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 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.
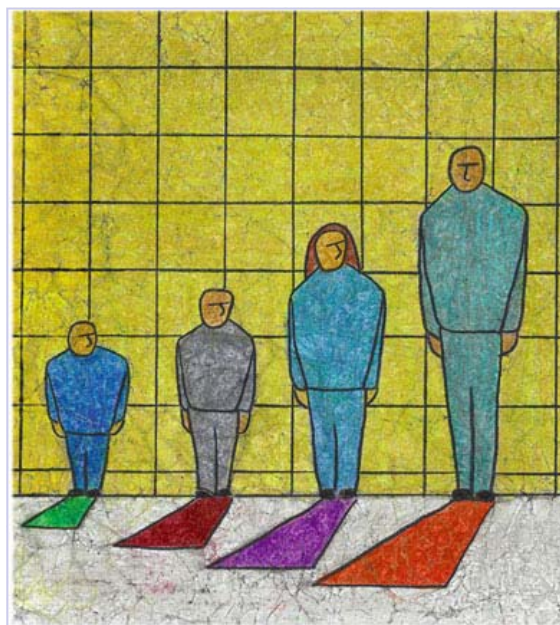
Low-tech beginnings

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.

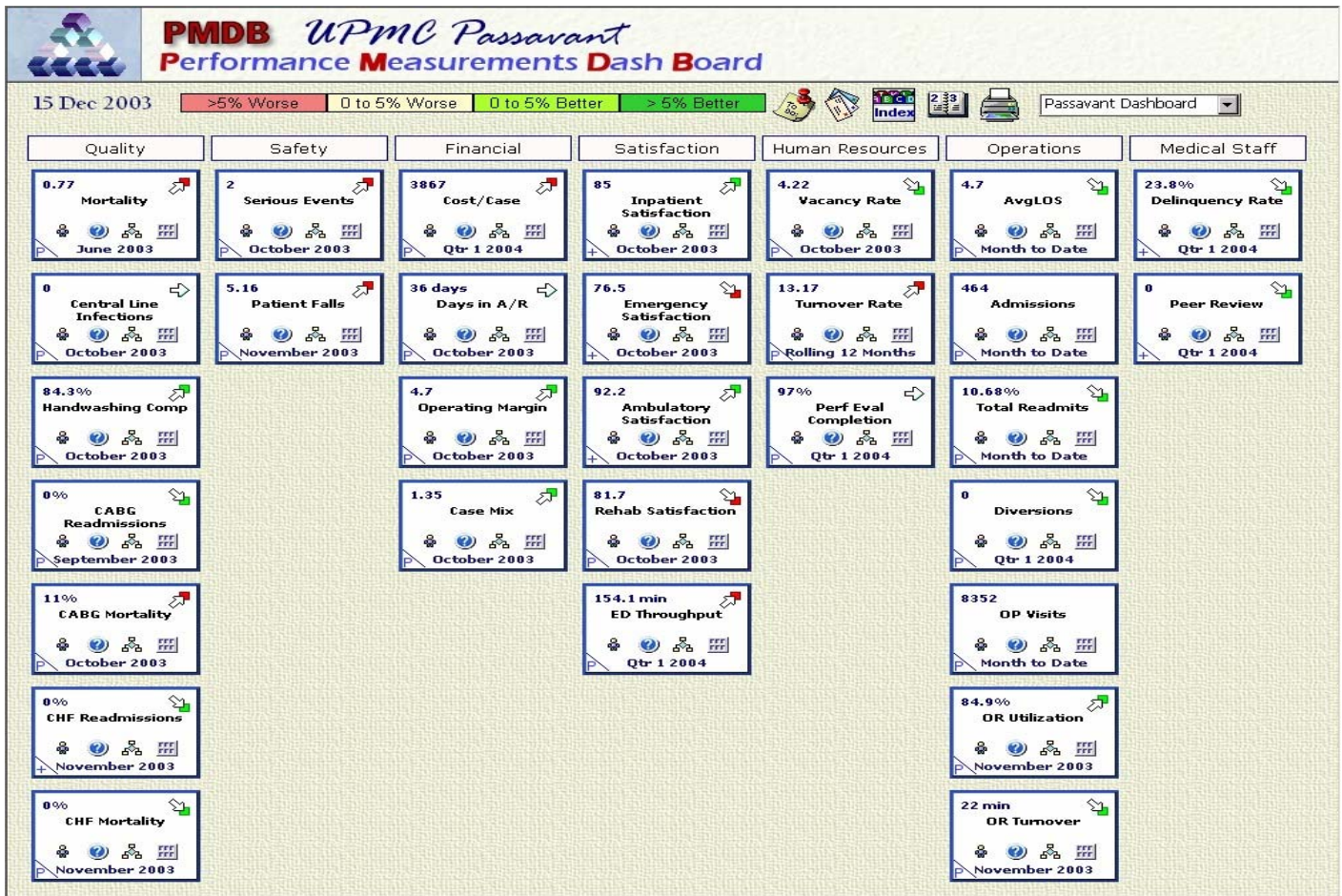"You have to be able to use the data," said Petrick. "If it's months old when you get it, how can you act on it?"

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.

"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,

PMDB *UPMC Passavant* **Performance Measurements Dash Board**

15 Dec 2003 | >5% Worse | 0 to 5% Worse | 0 to 5% Better | > 5% Better | Passavant Dashboard

Quality	Safety	Financial	Satisfaction	Human Resources	Operations	Medical Staff
0.77 Mortality — June 2003	2 Serious Events — October 2003	3867 Cost/Case — Qtr 1 2004	85 Inpatient Satisfaction — October 2003	4.22 Vacancy Rate — October 2003	4.7 AvgLOS — Month to Date	23.8% Delinquency Rate — Qtr 1 2004
0 Central Line Infections — October 2003	5.16 Patient Falls — November 2003	36 days Days in A/R — October 2003	76.5 Emergency Satisfaction — October 2003	13.17 Turnover Rate — Rolling 12 Months	464 Admissions — Month to Date	0 Peer Review — Qtr 1 2004
84.3% Handwashing Comp — October 2003		4.7 Operating Margin — October 2003	92.2 Ambulatory Satisfaction — October 2003	97% Perf Eval Completion — Qtr 1 2004	10.68% Total Readmits — Month to Date	
0% CABG Readmissions — September 2003		1.35 Case Mix — October 2003	81.7 Rehab Satisfaction — October 2003		0 Diversions — Qtr 1 2004	
11% CABG Mortality — October 2003			154.1 min ED Throughput — Qtr 1 2004		8352 OP Visits — Month to Date	
0% CHF Readmissions — November 2003					84.9% OR Utilization — November 2003	
0% CHF Mortality — November 2003					22 min OR Turnover — November 2003	

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. ✄