The CAHPS Improvement Guide

Practical Strategies for Improving the Patient Care Experience

This printed version of the Improvement Guide has been prepared based on the online version available on the CAHPS Web Site at www.cahps.ahrq.gov.

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About the CAHPS Improvement Guide

A. What is the purpose of the CAHPS Improvement Guide?

The extensive and growing use of CAHPS surveys to assess the quality of health plans, medical groups, and other organizations has created a demand for practical strategies that organizations can use to improve patients’ experiences with care. This guide is designed to help meet this need. It is aimed at executives, managers, physicians, and other staff who are responsible for measuring performance and improving the quality of services provided by health plans, medical groups, and individual physicians. Over time, this guide will be updated to include new improvement interventions and offer additional resources.

B. What surveys are addressed by this guide?

The guide is structured around the aspects of health care assessed by two CAHPS surveys: the CAHPS Health Plan Survey and the CAHPS Clinician & Group Surveys. If you are new to these surveys, you may want to explore the CAHPS Web site, which contains a great deal of information about the development, content, and use of these instruments.

- CAHPS Health Plan Survey.
- CAHPS Clinician & Group Surveys.

The guide does not currently address the needs of organizations that use the CAHPS Hospital Survey (H-CAHPS) or other CAHPS surveys. However, much of the guidance about the prerequisites for effective quality improvement, the process of analyzing performance issues, and the cyclical approach to implementing interventions is pertinent to all organizations seeking to improve patients’ experiences with care.

C. What are the performance issues listed in the guide?

The guide allows users to search for quality improvement strategies that can address performance issues assessed by CAHPS surveys. Those issues are reported to consumers and patients in the form of composite measures, which combine the results for two or more questions into one score.
The first table below organizes the *core* composites from the Health Plan Survey and the Clinician & Group Surveys into the major domains covered by CAHPS surveys. The term *core* refers to the fact that these measures are based on items that must be included in the questionnaire in order for it to qualify as a CAHPS instrument.

### Core Composite Measures in the CAHPS Health Plan Survey and the CAHPS Clinician & Group Surveys

<table>
<thead>
<tr>
<th>CAHPS Survey</th>
<th>Access</th>
<th>Interpersonal Care</th>
<th>Administrative Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Plan Survey</td>
<td>Getting Needed Care</td>
<td>How Well Doctors Communicate</td>
<td>Health Plan Information and Customer Service Claims Processing*</td>
</tr>
<tr>
<td></td>
<td>Getting Care Quickly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinician &amp; Group Surveys</td>
<td>Getting Timely Appointments, Care, and Information</td>
<td>How Well Providers (or Doctors) Communicate With Patients</td>
<td>Helpful, Courteous and Respectful Office Staff</td>
</tr>
</tbody>
</table>

* “Claims processing” is not technically a composite, but this category represents a set of measures collected by nearly all health plans for HEDIS reporting (i.e., supplemental measures required for those plans reporting CAHPS 4.0H).

The guide also offers information on interventions that address topics that survey sponsors may choose to add to their questionnaires. For both the Health Plan Survey and the Clinician & Group Survey, these topics are drawn from *supplemental items*, which are optional questions included in CAHPS surveys. These items enable sponsors to assess performance in areas not covered by the core items. Other topics come from the HEDIS and Medicare versions of the Health Plan Survey. The following table shows the additional topics covered by the two surveys.

### Full List of Topics Addressed In the Guide, Organized by Survey

<table>
<thead>
<tr>
<th>Core Topics</th>
<th>Health Plan Survey</th>
<th>Clinician &amp; Group Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Claims processing (from HEDIS item set)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Communication with doctors</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Customer service</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

### Additional Topics

<table>
<thead>
<tr>
<th>Additional Topics</th>
<th>Health Plan Survey</th>
<th>Clinician &amp; Group Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication about costs of care</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Coordination/Integration of care</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Health promotion/Education</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Preventive services</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Shared decisionmaking</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
D. What is in this guide?

The CAHPS Improvement Guide has several parts:

- **Why Improve Patient Experience?** – A compelling case for health care organizations to focus on improving their patients’ experience with care.

- **Are You Ready to Improve?** – An overview of five behaviors common to health care organizations that have been effective in improving their CAHPS-related performance.

