A FRAMEWORK FOR IMPROVING QUALITY

Using Project Study Teams, Providence Health System Tackles Problem Areas

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Healthcare organizations must identify and define quality to assess the success of their services and recognize opportunities for improvement.

To identify specific issues for quality monitoring and improvement, a healthcare organization's leaders must understand the business aspects of their healthcare mission. Quality indicators and measures differ according to the services provided, whether they are medical/surgical, social, long-term care, or a combination of services. Beginning with its mission and extending through specific program goals and objectives, the healthcare organization must reflect and articulate its standards of quality in terms of services provided, market position, and communication with key staff and strategic partners.

Summary To identify issues for quality improvement and monitoring, an organization first articulates its service mission and objectives. The organization uses internal measurements and self-examination with external accountability and benchmarks to select a manageable number of projects for study. Supported by collected evidence, published data, and broad-based approval, projects focus on the process or outcomes of care, frequency of services, or patient populations.

An accountable leader selects team members from the affected disciplines, who review evidence, agree on what and how to measure, determine implementation strategies, and develop an evaluation plan. The team meets established targets to track the project's progress and shares results with other teams.

Providence Health System (PHS) has integrated its continuum of care through quality study groups

WHAT IS QUALITY?

In healthcare, quality is the positive result of providing care and services to patients and their families. Quality indicators include technical expertise, peer performance standards, patient satisfaction, and good health outcomes. A quality-oriented organization not only meets these criteria but also measures how well it does so. Although quality measurement and improvement require significant resources, the gains in improved care and efficiency should more than offset the time and money invested.

Besides its intrinsic value, quality is important to external groups. Payers, purchasers, customers, contractors, partners, federal and state governments, and agencies such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) are demanding that organizations demonstrate quality. In response,

(e.g., CORE) and improved communication systems. The Guideline Evaluation and Redesign (GEAR) projects compare PHS performance against outside standards, studying eight patient conditions (e.g., geriatric depression, hysterectomy) to decrease hospital days without compromising care. Each team is encouraged to develop guidelines for admission, discharge, and hospital care in their specialty areas. These projects are balanced between surgical and nonsurgical conditions and across clinical programs to engage different staffs.

The PHS Population Health Improvement (PHI) teams used feasibility studies of eight patient populations to identify ways to improve quality of care based on internal and external evidence. The high-risk pregnancy team has redesigned staffing and implemented case management, and the Medicare and Medicaid projects have developed risk screens for new patient members.

various employers established the Health Plan Employer Data Information Set (HEDIS), which includes rates of preventive services, acute care procedures, and consumer satisfaction. Many large employers now require health insurance companies to submit their HEDIS data or receive accreditation from the National Council on Quality Assurance (NCQA) as a condition of the health insurance purchase.

People have a right to know where their healthcare dollars go.

evidence (e.g., database queries, chart reviews) as well as the published literature and information from less formal sources such as outside colleagues or customer requests. When appropriate, internal evidence should be based on trend data, with negative trends or the absence of positive trends suggesting opportunities for improvement. The most promising projects have valid evidence supporting the need for improvement.

Another external force is accountability. People have a right and want to know where their healthcare dollars go, and organizations are accountable to their customers. With healthcare spending and managed care now under greater scrutiny, providing the highest quality and most cost-effective care is increasingly important. Organizations that provide the best *value* in terms of quality and cost will survive in the competitive marketplace and better fulfill their mission to serve people in need.

BEGINNING TO MEASURE QUALITY

The two most important aspects of quality measurement are identifying what to study and who is accountable for the study.

Project Selection To identify appropriate study projects, an organization may use such benchmarks as community norms, purchaser requests, licensing or accreditation requirements, external targets such as "Healthy People 2000," or internal targets. Analyzing these benchmarks helps uncover areas of suboptimal performance that may warrant further study. Another approach involves self-examination: asking staff, physicians, administrators, and patients to identify problems areas.

The number of identified projects will probably exceed the organization's capacity to complete all of them. The organization must select a manageable number of projects, particularly if it is just beginning to focus on quality, realizing that quality-oriented projects are difficult and resource intensive.

Taking on too many projects can be counterproductive. The organization should apply the lessons learned from early projects before tackling the most challenging problems.

Evidence and Context Evidence should be the guide when choosing projects. This can include internal

In addition to reviewing the evidence, the organization must consider the context. Market share, requests from purchasers or partners, and future opportunities for external funding (e.g., grants, foundations) may help determine which ideas to pursue. A project supported by administrators, physician leaders, and committed staff is more likely to succeed.

Types of Projects The projects selected may approach the quality problem in the following ways:

• Addressing the *process of care* in order to develop or adopt a clinical guideline.

• Assessing *outcomes of care* and exploring patient self-reports of functional status after treatment (e.g., low back pain, coronary artery disease).

