too, as close as possible to real time.

Led by Donna Jasko, Vice President of Ancillary Service a coalition from across the hospital developed 22 quality

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JANUARY 2004

Inside:

Institute for Healthcare Improvement Conference

5000 healthcare leaders hear PRHI message

As the keynote speaker at the national conference for the Institute for Healthcare Improvement in New Orleans on December 5, Paul O'Neill challenged the 5000 healthcare leaders in attendance to answer one question: *In terms of health care, what does it mean to be an American?*

Of the $1.4 trillion spent on health care in America, half of it is wasted. We could cut spending by half and improve patient outcomes dramatically, making American health care a beacon to the world. How?

National leadership

As a nation, from the highest levels, we need to do these things:

Institute universal coverage

A just society grants access to basic health care to everyone. "Individuals of means have the responsibility to pay for their own health coverage, and a share for those who cannot pay," said O'Neill.

Create a national standard for capturing health and medical information

A nationally recognized standard is needed for recording every medical encounter a person ever has—from vaccinations to MRIs, from pre-birth to death. Because this information belongs solely to patient, such a system will have to meet tremendous privacy standards. Then, no matter where in the country you need treatment, you can grant the physician access to all or any

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PRHI is a consortium of those who provide, purchase, insure and support health care delivery in Southwestern Pennsylvania. Together, we are working to achieve:

✧ *Zero hospital-acquired infections.* ✧ *Zero medication errors.*

✧ *The world's best patient outcomes in: cardiac surgery; obstetrics; diabetes and depression.*

From page one

UPMC Passavant transforms data into action

indicators for their dashboard. To make sure the picture is complete, certain measurements, like length of stay, are balanced by measuring readmissions. This yin and yang of indicators includes the outcome measures from the PRHI Cardiac Registry.

Low-tech beginnings

At first, information was tracked manually on paper, retrospectively, quarter by quarter. It was "resource intensive" for the people collecting the information. And there was another problem.

"You have to be able to use the data," said Petrick. "If it's months old when you get it, how can you act on it?"

Passavant's IT crew went to work automating the dashboard. Now it is online, where employees and managers all have access to it. Some indicators are updated weekly, some daily, making the information real-time. The dashboard tracks these general categories: quality, safety, financial, satisfaction, human resources, operations and medical staff. A data steward oversees the information in each area.

We had good numbers on patient falls. But we want ZERO falls. So we redefined the term to include ALL falls and near-falls.

Holly Lorenz, RN, MSN
Vice President, Patient Care Services

"The dashboard turns data into information you can act on," says Glenn Hasulak, Passavant's Database Administrator.

Impact on patients

The dashboard tracks information on patient falls and near-falls, handwashing compliance, readmissions, medication errors, lab turnaround times, x-ray, and rehabilitation functional outcome measures.

"We had good numbers on patient falls," said Holly Lorenz, RN, MSN, Vice President of Patient Care Services. "But we want zero falls. So we redefined the term to include ALL falls and near-falls, not just injurious ones."

Leaders made it clear to employees that nobody would be blamed if they reported a fall or near-fall. Employees understood that the information was crucial for improving patient safety.

As expected, reported incidents went up. Like pixels on a screen, these increased reports filled in the picture, enabling leaders to discover key information about when and under what conditions patients were more likely to fall. What had been sketchy information became information they could act on. As reporting has increased, falls and near-falls have decreased.

Passavant's impressive new pavilion wing includes sophisticated bed alarms to help protect patients from falling. The key to fall prevention, however, has been steady reporting and remedy. The hospital did not look to high-tech beds as a "fix," but as an important enhancement to reporting. Technology is the servant, not the master.