- **Analysis of CAHPS Results** – A discussion of various approaches to analyzing data from CAHPS surveys in order to identify opportunities to improve and priorities.

- **Quality Improvement Steps** – A walk through the basic steps of a CAHPS-related quality improvement process.

- **Browse Interventions** – Descriptions of interventions that health care organizations can implement in order to help improve consumers’ and patients’ experiences with care.

- **Resources** – Quick access to lists of published studies, Web sites, books, and other resources that address the various issues discussed in the guide.

E. What information can I find about improvement interventions?

The guide presents approximately 20 ideas for improving the patient’s and consumer’s experience of care as measured by the CAHPS surveys. They are organized on the site by performance problem (e.g., access, communication, customer service) and by the composite measures for each survey (e.g., “Getting Care Quickly” from the Health Plan Survey).

The descriptions of the interventions are intended to give you enough information to determine whether the strategy is pertinent and worth further investigation. Specifically, the summaries of each intervention cover the following questions:

- What is the problem that is shaping the patient’s or member’s experience with the health care organization?

- What is the practice that can help address this problem? What is its purpose? What benefits does it offer to patients, providers, and plans? How has it been implemented?

- What are the published results of an evaluation (if any)?

- What are some key resources for more information on the intervention?
F. How do I select an intervention?

The interventions outlined in this guide represent a range of possible solutions. When you review your options, keep these considerations in mind:

- **Appropriateness for your organization:** Some interventions are more appropriate for health plans, while others are better suited to medical groups. In some cases, the strategies are directed at both stakeholders, but one will have to take the lead.

- **Resources and time available:** Some interventions are easy and inexpensive to implement, while others are much more logistically complex and require a significant investment of money, resources, and time. If you find a strategy that seems appropriate but overwhelming, it’s fine to “start small” — perhaps by tackling one component of the strategy, or even by stepping back to assess your organization’s readiness for the change. You may also want to explore ways to stage the implementation of one or more strategies to make them more feasible.

- **How quickly you need to see results:** As you review your options, consider the immediate and long-term goals of your organization, as well as its constraints. Some strategies are likely to address the performance issue directly, while others may have an indirect impact. Some may allow you to see results right away, whereas others may take months or even years to make a measurable difference.

G. Who is responsible for this guide?

The CAHPS Improvement Guide was produced by a team of researchers based at Harvard with the support of the Centers for Medicare and Medicaid Services (CMS). CMS is a major sponsor of the CAHPS Health Plan Survey, which it uses to assess the performance of the Medicare program and its health plans. Since 1998, it has collected CAHPS data from members of all Medicare HMOs in order to assess their experiences; it has collected data from beneficiaries in the traditional Medicare program since 2001. These results are shared with the health plans as well as with beneficiaries, who are encouraged to use the information to help choose the plan that best meets their needs. (Publicly reported results are available at [https://www.medicare.gov/find-a-plan/questions/home.aspx](https://www.medicare.gov/find-a-plan/questions/home.aspx))

Since CMS released the guide in 2003, it has been disseminated in print to Medicare health plans and more broadly in PDF format. In 2008, CMS funded a research team associated with Massachusetts General Hospital and Harvard to transform the printed guide into a Web-based resources that could join the many CAHPS-related resources made available by the Agency for Healthcare Research and Quality.
While initially designed for Medicare health plans, the guidance and quality improvement interventions are intended to help all health plans and medical groups, regardless of their patients’ source of coverage.

Why Improve Patient Experience?

In the face of multiple priorities and limited resources, leaders of health care organizations may question the value of measuring and improving the patient’s experience with care. Yet, powerful market trends, combined with increasing evidence linking patient experience to other important clinical and business outcomes, make a compelling case for improving patient experience as measured by CAHPS surveys.

A. Forces Driving the Need to Improve

Forces contributing to the growing imperative to improve patient experience include the public reporting of CAHPS survey scores as well as various initiatives to build measures of the patient experience into performance-based compensation systems, board certification and licensing, and practice recognition programs. A growing demand among patients for an enhanced service experience and greater participation in their health care is placing further pressure on health care systems to find ways to become more patient-centered.

