PRHI Executive Summary

We will reduce 2/3 of pharmacy order errors by December 31.

—Tony Lombardi, CEO, Monongahela Valley Hospital, March 6 LOG meeting

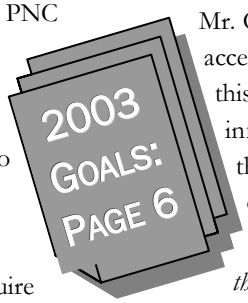
March 2003

Inside this issue:

This is the year; this is the place

Leadership Obligation Group sets 2003 goals

The March 6 meeting of the Leadership Obligation Group (LOG) set the crucial 2003 agenda for PRHI. Mellon Bank CEO Martin McGuinn, who has served as LOG co-chair alongside PNC Bank's James Rohr, announced that Paul O'Neill would resume the LOG chairmanship—a position he held until his departure for Washington two years ago.



Here, now

Ambitious initiatives like PRHI require some start-up time to ignite major improvements. This year, PRHI needs to make its first truly quantum leap in improvements. Quality improvement in other industries have shown that when leaders decide to change and give resources, improvement can come fast—***40% to 50% gains toward the goal of zero every year.***

Mr. O'Neill restated his belief that if PRHI can accelerate progress toward perfecting patient care this year, Southwestern Pennsylvania can influence decisions nationally, demonstrating to the whole country that American health care can be better for everyone.

Together our region can *wring the value out of the resources already in the system.* Although it won't be easy PRHI partners can increase quality and decrease cost by 50%—not through traditional cost-cutting, but through purposeful improvement.

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Reaching for pre-disaster transformation

Recent headlines mourned the death of Jésica Santillán, a 17-year-old patient at the respected heart-lung bypass unit of Duke University Medical Center. Jésica died as the result of a fundamental medical error: she received a heart and lungs from a donor of a different blood type.

In the wake of Jésica 's death, a question arises: will Duke use this tragedy as an opportunity to find out exactly how this cascade of errors led to disaster?

In September 2002, James Conway, COO of the Dana-Farber Cancer Institute, inspired PRHI leaders with the dramatic story of how that institution began to transform in patient safety and quality, a transformation that continues. Its genesis came through institution-wide reflection following the death of Betsy Lehman, a beloved health reporter for the Boston *Globe.* Under treatment for breast cancer, Betsy died of a massive chemotherapy overdose.

As a result of the ensuing institution-wide self-examination, healthcare workers at Dana-Farber now routinely report errors and problems and fix them. Patients serve on quality committees alongside healthcare providers and others. The hospital's error rates have plummeted, while the quality of care continues to improve.

If investigators at Duke ask the key question—not who, but ***why***—they can begin to find the root causes of each breakdown in the system that allowed the blood-typing error to slip through. They can fix the root causes. Most important, Duke can seize the international, headline-grabbing "sentinel event" involving Jésica Santillán, as Dana-Farber did with Betsy Lehman, as a rallying cry to press forward with profound systemic change.

Some forward-looking hospital leaders in Pittsburgh have begun the quest to find, report and remedy errors in new ways. At Allegheny General Hospital, physician leaders held a press conference and shared information widely among PRHI partners when a problem with bronchoscopes threatened patient health.

Leader declarations

Most dramatic improvement efforts, such as those on the Perfecting Patient Care Learning Lines,

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Pre-disaster transformation — from page 1

are done by the workers closest to the action. Yet the importance of leadership—as a precondition and then as non-delegated, continuous involvement—can't be overstated.

> ***NONE OF OUR EMPLOYEES SHOULD EVER HAVE TO BE SUBJECTED TO A WORK ENVIRONMENT THAT TOLERATES MEDICATION ERRORS***
>
> ***—CLIFF ORME LIFECARE HOSPITALS OF PITTSBURGH***

Transformation is possible when a leader steps out to proclaim that, from this point forward, things will be different. Patients in the institution will not be subject to medication errors and will not contract infections while they are in the hospital. Leaders must also acknowledge the devastating effects of mistakes on hard-working, well intentioned caregivers.