• Measuring *frequency of services*, as several HEDIS measures require, to increase preventive services (e.g., immunizations, mammography) or to decrease elective, cost-intensive services (e.g., hospitalization, laminectomy).

• Using a *population approach* and integrating elements of process, outcomes, frequency of care, needs assessment, implementation of new services, patient satisfaction, and other aspects of care for a specific patient group.

The projects should be balanced across the continuum of care, services provided, patient populations, and types of activities. With this balance, different staffs will have project accountability, which facilitates sharing both the organizational learning and the project burden among several people. However, the goal of balance is secondary to the reality of manageability.

PROJECT TEAM RESPONSIBILITIES

Once projects have been selected, project leaders and key staff members are assigned. The process is

most effective when a single person has both the accountability and the high-level authority to proceed with the project. This person is responsible for assembling the appropriate project team, which includes people from each discipline involved with the affected patient or group. For example, a clinical project may include one or more primary care physicians, specialty physicians, nurses, social workers, pharmacists, physical therapists, occupational therapists, dietitians, chaplains, quality managers, researchers, administrators, and others.

The project team reviews both the internal and external evidence.

Quality Review The project team reviews the internal and external evidence and may gather additional evidence. Team members must understand the issues, but must not be trapped by "analysis paralysis" from examining too much data. When the members are confident they understand the current practice and know the desired practice, they next design a mechanism to improve the former and achieve the latter. Then the team should develop an evaluation plan to assess the effectiveness of interventions and the degree to which goals were met.

The team needs to agree on what and how to measure. For example, a project trying to reduce the hospital days for hip fracture patients may track the length of preoperative and postoperative hospital stays, the number of patients, and when various disciplines (e.g., discharge planning, physical therapy) first interact with patients. These measurements help the project team explore whether reduced hospital days are a result of short preoperative or postoperative stays, changes in patient volumes, or earlier involvement of certain disciplines.

Data Selection When possible, the members should resist the temptation to create a new data collection tool for the specific project or evaluation. Ideally, the data or an established tool will be available. For example, transaction systems can be queried to evaluate length of stay based on the admission, surgery, and discharge dates.

Published tools tested for reliability and validity can be used to assess patients' functional status, or outside colleagues may share a tool they have developed. If an organization has adopted a specific standard, the team should comply with it to make internal comparisons, minimize redun-

dant measurements, and avoid patient and staff confusion.

Meeting Targets The team must establish and measure performance against a target or a "success indicator." Project teams who meet all their success indicators may move on to another issue or may declare the project completed.

If targets are not met, the team must determine why and intervene as appropriate. Besides poor performance, other reasons include slower progress toward the target than anticipated, unrealistic success indicators, or changes in the market or environment.

Sharing Results Project teams should share significant results and activity highlights with each other to ensure that learning occurs across the organization. Sharing results from "successes" can help other teams achieve similar gains. Sharing results from "failures" can help other teams avoid or minimize the same pitfalls.

CASE STUDY IN QUALITY

Providence Health System (PHS) is an integrated healthcare delivery system with services in Washington, Oregon, Alaska, and California. This case study focuses specifically on the competitive managed care marketplace of Portland, OR, where PHS provides a continuum of care with hospitals; independent practice association (IPA)–model health plans; and outpatient, home, and community services.

A unique resource within PHS is the Center for Outcomes Research and Education (CORE). CORE works with other PHS groups on population health improvement projects, clinical studies, health risk assessment and screening, HEDIS measures, physician profiling, guideline evaluation and redesign, satisfaction surveys, tumor registry, and selected information systems.

Background: Cooperation, Integration As with many healthcare systems, PHS has undergone significant changes in recent years. Historically a hospital system, PHS hospitals functioned autonomously and even competed with the other hospitals in the system. In the early 1990s, PHS began to increase cooperation and integration among hospitals; health plans; and outpatient, home, and long-term care services.

Various groups, including CORE, have changed from single-institution departments to PHS-wide resources. Likewise, various activities such as quality improvement are increasingly becoming multi-institutional efforts across the continuum of care, rather than single-hospital projects. Current integration efforts span the four states PHS serves.

Organizational culture and infrastructure have changed greatly. Staff members are beginning to identify themselves as employees of PHS rather than of a specific hospital. Communication is increasing and competition is decreasing among the staff who hold similar positions at different institutions.

More departments have been combined across institutions, including patient care services (e.g., rehabilitation, pharmacy) and support functions (e.g., information services, medical records, housekeeping). The technologies for information storage and group communication continue to evolve in such areas as electronic medical records, shared transaction systems for decision support, electronic mail across the four-state region and the Internet, and access to the World Wide Web.