Examples of prominent forces include the following:

- The 17 Aligning Forces for Quality communities and 24 Chartered Value Exchanges include measuring, reporting, and improving patient experience as key objectives of their health system reform efforts.

- The Patient Protection and Affordable Care Act of 2010 includes new provisions for measuring and reporting patient experience of care:
  
  - The Centers for Medicare & Medicaid Services (CMS) now includes patient experience survey results based on the CAHPS Hospital Survey (H-CAHPS) in its hospital value-based purchasing program.
  
  - CMS is also producing a PhysicianCompare Web site, which will likely include patient experience measures drawn from the CAHPS Clinician & Group Survey.
The National Committee for Quality Assurance’s (NCQA) Patient-Centered Medical Home 2011 program includes optional recognition of patient experience. Physician practices seeking recognition are encouraged to use the CAHPS Clinician & Group 12-Month Survey with the Patient-Centered Medical Home Item Set.

The American Board of Medical Specialties has revised its Maintenance of Certification requirements for each of its 24 member Boards to include core items from the CAHPS Clinician & Group Survey.

The National Priorities Partnership has articulated a goal of measuring and using patient experience in all care settings. Its Work Group on Patient and Family Engagement has specifically identified widespread implementation of the CAHPS Clinician & Group Survey in ambulatory settings as a top priority.

Health plans (such as Blue Cross Blue Shield of Massachusetts and HealthPlus of Michigan) and multi-stakeholder organizations (such as California’s Integrated Healthcare Association) are incorporating patient experience scores into provider pay-for-performance incentives.

B. The Clinical Case for Improving Patient Experience

Improving patient experience has an inherent value to patients and families and is therefore an important outcome in its own right. But good patient experience also is associated with important clinical outcomes. For example:

- At both the practice and individual provider levels, patient experience positively correlates to processes of care for both prevention and disease management. For example, diabetic patients demonstrate greater self-management skills and quality of life when they report positive interactions with their providers.

- Patients’ experiences with care correlate with adherence to medical advice and treatment plans. This is especially true among patients with chronic conditions, where a strong commitment from patients to work with their providers is essential for achieving positive results.

Patients with better care experiences often have better health outcomes.\textsuperscript{[6][7]} For example, studies of patients hospitalized for heart attack showed that patients with more positive reports about their experiences with care had better health outcomes a year after discharge.\textsuperscript{[8][9]}

Measures of patient experience also can reveal important system problems such as delays in returning test results and gaps in communication that may have broad quality, safety, and efficiency implications.

\textbf{C. The Business Case for Improving Patient Experience}

Patient experience is correlated with key financial indicators, making it good for business as well as for patients. For example:

- Good patient experience is associated with lower medical malpractice risk.\textsuperscript{[10][11]} A 2009 study found that for each drop in patient-reported scores along a five-step scale of “very good” to “very poor,” the likelihood of a provider being named in a malpractice suit increased by 21.7%.\textsuperscript{12}

- Efforts to improve patient experience also result in greater employee satisfaction, reducing turnover. Improving the experience of patients and families requires improving work processes and systems that enable clinicians and staff to provide more effective care. A focused endeavor to improve patient experience at one hospital resulted in a 4.7% reduction in employee turnover.\textsuperscript{13}

- Patients keep or change providers based upon experience. Relationship quality is a major predictor of patient loyalty; one study found patients reporting the poorest-quality


\textsuperscript{7} Stewart MA. Effective physician-patient communication and health outcomes: a review. CMAJ. 1995; 152:1423-1433.


\textsuperscript{9} Meterko M, Wright S, Lin H, et al. Mortality Among Patients with Acute Myocardial Infarction: The Influences of Patient-Centered Care and Evidence-Based Medicine. Health Services Research. 2010 October; 45(5):1188-204


relationships with their physicians were three times more likely to voluntarily leave the physician’s practice than patients with the highest-quality relationships.[14]

Are You Ready To Improve?

Improving CAHPS scores, i.e., the patient’s experience of care, is a quality improvement challenge that is somewhat different from improving a clinical or technical process of care. This kind of transformational work requires new tools and often challenges many existing practices in your organization.

Before embarking on this kind of improvement initiative, it is helpful to perform a self-assessment to evaluate whether your organization approaches improvement in a manner that is associated with the successful implementation of CAHPS-related quality improvement (QI) programs. This is a valuable exercise because it takes time and effort to work through the QI process, i.e., to identify weaknesses, develop and apply solutions, and refine your strategies until they have a measurable and sustainable impact.