Change in the air

Two years ago, LifeCare Hospitals of Pittsburgh instituted the "error-free medication stay" as a scorecard indicator. However LifeCare CEO, Cliff Orme, was dissatisfied with the progress.

"We got better at reporting medication errors, and we could see the magnitude of the problem," said Orme, "but I didn't feel we were any closer to eliminating them."

In response to Orme's request, PRHI field managers helped LifeCare simulate a real-time reporting system using MedMARx. One February afternoon, Orme led a group—consisting of team coordinators, nurse educators, administrators, and PRHI staffers—as they considered what it would be like to capture and review every error every day. The team began to see how it could be done. Their optimism prompted LifeCare's decision to institute real-time medication error reporting and resolution.

"The simulation was enlightening for all of us," says Orme. "It helped us realize just how complex our medication process is. We now have an idea of what it will take to fix these errors before we have a chance to repeat them."

Orme reported back to the employees, stating: **No one who works here should ever have to be subjected to a work environment that tolerates medication errors**.

He announced that LifeCare will institute real-time medication error reporting and pledged to begin fixing errors within 24 hours.

Eliminating abbreviations

As part of the drive to reduce medication errors, LifeCare adopted the policy that prohibits physician orders that include dangerous abbreviations. The message was clear: **Dangerous abbreviations are unacceptable. They compromise the health and safety of our patients.**

In his statement to employees, Orme acknowledged the awkwardness of confronting physicians.

"I hate to confront people just as much as the next person," he said. "I empathize with nurses who must tell the physician, 'I'm sorry, Dr. ____, I need you to clarify this order because it contains a dangerous abbreviation.'"

The statement promised that Orme—along with Dr. Sotos, chief of the medical staff and several other physicians, by name—would back up nurses and pharmacists refusing to accept the abbreviations.

Orme followed the declarations with an article in the employee newsletter, reprinted on the facing page.

Learning opportunities

LifeCare is an licensed acute care hospital that specializes in the care of protocol-resistant patients. The facility administers over 70,000 medication doses each month. LifeCare will provide an unique laboratory where other PRHI partners can come to learn. Orme has pledged that once real-time reporting begins, in tandem with a rapid way for everyone in the organization to solve problems to root cause, PRHI partners will be invited to observe. As the learning proliferates, medication errors can be reduced throughout the region.

The key: leadership

PRHI offers resources to partners interested in transforming their institutions without waiting for a catastrophe on the scale of a Jésica Santillán or a Betsy Lehman. As a region we can begin now to tackle complex systems, and the problems and errors they engender. The key will be leadership.

Transformation: what might it look like?

One Error is One Error Too Many

From LifeCare Employee Bulletin, *Grapevine*, March 3, 2003

Last month I made two important declarations. First, our *employees should not be subjected to a work environment that tolerates med errors*. And, second, at LifeCare *using dangerous abbreviations is unacceptable*. Making these statements is the easy part. Making sure what I said is put into practice will be the challenge. LifeCare is committed to improve the way we care for people's health. The only way I know to live our mission statement is to fundamentally change the way we conduct business.

Traditionally, hospitals have tolerated systems that allow for errors to occur. Even at LifeCare, we are behind the times, compared to industry, in addressing breaches in quality. The public is outraged. Far too many people develop infections in hospitals or suffer adverse drug reactions because healthcare leaders fail to put in place systems to eliminate the causes of errors.

As CEO of LifeCare Hospitals of Pittsburgh, I am committed to implement a real-time med error reporting system. We will find and eliminate causes of errors until we get to zero. That is the goal. Sure, we can hide behind statistics that show our performance is better than national averages. But this is not right. If you or your loved one suffered the consequence of even a single mistake you would say, "One error is one error too many."

Representatives of the Pittsburgh Regional Healthcare Initiative (PRHI) tell us that even though we are reporting more med errors than we used to, we are still dramatically underreporting. They believe if we reported every error that we would have roughly 40 errors a day! Knowing this, if I don't act swiftly to address this problem, I am negligent in my responsibilities to our patients. The only reason I can sleep at night is now I know we have a tool to help us identify and eliminate the causes of these med errors. We have a program called MedMAR$_x$. Soon I will be able to see, on a daily basis, med errors as they occur. I will also be able to determine what has been done ***today*** to make sure we don't repeat the same mistake ***tomorrow***. This program will get us headed in the right direction.