The following highlights of selected quality-based projects are from more evolved, broad-based, intentionally balanced efforts. This is because PHS has also evolved, integrating institutions, expanding the continuum of care, accessing more reliable electronic data sources, changing focus from specialty to primary care, and becoming more sophisticated about project selection and team participation. Also, like all organizations, PHS has learned from false starts, mistakes, and missed opportunities.

GEAR Efforts One example of a series of projects that compare PHS performance against external benchmarks is the Guideline Evaluation and Redesign (GEAR). PHS used the Milliman and Robertson guidelines for hospital days per 1,000 members of tightly managed healthcare systems. A research analyst queried the decision-support transaction systems for each patient condition to review number of hospitalizations, average length of stay, and hospital days that could be saved if utilization at PHS matched the guidelines.

Senior leaders then selected eight conditions with large potential savings: spinal surgery, geriatric depression, colectomy, inpatient rehabilitation, congestive heart failure, heart bypass surgery, hysterectomy, and cesarean birth. Some conditions involved a few patients with long hospital stays, and some involved more patients than anticipated but with a typical hospital stay. These projects were distributed equally among surgical and nonsurgical conditions and across clinical programs to engage a variety of staff and avoid burdening a small group with several projects.

A single administrator has been charged with ensuring success of the GEAR efforts, which are highly visible as important projects within PHS. Each of the eight conditions has its own project team. An oversight group of administrators and physicians reviews the teams' work.

Each project team includes an identified leader, clinical experts (physicians, nurses, and others as needed), research and quality management support, and other resources as necessary. These teams are responsible for decreasing the longer-than-necessary hospital stays for patients with a specific condition. They are encouraged to develop guidelines for hospital admission and discharge, care during hospitalization, care after discharge, and other issues that could decrease hospital stays without compromising quality of care.

The project teams were organized in late 1995, and most have finalized their guidelines and started implementaion. PHS should be able to evaluate the success of GEAR efforts by reviewing hospital utilization in 1998. Additional conditions can now be designated as new GEAR projects, with hip fracture prevention endorsed as the ninth project study.

PHI Projects Another extensive quality-oriented effort for PHS is Population Health Improvement (PHI). This is the first wide-ranging team effort spanning clinical areas, continuum of care, various hospitals, and health plans. In late 1994, senior management and physician leaders selected patient groups in eight categories: breast cancer, cardiac risk factors, high-risk maternity, childhood immunization, low back pain, diabetes, high-utilization Medicare, and high-utilization Medicaid.

Teams composed of CORE, quality manangement, program development, and health plan staff prepared feasibility studies for each patient population. Each study identified specific ways to improve the quality of care. These five-to-ten page documents included an extensive literature review (external evidence) and PHS data when available (internal evidence). Based on the evidence, each team identified a series of interventions, success indicators, budget issues, and anticipated savings. The teams submitted the eight studies to the quality council of the PHS community board for approval.

Although all the PHI projects started with the feasibility report, they have evolved into distinct projects, and are in various stages, ranging from preimplementation to implementation to completion. Each project includes an evaluation component.

IMPROVING QUALITY

One of the more developed ongoing projects is high-risk maternity management. This team has developed a prenatal screen to identify women at risk for early deliveries or other problems. The team has also redesigned staffing for labor and delivery and implemented case management for high-risk pregnant patients. This group is collecting and analyzing the risk screens, assessing outcomes such as cesarean birth rate, low birth weights, and frequency of prenatal care. After this analysis, the project team will continue its quality improvement efforts.

The low back pain team is the only one that has officially "finished" its project. It consisted of an observational study of low back pain treatments in a large primary care clinic, with the goal of proposing a treatment guideline. The limited study enrollment, lack of unmet needs or opportunities for improvement among study enrollees, and pressures from other projects led to the primary care group's decision not to develop a formal guideline. Instead, the group's members are awaiting the GEAR project's quality recommendations, which will span the continuum of care to address primary and specialty care treatment and specific interventions such as physical therapy and surgery.

The high-utilization Medicare and Medicaid projects started with the fewest and least-defined available resources. Both have developed evidence-based risk screens, with the goal of proactively identifying people at risk for poor health and high healthcare costs. These risk screens are now administered to newly enrolled members of the health maintenance organization. □

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SPONSORSHIP

Sponsorship will continue to change as healthcare changes.

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distant relationship to the Church. They act in their own name, and their assets are not Church property.

Juridic person status can be granted by either the diocesan bishop, the U.S. Conference of Catholic Bishops, or the Vatican.

In addition, there are healthcare organizations that, although they do not seek institutional ties to the Church, are formally recognized as Catholic by the bishop.

CHANGE IN THEORY AND FORM

Sponsorship has changed both in theory and in form over recent decades. It will most likely continue to change as healthcare changes, because it serves the Church as a useful way to maintain its focus on the essential components of the Catholic mission in healthcare. □

NOTES

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