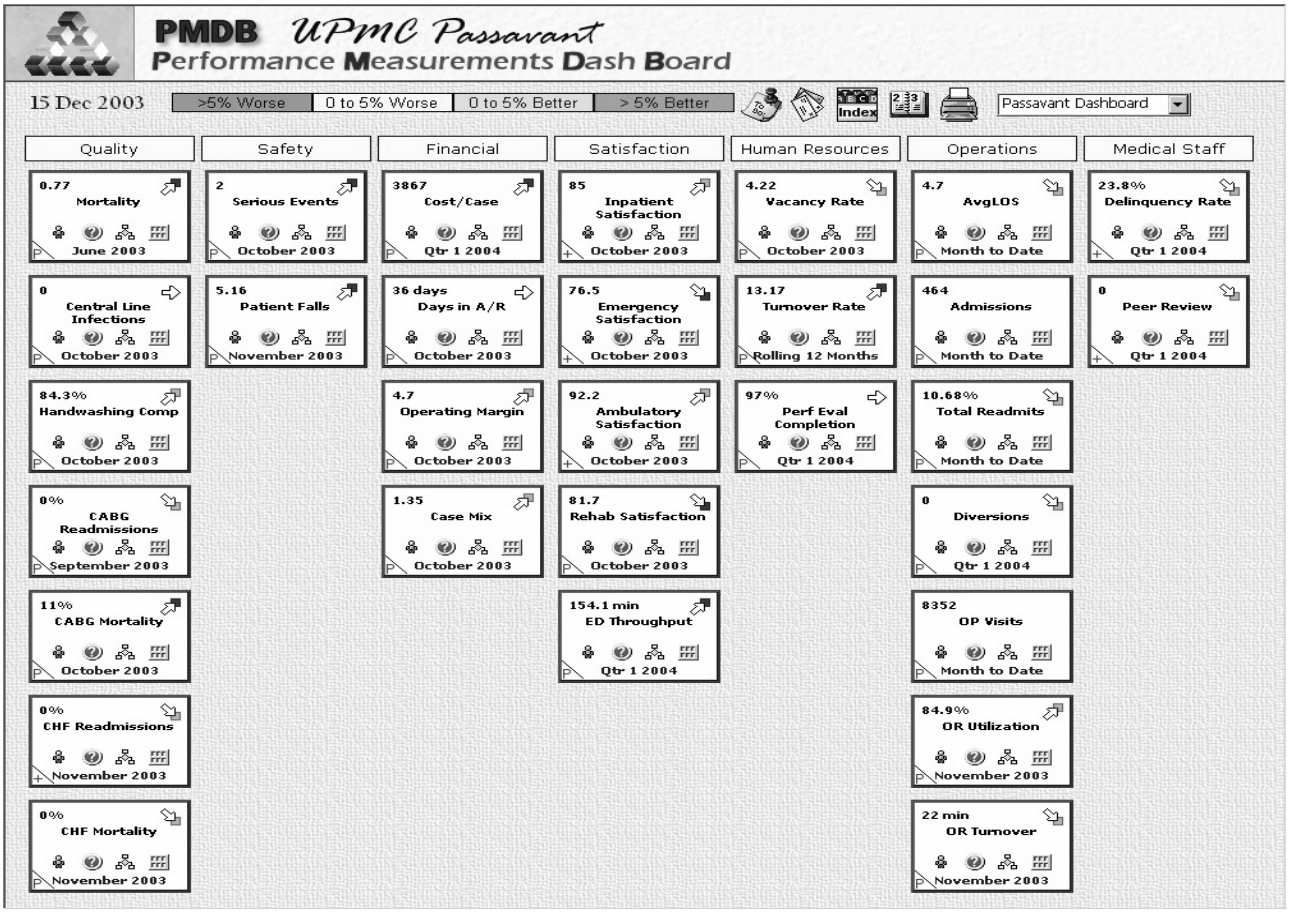
"Reporting every fall and near-fall may make the numbers go up," said Paul O'Neill, CEO of PRHI. "But reporting all falls liberates the leaders to do analyses and figure out how to fix the underlying problem. They aren't collecting data to report to some commission, or even to report to PRHI. They're not putting data in a pile somewhere. These leaders are collecting the information they need to run their enterprise."

Impact on employees

Patients will be safer when the people who take care of them are safer. Dashboard data includes employee turnover and vacancy rates, plus performance evaluation statistics. Development of worker injury rate comparisons will be the next addition to the dashboard.