Please, if you commit an error, report it so that we can implement systems to help you and your coworkers reduce the probability of making the same mistake twice. Then, hopefully, you can leave at the end of your shift knowing you have done everything in your power to protect your patients. We have a lot of work ahead of us.

—Cliff Orme, CEO

LifeCare Hospitals of Pittsburgh

OTHER HOSPITAL LEADERS PLEDGE AMBITIOUS TARGETS FOR 2003.

SEE PAGE 6.

PRHI Cardiac Forum

When: **April 26, 2002**
8 am to 1 pm

Where: **Passavant Hospital, Babcock Boulevard, North Hills**
Assembly Room

Who: **Cardiothoracic surgeons, cardiologists, nurses, perfusionists, data analysts, and cardiac program administrators from the 6-county region and Cardiac Working Group members**

The cardiac care centers in our region have worked diligently to submit the first registry data, with the target of dramatically improving patient outcomes.
Come share the results and help guide the future of cardiac surgery in Southwestern Pennsylvania.

To register, please call Helen Adamasko 412-535-0202, ext 100 or e-mail her at hadamasko@prhi.org

Learning Lines

Tackling the awkward conversation

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"Wash your hands, please."

Talk about an awkward social situation. It's well known that failure of hand hygiene can put patients at risk to acquire infections. Yet healthcare workers usually hesitate to call out hand hygiene lapses on the part of their fellow healthcare workers. A goal of the Learning Line at the Veteran's Administration Pittsburgh Healthcare System (VAPHS*) is to make hand hygiene a 100% habit for every healthcare interaction with patients.

Surrounding the problem

Healthcare workers at all levels know that hand hygiene is important to reduce the spread of infection. Yet observational studies by the renowned Swiss infection control researcher, Didier Pittet, MD, show only a 10-30% compliance rate in practice.

THE FIRST TIME A PATIENT REMINDS YOU TO WASH YOUR HANDS, YOU'LL NEVER FORGET IT.

—PHYSICIAN

How has the VAPHS Learning Line on 4 West begun to create a culture that reinforces hand hygiene as a habit?

"We're surrounding the problem," says Ellesha Miller, the Perfecting Patient Care Team Leader at VAPHS. "We're thinking systematically about how to remove the barriers that keep workers from performing hand hygiene every time."

Keeping it simple: keeping it real

After reviewing observational data, the Chiefs of Staff and Surgery wrestled with the challenge of boosting hand hygiene. They concluded that policies needed to support the habits. Their new rule required 100% hand hygiene compliance upon entry and exit from a patient's room.

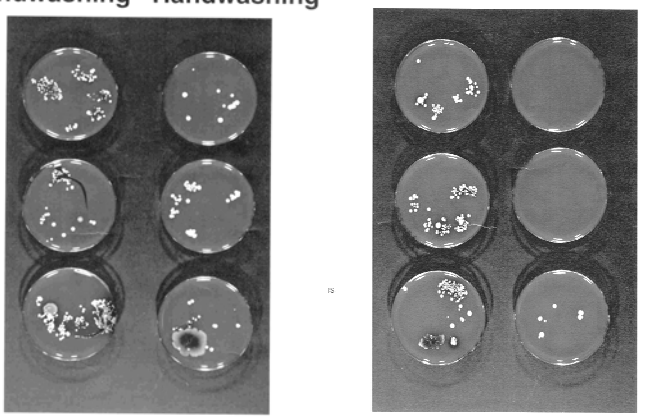
As all healthcare providers know, rules are one thing.

To support the rule, alcohol rub dispensers were installed at each patient's door. Alcohol rub is recommended by the CDC and may be superior to hand-washing in certain situations. The illustration at right shows a poster displayed prominently at the VAPHS. This key visual cue demonstrates to workers how well the alcohol rub works. The type used at the VA contains moisturizers, so it use helps eliminate skin dryness, while reducing the time required for hand hygiene.

Ellesha Miller followed up with 4 West staffers conducting continuing training about the risks and benefits of hand hygiene.

