

PATIENT-CENTERED PROCESS OF WORK REDESIGN

Arizona Hospital Reengineers with No Outside Help

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A few years ago, Carondelet St. Joseph's Hospital in Tucson, AZ, a part of Carondelet Health System, realized its care-delivery system was offtrack. The importance of patient care had gotten lost in the busyness of providing "hotel" services and in the fragmentation of centralized departments. The scope of the problem was well defined: Care delivery reflected a mechanistic, boundary-filled system rather than a process centered around patient care.

St. Joseph's operates in accordance with Carondelet values, such as showing respect for each person, without distinction; understanding that we seek the good of the community, which requires balancing the desires of an individual against the good of the whole; and emphasizing the continuum of healthcare. To further these values, while remaining viable in one of the most competitive managed care markets in the nation, St. Joseph's decided to join the ranks of healthcare facilities that are reengineering the delivery of patient care. Moreover, the hospital decided to do the job itself, forgoing the use of outside consultants. The process was planned, implemented, and evaluated by a

multidisciplinary team under the guidance of nursing leadership.

ENVISIONING CHANGE

The Problem Frustration with the care delivery system led one of us (Norma Hagenow) to rethink the design of nursing service delivery. At St. Joseph's we had drifted from our central focus of putting the patient first, and we needed to look at how we were providing care and how the structures we had in place affected that.

Although I was a veteran of bedside nursing, it was the experience of sitting eight hours a day for a week with a hospitalized family member that moved me to call for a new look at the job of providing patient care. Day after day, I watched all kinds of different people stream into the room, delivering various kinds of care to the patient. The dietary aide delivered the food tray, and 10 minutes later the licensed practical nurse (LPN) arrived to catheterize the patient. Obviously, a person cannot eat and be catheterized at the same time. The Occupational Therapy Department, bustling with outpatients, posted a schedule on the door of the bedridden patient indicating when a therapist would be in, rather than inquir-

Summary A few years ago, Carondelet St. Joseph's Hospital in Tucson, AZ, realized that care delivery reflected a mechanistic, boundary-filled system rather than a process centered around patient care. To change this, St. Joseph's planned a work redesign process that a multidisciplinary team (under the guidance of nursing leadership) implemented and evaluated.

The Steering Committee for Patient Centered Care (an interdisciplinary group) established five teams to plan and implement the redesign effort. The teams were responsible for quantification,

quality, public relations and communication, education and human resources, and the pilot project.

Four key factors helped get the redesign effort up and running:

- Support from the top.
- The involvement of all key disciplines.
- The timely movement from envisioning to implementation.
- Communication of tangible measurements of the change process.

Patient-centered care continues to be refined and improved at St. Joseph's.

ing when the patient would need therapy. Each staff person completed his or her rounds, but it appeared very disruptive and unorganized from a consumer point of view. Care was fragmented; it was not delivered in a continuous way with the patient at the center.

Non-value-added work also contributed to the problem (see Figure). In production there are two basic inputs: raw material and value-added work.¹ Care of patients is the value-added work that we do to deliver healthcare. At St. Joseph's, only 17 percent of the labor expenses was spent on employees providing direct or indirect care of inpatients. In a typical large hospital, clerical employees equal or outnumber patients. Thirty percent of labor costs is spent on documenting work, 18 percent is spent on downtime, and 14 percent goes for scheduling and coordinating.² From the patient perspective, this work is not essential to patient care.

Increasing work complexity was another problem with focus. A routine chest x-ray, for example, should take 15 minutes; it often takes up to 90 minutes and involves 20 people performing 40 separate tasks. With overspecialization, care givers have to compete with each other to gain access to patients. In hospitals, nearly 45 percent of attempts to provide respiratory therapy have to be deferred, most often because the patient is receiving other care.³ During the course of a three-day stay at a large hospital, patients might see a parade of 40 to 50 different employees, including nurses, therapists, technicians, dietary workers, and maintenance people. St. Joseph's was no exception. Clearly, something had to change.

Possible Solutions Nursing leaders decided that the process of change needed to be controlled from the bedside; otherwise, it could be subject to the influence of outside consultants without regard to the values and perspectives of care givers and patients. It violates organizational theory to expect an external intervention to work in solving what was clearly an internal problem.

It also made good economic sense to carefully consider what work should be done and who could best do it. With a mandate to improve quality and reduce cost, it was imperative that the process of change be managed internally. Initiating the change internally allowed those affected to become active participants from the very beginning—a key strategy in the redesign process.