In fact, employee turnover was among the first problems the dashboard revealed. It was greater than expected, especially during employees' first six months. Petrick called a one-day management retreat to outline the problem and ask for creative strategies to end this resource drain. As a result:

- ✧ All managers are Chief Retention Officers, expected to create a plan for retaining workers and making them feel vested in the institution early on. Respecting the uniqueness of each unit, details of the plan were not specified. Each Chief Retention Officer created a plan unique to his or her area.
- ✧ Senior managers hold breakfasts for new-hires. Then managers



meet individually with new employees monthly for the first three months. Department managers are encouraged to take new employees to lunch.

"The first six months of employment is a crucial time for our new hires," says Gary Mignogna, Vice President of Human Resources. "The breakfasts and luncheons are designed for new employees to give feedback to all levels of the organization on their work experience both positive and negative."

- In addition to the obvious search for people with technical competence, the hiring process now places greater weight on "soft" skills, such as courtesy, integrity and honesty. Subsequent interviews involve peers. It's part of creating a good "fit" between institution and employee.
- The department orientation program was revamped, with greater consistency for the new employee with a preceptor. Focus groups help monitor the adjustment period.

When comparing the first 9 months of FY 2002, with the first 9 months of FY 2003, UPMC Passavant's average monthly employee turnover rate has plummeted from 1.42 to .85 percent. The target rate is the theoretical limit of zero. Since 70% of leaves are due to uncontrollable circumstances, such as medical leave or retirement, the remaining 30% is the target. Mathematically, a rate of .75 employees per month would equate to "zero" turnover.

The dashboard concept has proven so powerful that individual departments are creating their own sub-dashboards to give them more information they can use "on the ground" in each unit. Professional Practice Councils and Unit-based Councils also help disseminate information about what's working throughout the organization.

For now, Passavant's own real-time dashboard is already helping the hospital translate data into information, and into action.

Technology is servant, not master. UPMC Passavant's new pavilion wing features "smart" beds with adjustable alarms to help prevent patient falls. However, fall prevention at Passavant relies more on reporting every fall or near-fall, fixing the reasons, and sharing what is learned across the hospital.

From page one

5000 healthcare leaders hear PRHI message

part of your medical records in a universally understood format.

"Park that information somewhere in cyberspace, with only the patient granting access to it," said O'Neill. "Such a system should not be proprietary."

Reinvent the reimbursement system.

The current system does not work. Billing does not correlate accurately with cost, and reimbursement rates vary irrationally. This cynically complex system does not reflect our nation's best business practices. The current system needs to be scrapped and re-created.

Prejudice the system toward telling the truth about things gone wrong.

The malpractice system is punitive, and drives mistakes underground. We need to create an incident reporting system similar to those in the aviation and nuclear power industries. Under such a system if incidents were reported to the family and the reporting agency within 24 hours, fair awards would be quickly paid. However, practitioners failing to report incidents in a complete and timely way would be subject to treble or quadruple damages. Unless we learn from each other quickly and continuously through such reports, each hospital will have to make each mistake.

> ***"Once you permit your mind to believe in the inevitability of errors, you'll never work on them."***
>
> *Paul H. O'Neill*
>
> *Keynote address, IHI conference*

Local leadership

Courageous leaders in institutions across the region need to do these three things.

1. Remove excuses

When excuses masquerade as reasons for an error, progress can't be made. Consider:

- *It was an accident.* An *accident* implies that an error was unpreventable, and therefore not worth investigating. Calling it an *incident* allows us to work on it.
- *It can't be done.* "Once you permit your mind to believe in the inevitability of errors," said O'Neill, "you'll never work on them."
- *It isn't in the budget.* When the root cause of a problem surfaces, it's important to fix it right away, even if it costs money. It shows confidence in the workers, and it's an investment that pays off. "It really works."
- *We can only eliminate "preventable" infections.* Start with the premise that any infection that the patient didn't come in with is preventable, and work from there. Accepting some hospital-acquired infections as "inevitable" keeps you from working to prevent them.

2. Embrace the theoretical limit of human performance

Excellence is not an accident. It's hard to find an institution achieving high goals that they haven't overtly aspired to. Pick a goal that is so ideal that nobody's done it yet. Progressing toward the best imaginable goal is not easy: if it were, it would have been done by now.