"We don't talk so much about policies," says Miller, "but more about what you need to do to protect the patient. When you address the problem in real life, people get it much more quickly. We ask people to sanitize their hands on entry and exit of all rooms, to establish the habit."

Similar, consistent rules were applied to gowning and gloving. To support the rules, new supply procedures ensured that comfortable, properly fitting gloves and gowns were always available when and where needed, in the quantity needed. In one instance, a question came up about gowning: when entering a



Visual cues are key. Posters are installed in staff areas in 4 West show petri dishes created on-site from clinicians' hands. The poster demonstrates the superiority of hand sanitizing as opposed to hand washing alone.

**The VAPHS Learning Line is run in conjunction with the Centers for Disease Control and Prevention (CDC)*

These signs remind patients and workers alike that hand hygiene is a 100% requirement.

patient's room for an encounter that would not require contact—such as saying, "Good Morning," or asking a question—would it be necessary to gown?

To deal with this eventuality, the team taped off a one-foot-square floor area just inside the room. This unequivocal visual cue tells employees that they may enter but may not go past the line without gowning (see illustration, this page).

Scripting that awkward conversation

"The traditional occupational hierarchy of a hospital creates discomfort for people who want to remind others about hand hygiene," says Miller. "We've been able to create an environment in 4 West that is spreading throughout the hospital. A person's job title no longer gets in the way of doing the right thing for patients. I have seen nurses reminding Chief Residents to sanitize their hands."

How did they do it? Miller gave staff time and training to come up with a prepared script to use when they witnessed a lack of precaution compliance. Then Miller and others began using the script themselves, as a signal to others that it was safe—and expected—for them to do so.

Creating what Miller calls a "global culture change" also involves the patients. Signs were designed by a team from patient care services, decorating, housekeeping and others to inform patients of their right to be treated with clean hands. Large, prominent signs urge patients to speak out if they have questions.

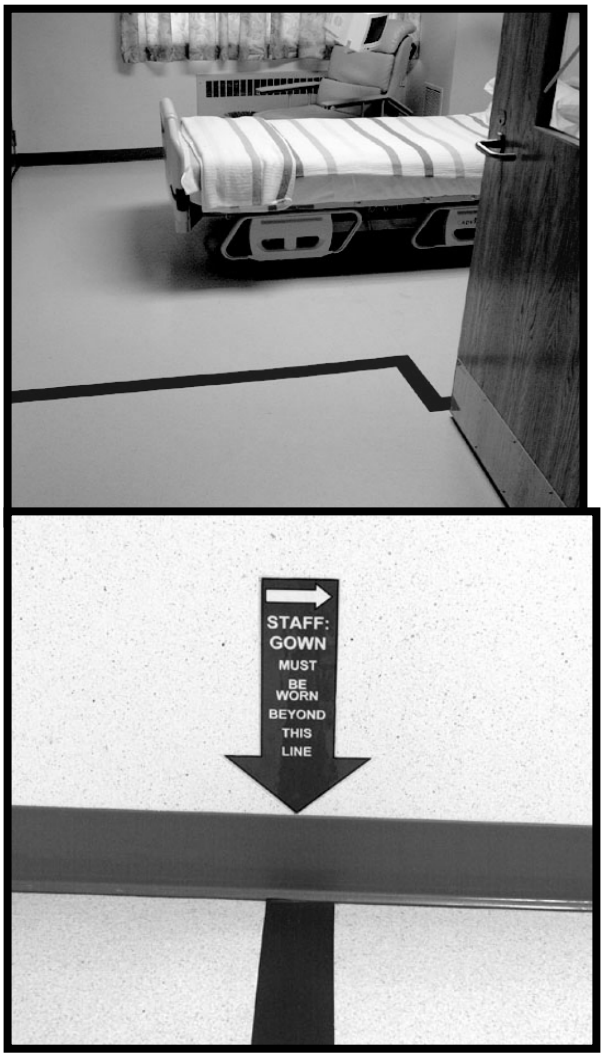
Miller recounts, "One doctor tells his students and co-workers about the time a patient stopped him. He says, 'The first time a patient reminds you to wash your hands, you'll never forget it.'