SEVEN DIMENSIONS OF CARE

- Respect for the person
- Coordination of care
- Communication and information
- Physical comfort and care
- Relief of fears
- Involvement of family and friends
- Continuum versus episode

Moreover, the entire approach reflected an effort to view care delivery from the patient's perspective, focusing on the important dimensions of care (see Box) identified by the Picker/Commonwealth Program for Patient Centered Care.⁴

"What would the *patient* value?" was the central question. All those involved in the care of patients readily endorsed

changing the system to better serve patients.

MAKING THE VISION OPERATIONAL

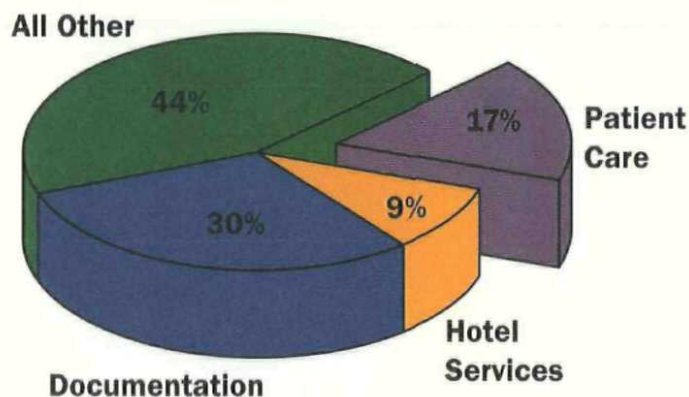
With the support of executive leaders, including Sr. St. Joan Willert, CSJ, president and chief executive officer (CEO), and Thomas Gagen, chief operating officer (COO), administrators took practical steps to make the vision a reality. In July 1992 they assembled a group of workers from every key discipline for a one-day retreat. The agenda was designed to achieve two specific outcomes:

- The group would assume ownership of, or responsibility for, the problem.
- Members would collectively consider how to change the care delivery system.

These goals were readily achieved without resorting to criticism of current practice. The group seized the opportunity to improve, and it generated tremendous energy. Three main goals emerged:

- Improved quality from the patient perspective

VAST MAJORITY OF TIME IS NON-VALUE ADDED



- Job enrichment or enlargement
- Cost-effectiveness from a hospital system perspective

A second retreat session was devoted to moving thoughts to action. In his book *The Fifth Discipline*, Peter Senge talks about "movement of a group to action through generative learning."⁵ Looking at the end first made the group aware of the gap between the current reality and the future vision and generated a creative tension. That tension led to action to close the gap—to remove the walls that divided workers and hindered the delivery of care truly centered on the patient.

The group defined what the delivery system would look like once the goals had been achieved and decided on total team outcomes (i.e., broad indicators that would reflect the entire team rather than, e.g., the cost of care on one of the units). Global aims for the team were to *increase patient satisfaction* and *reduce total costs per day*. To assess whether the goals had been met, baseline information from quarterly patient satisfaction surveys (conducted by an outside firm) would be compared with data gathered later in the process. And all costs from centralized and decentralized departments were to be measured before and after implementation of changes to determine whether costs were reduced.

The group listed the many tasks that compose the process of patient care and reduced 10 job positions to 5 jobs that would serve as the core of the redesign effort: registered nurse (RN), LPN,

patient care technician (PCT), patient care associate (PCA), and service coordinator.

The Steering Committee for Patient Centered Care (an interdisciplinary, broad-based group) evolved from the retreats and met biweekly. The committee, in turn, established five teams to plan and implement the redesign effort. The teams, which reported to the larger groups, were responsible for quantification, quality, public relations and communication, education and human resources, and the pilot project (see **Box** below).

The pilot project was implemented in October 1992 on two surgical units. A dedicated project facilitator was hired for the first 10 months of the project to plan meetings and provide support where needed. As work redesign was introduced on each unit, a unit-based shared governance team became responsible for implementation. Full implementation of the pilot project was completed in October 1993, nearly six months ahead of schedule. We attribute the success of the work redesign process to certain essential elements (see **Box**, p. 31).

EVALUATING THE CHANGE

July 1994 marked the end of the first year of hospital-wide implementation of patient-centered care. Although quality and cost indicators had been observed carefully throughout the change process, the date was a planned benchmark for scrutinizing the process and outcomes.