Read this section to learn about five behaviors common among organizations that are committed to and successful at improving their performance:

- Cultivating and supporting QI leaders
- Focusing on microsystems (“where the action is”)
- Training staff in QI concepts and techniques
- Paying attention to customer service
- Recognizing and rewarding success

Once they become part of the organization’s culture, these behaviors often play a large role in supporting and driving successful efforts to improve members’ and patients’ experiences with health care. If any are missing or inadequate in your organization, you may want to think about ways to introduce them. At the very least, recognize the impact of their absence on efforts to improve CAHPS performance and plan accordingly. You may, for example, need to devote resources to training team members in basic process improvement methods, or set aside time to educate and build support among physicians or board members.

A. Cultivating and Supporting QI Leaders

Many health care organizations are highly resistant to change. Employees are not encouraged to solve problems on their own, nor do they challenge the status quo. Most are accustomed to following standard operating procedures even when the policies and procedures may seem ineffective and outdated. Given the life and death issues confronted every day in most health care organizations, this risk-averse behavior is neither surprising nor hard to understand.

Because of this pervasive attitude, the search for better solutions and creative new approaches to long-standing problems requires strong and consistent encouragement and support. In order to achieve the goals of better performance on CAHPS measures, health plans and provider networks must cultivate strong leaders throughout their organizations. Leaders are those who can communicate a compelling vision, motivate clinicians and other staff to lower their resistance to change, and effectively and willingly participate in the redesign of new systems of care. Ideally, all levels of staff in the organization should become adept at leading change, making changes, and managing change.

Sources of Leadership

Leadership for quality improvement (QI) can emanate from multiple sources: the board, the CEO and senior leadership team, and mid-level managers. Leaders may obtain their power from the authority of a title, through mastery of knowledge, or through the strength of personality or persuasive abilities.

Senior Leadership: Studies suggest that leadership from the top is a key factor in determining whether clinicians and others support and participate in QI efforts.\textsuperscript{15} Senior leaders set the tone and establish the policies and organizational structure that can either strengthen or undermine QI efforts.

Mid-level Management: Because the CAHPS Health Plan Survey asks about processes of care at both the plan and medical group level, the success of efforts to improve CAHPS scores often depends on the involvement, or at least cooperation, of clinicians and medical group staff. Medical group physicians and mid-level managers can also encourage cross-functional improvements in a

group practice or ambulatory care site by selecting interdisciplinary team members and physicians with a special interest in QI.

**The Board**: Finally, strong board leadership can play a crucial role in QI. With the high turnover rates in plan and medical group senior executives, the board can help sustain a corporate culture focused on quality and provide “constancy of purpose.”[16]

**Attributes of Service-Oriented Leaders**

Effective leaders maintain a focus on the needs of those they serve and their employees. Such leaders exhibit many of the following characteristics:

<table>
<thead>
<tr>
<th>Energetic, creative</th>
<th>Not...</th>
<th>Stately, conservative</th>
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</thead>
<tbody>
<tr>
<td>Participatory, caring</td>
<td>Not...</td>
<td>Removed and elitist</td>
</tr>
<tr>
<td>Listening, coaching and teaching</td>
<td>Not...</td>
<td>Supervising and managing by command and control methods</td>
</tr>
<tr>
<td>Motivating by mission</td>
<td>Not...</td>
<td>Motivating by fear</td>
</tr>
<tr>
<td>Leading by means of personally demonstrated values</td>
<td>Not...</td>
<td>Relying on institutional policies that are meaningless or outdated</td>
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**Key Tasks for Leaders at Every Level**

Those who study effective leadership have identified ten practices that leaders at all levels can implement to produce and maintain an environment that emphasizes and encourages quality improvement:[17]

- Link QI goals to the organization’s mission and strategic plan (in other words, integrate improvement planning with business planning).

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Establish and communicate the purpose of the organization.

Adopt and encourage a view of the organization as a system. Refer to “Focusing on Microsystems” below.

Use measurement and management’s attention to keep the organization focused on the goals of QI efforts.