"If a neighbor runs a stop sign in your neighborhood, you'll probably have a talk with him or her. Skipping hand hygiene is so very serious for patients that we want the same instinctual reaction when people see hand hygiene violations," says Miller. "Nobody is out to assess blame, but to let everyone know what the hospital rules are. It's each person's responsibility to perform hand hygiene, and to encourage others to do likewise."

Preliminary results: encouraging

Dr. Pittet's research suggests that when hand hygiene compliance improves from just 50% to 75%, the rate of infection transmittal drops by half. Initial results at the VA, while not definitive, do show improvement.

Improving hand hygiene stops the transmission of harmful bacteria, reducing the potential for colonization and infection. Various problems, from lack of gloves to lack of time, prevent well intentioned workers from doing the right thing. Addressing both the physical and psychological factors that cause workers to take hygiene short-cuts will protect both the healthcare worker and patient.



Exactly at what point do I need to gown? Visual cues at the VAPHS leave no doubt.

Continued from page 1

Leadership Obligation Group sets 2003 goals

> ***WE NEED TO GET BEYOND THE NOTION THAT EXCELLENCE COSTS. IT'S THE LACK OF EXCELLENCE THAT COSTS***
>
> ***—PAUL O'NEILL***

Safety for workers and patients

One way leadership demonstrates that it "means it" is by taking steps to keep people from being hurt at work. According to December's Bureau of Labor Statistics report, the nation's hospitals suffer 3.3 lost work days per 200,000 hours worked. By contrast, Alcoa (140,000 employees in 36 countries) has just 0.15 lost work days. In both patient and safety, excellence must become a habit.

Meaning in reimbursement, reporting

Reimbursement systems have become complex and meaningless. We must restore integrity to billing systems.

People need a reason to report errors in a very timely fashion. We need to transfer learning faster, not one thing at a time.

"This is about caring for the American people," said Mr. O'Neill. "Sharing information is pre-competitive."

Finding a baseline, pushing ahead

Establishing a baseline—learning where we are today—is key. Finding the baseline does not mean finding fault. Progress can happen quickly when leaders are out among the people doing the work, helping them solve problems.

Many of these approaches to improvement are no-cost, yet the rewards are enormous. We must get beyond the notion that excellence costs. In fact, it's the lack of excellence that costs.

When goals are clear and resources are allocated, bold improvements will come quickly. PRHI must push toward 40-50% annual improvement on the way to its goals.

Listening to concerns; inciting progress

Hospital CEOs face inordinate financial and regulatory pressures, which can complicate the quest for improvement. However, as one hospital CEO noted, banks and other entities face much more regulation.

"With five retirees for every active employee, we have had to find new ways to be efficient," said Roy Dorrance of US Steel. "We in corporate America know that quality management works."

Chairman McGuinn challenged the group. "I'm thinking of asking our insurers to use only the hospitals that show improvement," he said.

"Our experiment here in Southwestern Pennsylvania can demonstrate to the whole country that it means something to be an American," Mr. O'Neill said. "Our health will be better, not because of random events, but because of the purposeful improvement we make together."

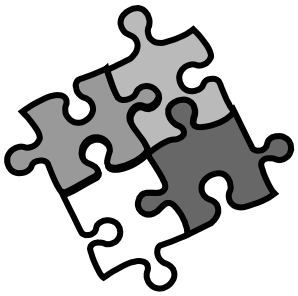
PRHI Goals

- **Zero medication errors**
- **Zero hospital-acquired infections**
- **The world's best patient outcomes in cardiac surgery; hip and knee replacement surgery; maternal and child outcomes, diabetes and depression.**

Targets for 2003

Where system improvement is taking place in earnest, improvements of 40-50% toward the goal can be expected. As PRHI partners head toward the "zero" goals, the consortium's targets for 2003 are:

- Eliminate CLABs in ICU's; reduce CLABs outside ICUs, MRSA, others by 50%.
- Report all errors daily and eliminate 50% of them.
- Reduce in-hospital mortality following CABG surgery by 50%.
- Share every major event or learning regionally as soon as possible.