Improved Quality Throughout the implementation,

STEERING COMMITTEE ROLES

STEERING COMMITTEE

- Provided guidance
- Removed obstacles
- *Provided organization with tools and understanding*
- Set boundaries
- Created conceptual design

QUANTIFICATION TEAM

- Identified centralized/decentralized staffing needs
- Analyzed RN activities for skill mix opportunities
- Analyzed labor reports
- Calculated clinician and patient care associate needs for RN skill mix
- Developed cost comparison
- Identified capital costs
- Identified costs (patient-centered care model)

EDUCATION AND HUMAN RESOURCES TEAM

- Clarified roles, duties, and responsibilities
- *Developed position descriptions*
- Handled licensure and legal considerations
- Assessed plan to address learning needs, both general and specific
- Developed curriculum for pilot project and for new roles
- Set up hospital-wide orientation
- Recruited personnel

PUBLIC RELATIONS/COMMUNICATION TEAM

- Identified key communication points (physicians and staff)
- Facilitated information diffusion
- Developed tools: telephone hotline, newsletter, updates, hospital newspaper, patient education tools

- Promoted each phase of development
- Controlled rumors

QUALITY TEAM

- Measured system quality
- Developed concurrent patient satisfaction tool
- Monitored baseline
- Plotted trends of key aspects of redesign

PILOT PROJECT TEAM

- Designed the prototype of the model
- Clarified roles, duties, responsibilities
- Enhanced movement of concept into larger organization

we had to learn the discipline of knowing baselines and measuring change (e.g., the average length of time for completing an EKG). Ongoing retrospective patient satisfaction surveys showed that patient satisfaction *did not decrease* during the implementation; in fact, several units demonstrated measurable increases on the quarterly patient satisfaction surveys. This was noteworthy because other institutions implementing work redesign have reported initial declines in patient satisfaction. Timeliness and cleanliness, important to patients, were improved through patient-centered care. Finally, clinical supervisors are now conducting a concurrent survey to gather information to improve patient satisfaction with care. We ask patients five simple questions to learn whether they would revisit our hospital.

By implementing a decentralized pharmacy model, delivery times for stat drugs decreased from 4 hours to 30 minutes. The adequacy of pain management, a key aspect of care critical to patient and family, is now being continuously evaluated through the use of a pain scale developed to assess pain from the patient's perspective.

Job Enrichment or Enlargement As the job redesign proceeded, employees in positions eventually eliminated were given the opportunity to be trained for one of the five core roles. Patient transporters, for example, moved into the role of PCAs after appropriate training. Those who could not make the change transferred to other Carondelet facilities or chose other opportunities.

Employees who worked as LPNs, PCTs, and PCAs clearly demonstrated increased job satisfaction. This was measured through a baseline satisfaction survey done in 1991. A follow-up will be repeated this year. PCT and PCA satisfaction is monitored through a satisfaction questionnaire. The Human Resource Department now provides monthly data on turnover for all job classifications.

After their training as PCAs, housekeepers were permitted to interact with patients and be part of the care team. Moreover, a number of PCAs formerly in the housekeeping department moved on in the second year after implementation (1994) to become PCTs. Their job satisfaction continues to grow.

Unfortunately, for other important roles, results were less positive. Respiratory therapists resisted the transition and perceived efforts to have RNs perform certain respiratory therapy functions as job shrinkage. RNs also had difficulty coping with the transition. Job enrichment and enlargement for them involved changing from a functional orientation with a focus on performing tasks and assignments of care for the point-of-

service team. RNs were reluctant to relinquish certain tasks to focus on expanded role possibilities. We attribute this to the fear so common in the work force today.

To help employees cope with the changes, administrators made enhancing the professional practice environment a priority for 1995. We predict that nurses will come to appreciate their unique role in leading the integration of care across the continuum. One unexpected, but welcome, result of implementing patient-centered care was that it strengthened nursing's participation in unit-based shared governance.

Currently, RNs are revising the existing career ladder to reflect new competencies in the role. Nurses also have become active as facilitators of ongoing multidisciplinary discharge planning rounds.

Cost-effectiveness In general, projections indicate that work restructuring requires several years before fiscal payback is demonstrated; however, at St. Joseph's cost savings occurred during the implementation year. A financial analyst assisted with the project throughout the one-year period, and an independent audit was conducted at the end of that year.