Two of PRHI's goals demonstrate what it means to aspire to the theoretical limit of human performance:

Zero medication errors

Zero nosocomial infections

3. Make sure everyone can answer these questions every day:

- *Are you treated with respect and dignity by everyone every day, and do you treat others the same way?*
- *Are you given the tools, education and training to do your job well, and does your job add meaning to your life?*
- *Did somebody tell you you're doing a good job?*

Respect and dignity mean that physicians write legibly because a person at the other end must read it. Respect and dignity mean an end to workplace injury. Alcoa remains the safest workplace in the world, with a lost work-day rate of .12 days per year. Yet the average American hospital has a lost work-day rate of 3.3 days per year—27 times higher than at Alcoa, where workers deal with molten aluminum.

Workers must not be hurt ***physically*** on the job; ***emotionally*** by being allowed to work in error-prone systems; or ***professionally*** by being discouraged from reporting errors and near-misses. Next to the patient, the worker must be the focus of workplace improvement.

This article includes highlights from Mr. O'Neill's keynote address, delivered at the IHI Conference December 5. The tape of Mr. O'Neill's address is available for checkout from the PRHI library (contact Leslie Smith, 412-535-0292, ext. 102.)

The Courage to Change

At its national conference in New Orleans on December 4, the Institute for Healthcare Improvement (IHI) offered these seven challenges to healthcare providers and institutions. They comprise promising hypotheses—some tested but none rigorously studied. If you decide to take on one or more of them, you may join other courageous colleagues in an online community hosted by IHI. To join, visit *www.qualityhealthcare.org*.

1. ***Give medical records to patients … no cost, no fetters, no conditions***.
2. ***Put care protocols in patients' hands***. *Download guidelines at www.icsi.org/index.asp.*
3. ***Test effective patient communication with 10 patients, using the FACCT ASK agreement***. *Available at www.facct.org/facct/site/facct/facct/home and click on "FACCT's Clearinghouse."*
4. ***Enroll 200 patients in "How's Your Health?" online assessment tool***. *Visit www.howsyourhealth.org/. To enroll, e-mail howsyourhealth@ihi.org.*
5. ***Put patients and families on redesign teams as co-chairs***. *If you already do, you are urged to join the Patient Centered Challenges discussion group at www.qualityhealthcare.org and share your experience.*
6. ***Open visiting in ICUs, EDs, and recovery rooms***. *Visit Qualityhealthcare.org to read more about open visiting in the systems that have done it.*
7. ***Implement shared decision-making processes for conditions such as prostatic hypertrophy and breast cancer***. *Visit the Foundation for Informed Medical Decision Making at www.fimdm.org/index.html.*

Corporate partnership

Mellon steps up employee information: PRHI can help

Visitors to the new PRHI website will notice a new section for healthcare consumers that includes two new documents: "Tips for Consumers," and the "Diabetes and Depression Resource Guide," featuring information about where to go for help in the Pittsburgh region.

Pittsburgh-based Mellon Financial Corporation is, among other things, the fourth largest provider of human resources consulting and administration in the country. Like more and more enlightened companies, Mellon recognizes that prevention and ready access to health information are keys to healthy and productive employees.

Mellon has been a partner since PRHI's inception, and its Chairman and CEO, Martin McGuinn, has played a long-standing leadership role. So we were pleased when Mellon recently decided to highlight PRHI's two consumer information pieces on its website.

At ***www.mellon.com***, employees and healthcare consumers nationwide will be guided through a special "In the Spotlight" section to tips for consumers. Those in the Pittsburgh region will be able to print out the Diabetes and Depression Resource Guide to find local care for those chronic diseases.

"Putting all this information on our website will showcase for employees and others throughout the country our liaison with PRHI," said Diane Doyle-Love, title.

Tips for Consumers and the Diabetes and Depression Resource Guide may be found at ***www.prhi.org/wpapers.cfm***. If your company would like to help disseminate this information, please contact Naida Grunden, PRHI Communications Director, at 412-535-0292, ext 114, or ***ngrunden@prhi.org***.