Individual hospitals pledge

PRHI partners are being asked to submit their own targets for 2003. Letters and scorecards are en route to hospital leaders. Already, some have publicly disclosed their goals.

- Monongahela Valley: reduce pharmacy order errors by 2/3; bring two surgical infection rates to zero
- Lifecare Hospitals: real-time reporting of 100% of medication errors
- *Your hospital's name here*

Real-time data reporting

Errors 4 and 5 from the "Top 11"

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Third in a series

Last summer, members of the Regional Working Group on medication errors (practitioners from the region's 39 hospitals) considered this question: ***Of the medication errors brought to your attention in the past year, which ones provided the richest learning opportunities for the region?*** The group defined 11 such errors for sharing widely.

Based on the information from this Working Group, PRHI Administrative Manager, Annette Mich, formatted these errors as they would appear in a complete MedMARx daily report. Identifying data were removed, and dates changed.

Should your hospital desire more information about how to deploy MedMARx or another electronic medication error reporting system to its fullest capability, please contact Annette Mich. ☙

#4 and #5 of the Top 11

Presented in MedMARx custom search format

Data reflect real events between 2001-02, but have been de-identified for regional learning

Date of error	Date record was entered	Description of error	Root cause analysis summary*	Action taken detail	Location of error detail
#4 8/15/2002	8/21/2002	A pharmacy order entry discrepancy was reported to the Pharmacy by a RN. Allegedly a Percocet order was not entered from a preprinted order sheet. All other medications on the sheet were profiled correctly. It was soon determined that the Percocet order was added to the sheet after it had been faxed to the Pharmacy	Proper procedure was not followed by the ordering physician. Even though the order was stamped "faxed," the Percocet entry was added to the sheet. The Pharmacy was not verbally notified of this change and did not catch the alteration	The issue was discussed at the following committees: Med Error, P&T, Med Exec, Med Quality and Performance Improvement. Educational e-mails have been sent. A poster campaign is under way. Med Error reports are completed and employees are notified with each incident.	
#5 8/15/2002	8/21/2002	The current labeling process increases the potential for error by pharmacy and nursing staff in the dispensing and administration of cytoxic agents to the patient	The label does not include the necessary information for nursing and pharmacy staff double-checks before patient administration. The label does not fulfill cytoxic labeling requirements of regulatory agencies and American Society of Health System Pharmacists	Label revised: Pharmacy team standardized the cytoxic agents in the formulary to list by generic name and provided concentration of each cytotoxic agent for inclusion in the label. The Information Systems Team programmed the automatic dose calculation and reformatted the label to include added information. Follow-up included tracking errors made in dispensing and administration and staff feedback.	

* *This portion of the MedMARx report sometimes causes confusion. A "Root Cause Analysis" in a hospital setting is ordinarily a detailed, lengthy report published at the end of a months-long investigation into a sentinel event. For purposes of MedMARx reporting, it is a simple analysis of what went wrong, rendered as close as possible to the time the problem occurred. The terminology should not discourage those closest to the problem from describing what happened.*

Calendar, April 2003

Tuesday, April 1
Infection Control Advisory Committee, PRHI Offices 8-10 am
Tuesday, April 8
Medication Administration Advisory Committee, PRHI Offices 3-5 pm
Thursday, April 10
Buying Healthcare Value Committee, JHF Offices, 23rd floor 2:30-4 pm
Friday, April 11
PRHI Co-Chairs Meeting, PRHI Offices 11:30 am-1 pm
Tuesday, April 15
Board of Directors Meeting, JHF Offices, 23rd floor 4 pm
Perfecting Patient Care (PPC) Information Session – PRHI Offices 6-9pm
Wednesday, April 16
Hospital Learning Line visit – West Penn Hospital 8am-noon
Clinical Advisory Committee – (location TBA) 6-8pm
Monday, April 21
Chronic Care Summit
(Depression, Diabetes) Centre City Tower, 5th Floor 4-7 pm
Saturday, April 26
Cardiac Forum, Passavant Hospital 8 am-1 pm

For further information call Helen Adamasko, 412-535-0292, ext. 100

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PRHI Executive Summary is also posted monthly at **www.prhi.org**

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