Total hospital labor costs per adjusted admission (the evaluation measure determined before change) decreased 5.9 percent between 1992 and 1994. Medical/surgical and critical care units showed a decrease of 5 percent in labor expenses per adjusted admission. During the same period, total volume of patient days decreased by 7 percent, adjusted admissions increased, patient acuity increased, and the percentage of ambulatory patients dropped slightly. Total cost savings for the first year were calculated to be more than \$1 million based on 1994 total adjusted admissions.

Key Factors From a process perspective, four key factors helped get the redesign effort up and running:

- Support from the top. An organization's top executives and finance experts need to be involved early on to provide system-level measurements of the program both before and after implementation of work redesign. This support is essential, since operationalizing work redesign requires more commitment and energy than anyone might anticipate because of employee attach-

WORK REDESIGN

Essential elements of the work redesign process include:

- Understanding the perspective of the patient
- Leading the process through clearly articulated expectations and outcomes
- Examining the work and the worker to develop appropriate positions
- Learning new patterns for delivery of care

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Vice President of Mission Integration

The Pittsburgh Mercy Health System, Inc. (PMHS), a not-for-profit corporation sponsored by the Eastern Mercy Health System, is conducting a search for Vice President of Mission Integration. Key responsibilities include promoting health-care ministry of PMHS and its sponsoring organizations; collaborating with leaders in development and implementation of education, program and services with PMHS and the communities we serve; developing communication and collaborative processes for policy review, leadership development and planning/integration of the philosophy and mission for all employees; designing and implementing leadership development programs for continuing the mission and philosophy through the laity.

Minimum of Master's in education, theology, organizational development, administration, behavioral sciences, or religion required. 5+ years of management/administration required and at least 8-10 years of increased responsibility in two or more of the following areas: education, theology, organizational development, administration, behavioral sciences, or religion. Healthcare experience is preferred. PMHS provides a comprehensive and competitive compensation package. Send resume to: **Rosalie Barsotti, Vice President, Human Resources, Pittsburgh Mercy Health System, 1400 Locust Street, Pittsburgh, PA 15219. EOE M/F/H/D/V.**

WORK REDESIGN

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Without
a multidisciplinary group,
changing patient care
would have been
impossible.

ments to old work patterns.

- The involvement of all key disciplines. Drawing on employees from all facets of hospital life helped foster ownership and responsibility for change. Without a multidisciplinary group, making a radical change in the delivery of patient care would have been impossible.

- The timely movement from envisioning to implementation. Housewide implementation was completed in 12 months rather than the anticipated 18. Administrators attributed this to hiring a designated project facilitator, selecting an enthusiastic departmental director to head the pilot project, and staying on or ahead of schedule for each step of the process.

- Communication of tangible measurements of the change process. For example, knowing how long it takes from the time a physician orders an EKG until the procedure is actually carried out allows people to set measurable targets for improvement. Thus behavior changes simply through exposure to data. In some areas—such as staff satisfaction and physician perceptions—St. Joseph's staff did this baseline measurement meticulously. But they realized too late that they could have used this strategy more effectively in other components of the change process. We need to let individuals decide what they want to measure, and then provide them with the resources to do it.

FUTURE DIRECTIONS

Patient-centered care continues to be refined and improved at St. Joseph's. Through evaluation, each department

has developed a specific plan to address internal problems. In addition, system-level plans are in place to improve quality, education, and communication. Entire processes from preadmission to postdischarge are being evaluated from a total system-delivery perspective.

The transition to patient-focused care is analogous to the change from quality control to process improvement. A laboratory can maintain quality control standards even if the larger hospital environment is not committed to continuous quality improvement. In the same way, it would be possible to continue the effort just within one division, but to realize the greatest impact and savings, the entire organization needed to be involved.

As more Catholic hospitals contemplate work reengineering, they must rely on their values and adhere to mission and philosophy to make their patients the true center of healthcare delivery. □

 For more information, call Carondelet Health Care, 520-721-3915.

NOTES

1. J. Philip Lathrop, *Restructuring Health Care: The Patient-focused Paradigm*, Jossey-Bass, San Francisco, 1993.
2. Health Care Advisory Board, Executive Report to the CEO, *The Merits of Patient-focused Care*, Washington, DC, 1992.
3. Health Care Advisory Board.
4. Margaret Gerteis, *Through the Patient's Eyes: Understanding and Promoting Patient-centered Care*, Jossey-Bass, San Francisco, 1993.
5. Peter Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization*, Doubleday, New York City, 1990, p. 150.