Institute for Safe Medication Practices (ISMP)

PRHI med safety partners receive Cheers Award

The members of the Pittsburgh Regional Healthcare Initiative received one of the national *Cheers* awards from the Institute for Safe Medication Practices (ISMP) for their collaborative efforts to prevent medication errors. The 6th Annual Cheers Awards were given on Tuesday, December 9, 2003 during the American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting in New Orleans, Louisiana.

The *Cheers Awards* honor individuals, organizations, and companies that have set a "superlative standard of excellence for others to follow in the prevention of medication errors and adverse drug events."

Through PRHI, 44 healthcare organizations in Southwestern Pennsylvania seek to demonstrate that substantial, continuous, measurable improvement in health care quality is possible across an entire region. PRHI's endorsement of the United States Pharmacopeia's (USP) MEDMARX* enabled the region to examine medication errors by hospital and region while comparing to national aggregate data.

"This award honors all the nurses, pharmacists and others in the trenches who have been doing the work for many, many years," said Heidi Norman, PRHI Patient Safety Team Leader, upon receiving the award. "We know that we've only reached the tip of the iceberg in terms of the number of medication errors reported and fixed to root cause. But even as we acknowledge just how much farther we have to go, receiving this recognition gives us the energy to continue."

MedMARx Index for Categorizing Medication Errors

I	Error occurred that may have contributed to or resulted in patient's death
H	Error required intervention necessary to sustain life
G	Error contributed to or resulted in permanent harm
F	Error may have resulted in temporary harm, required initial or prolonged hospitalization
E	Error may have resulted in temporary harm or required intervention
D	Error reached patient, required monitoring or intervention to preclude harm
C	Error reached the patient, did not cause harm
B	Error occurred, did not reach the patient
A	Circumstances or events could cause error

Region-wide use in SWPA

Currently, 92% of PRHI hospitals use MEDMARX . In fact, Pittsburgh's reported errors account for 5% of all reports in the national MEDMARX database, a statistically higher number of errors compared to the nation.

PRHI's medication safety program consists mostly of volunteers from participating hospitals who work in small Regional Working Groups, and five medication safety researchers and a patient safety evaluation team from the University of Pittsburgh School of Pharmacy and Purdue University. (The latter are funded through a grant from the Agency for Healthcare Research and Quality [AHRQ]).

Data collection (e.g., MEDMARX regional and national data, evaluation surveys) is handled by the Data Coordinating Center of the University of Pittsburgh School of Pharmacy. The AHRQ-funded patient safety team is evaluating the effectiveness of reporting systems and hospital cultures for patient safety within PRHI. As a result, the Medication Safety Advisory Committee not only analyzes medication error data, but develops and implements region-wide targeted interventions to improve safety.

Four drugs involved in 45% of errors

Based on review last year's medication error reports by PRHI partners, four drug classes (antibiotics, glycemic agents, anticoagulants and opioids) were involved in nearly 45% of all errors resulting in serious harm (e.g., MEDMARX category "E-I" errors). Using an evidence-based model and a survey of best practices across the nation and within Pittsburgh, PRHI has developed region-wide guidelines for safe handwriting practices, proper use of fentanyl transdermal patch and safe practices for patient controlled analgesia (PCA).

PRHI hospitals receive quarterly MEDMARX reports that describe their reported errors and trends over time. The Regional Working Groups provide a forum for regional learning about medication patient safety in each hospital. Regional compliance with safe handwriting practices has increased from 43% to 65% at the first quarter of data collection. Regional compliance with safe PCA practices is progressing (see article, page 1). Future plans include region-wide safety programs for insulin use, anticoagulation and standards for surgical prophylaxis.

**MEDMARX standardizes medication error reporting according to the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) classification system.*

Also of note . . .

Dr. Shannon one of "12 who made a difference" in region's health care

In its December 30 edition, the *Pittsburgh Post-Gazette* listed 12 people in the Pittsburgh region who made a difference in healthcare in 2003. Among their picks was Dr. Richard Shannon, Professor and Chairman, Department of Medicine at Allegheny General Hospital. Dr. Shannon was selected for "doing the right thing" through forthright public disclosures during a bronchoscope-related *Pseudomonas* outbreak.

PCA conference on human factors

On November 19, 91 people attended a PRHI-sponsored conference on how human factors influence errors with patient-controlled analgesia (PCA) pumps. John Gosbee, MS, MD, from the Department of Veterans Affairs, described how human factors engineering and testing methods can help designers and healthcare workers see through the "unintended magic" (problems that are introduced with improvements). Attendees included 37 nurses, 28 pharmacists, 6 physicians, and 20 others including medical device representatives, purchasers, insurers, patient safety and quality improvement specialists and PRHI staffers. In addition to 28 hospitals, 5 other institutions were represented including device manufacturers Abbot, Deltec and Alaris, and insurer Highmark. Documents by Dr. Gosbee and others are available in *.pdf* format. Contact Stacie Amorose, ***samorose@prhi.org***, 412-535-0292, ext 106.

Perfecting Patient Care site highlighted

The topic for the December 2003 edition of *Branches*, the newsletter of the Jewish Healthcare Foundation, is the Perfecting Patient Care site for treating diabetes and depression in a primary care setting. The work is progressing under the guidance of JHF staffer, Fran Sheedy-Bost, at the UPMC St. Margaret Lawrenceville Family Health Center. Find the newsletter at ***www.jhf.org/reports/branches.***

Nurses publish quality improvement article

The Journal of Nursing Administration, November 2003, includes the article, *Driving Improvement in Patient Care: Lessons from Toyota*, by:

- ✧Debra N. Thompson, MSN, RN, PRHI Team Leader
- ✧Gail A. Wolf, DSN, RN, FAAN, Senior Vice President and Chief Nursing Officer, UPMC Health System
- ✧Steven Spear, DBA, Assistant Professor, Harvard Business School

The article describes today's complex nursing environment, where nurses attempt to do more with less while grappling with faulty, error-prone systems. It also describes efforts to create greater value with scarce resources, and fix broken systems that compromise the quality of care by applying the principles of the Toyota Production System to health care. It is available online to OVID subscribers. To request a reprint, contact Naida Grunden, ***ngrunden@prhi.org***, 412-535-0292, ext. 114.

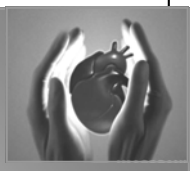
PRHI website updated

Our website, www.prhi.org, has been redesigned to include up-to-date information, geared to specific audiences. Your feedback is welcome: Contact Naida Grunden, ***ngrunden@prhi.org***.

Not getting your PRHI meeting notices via e-mail?

Your hospital IT system could mistakenly have PRHI on its junk-mail list ! We recommend that you ask them to remove PRHI from the list of blocked addresses.

MARK YOUR CALENDAR



Cardiac Forum
Winter 2004
Highlighting the Efforts of Anesthesiology in CABG Surgery

Tuesday February 10, 2004
Registration: 5:30 PM, Forum: 6 – 8 PM
UPMC Shadyside West Wing Auditorium
5230 Centre Avenue
Pittsburgh, PA 15232

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New year: new web page!
Check it out at:
www.prhi.org

Calendar, February 2004

Tuesday, February 3	Infection Control Advisory Committee PRHI Offices, 21st floor, Centre City Tower	8–10 a
	ppC 101* Montour Room, 5th Floor, Centre City Tower	8 a–5 p
	Information Session* PRHI Offices	6–9 p
Wednesday, February 4	*Go and See* Session* Allegheny General Hospital	8 a–noon
Monday, February 7	Diabetes & Depression Working Group Montour Room, 5th Floor, Centre City Tower	5–7 pm
Tuesday February 10	PRHI Winter Cardiac Forum UPMC Shadyside West Wing Auditorium 5230 Centre Avenue	5:30–8 pm
	Medication Safety Advisory Committee PRHI Offices	3–5 p
	Obstetrical Working Group PRHI Offices	5:30–7p
Tuesday, February 17	*Oh! No!* Session* Location TBA	8a–noon

CEUs and/or CMEs offered. For further information or to enroll, call Patience Celender, 412-535-0292, ext. 100

Contact Us

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