Allocate financial and other resources (e.g., staff) to QI endeavors.

Align incentives and performance appraisals to stimulate QI. (For example, create reward and recognition programs that reinforce the values and goals of the organization. Refer to “Recognizing and Rewarding Success” in the “Are you Ready to Improve” section.

Design and manage a system for gathering improvement information.

Remove barriers, which could be a function of finances, policies, system failures, internal politics, unsuitable attitudes, or legitimate concerns of personnel.

Become directly involved in continuous improvement projects, perhaps by managing individual and team improvement activities.

Market and advertise the QI work to the board, staff, and community through interpersonal communication, newsletters, and the media.

While some of these activities may be more appropriate for senior leaders, most can be applied throughout the health care organization.

B. Focusing on Microsystems

One way for health plans and medical groups to strengthen their quality improvement (QI) programs is to think of the organization as a system, or more specifically, as a collection of interrelated “microsystems.” The term “microsystems” refers to the multiple small units of caregivers, administrators, and other staff who produce the “products” of health care – i.e., who deliver care and services on a daily basis. A unit could be a team of primary care providers, a group of lab technicians, or the staff of a call center. In practices with three or more physicians, clinicians are often organized into “pods” or care teams that are examples of a microsystem.

Elements of a Microsystem

The concept of microsystems in health care organizations stems from research findings indicating that the most successful of the large service corporations maintain a strong focus on the small,
functional front-line units who carry out the core activities that involve interaction with customers.\textsuperscript{[18][19]}

Adapting that organizational theory to the health care setting, health services researchers suggest that a microsystem would consist of the following elements:\textsuperscript{[20][21]}

- A core team of health professionals;
- A defined population of people or patients for whom they provide care;
- An information environment to support actions of caregivers and patients; and
- Support staff, equipment, and office environment.

**Tasks Conducted by Microsystems**

The elements of a microsystem work together to perform related clusters of tasks. For a health plan, such tasks could include:

- Enrollment of members;
- Disenrollment;
- Claims processing;
- Member services; and
- Supporting tasks (e.g., gaining knowledge of patients and populations; measurement of health, health status, and costs of care; measurement of microsystem performance).

For a medical group, tasks could include:

- Assignment of a person to a caregiver;
- Scheduling appointments, responding to emails and phone calls, and other administrative, patient-oriented tasks;

\textsuperscript{21} Berwick DM. A user's manual for the IOM's 'Quality Chasm' report.” Health Aff (Millwood) 2002;21(3): 80-90.
- Orientation to the practice and its services;
- First visit, initial assessment, and care planning; and
- Delivery of health care services: acute, chronic, and preventive.

**Use of the Microsystem Approach**

The goal of the microsystem approach is to foster an emphasis on small, replicable, functional service systems that enable front-line staff to provide efficient, excellent clinical and patient-centered care to patients.\(^{[22]}\) To develop and refine such systems, health care organizations start by defining the smallest measurable cluster of activities. Once the microsystems have been identified, a practice or plan can select the best teams and/or microsystem sites to test and implement new ideas for improving work processes, and can then roll out effective changes to the broader organization over time.

**C. Training Staff in QI Concepts and Techniques**

One requirement for successful quality improvement (QI) initiatives is a staff that is familiar with the reasoning that underlies these efforts and comfortable using the required tools and techniques. Many resources and educational programs are available to help organizations accomplish this. Here is a quick review of the kind of investment in training that you might want to make as you lead your health care organization down the path described in this guide. A list of pertinent readings and other resources is available at the end of this page.

**Teaching the Rationale**

Since training programs should address the “why” of QI as well as the “what” and the “how”, you may want to start by educating clinical and administrative staff on the central precepts of QI and how it can benefit the organization and its members/patients. It can be especially useful to share information on how others have used this approach to improve patients’ experiences with care and what their responses have been. For example, in a recent survey of physicians, over three-quarters of those who had been affected by patient satisfaction surveys reported that the impact on the quality

and efficiency of their practice has been positive.\textsuperscript{[23]} \textsuperscript{[24]} Strategies to improve patient satisfaction and involvement can also have an important effect on clinical outcomes and physician satisfaction.

➤ Read about a study that demonstrated this effect.

<table>
<thead>
<tr>
<th>Study Summary: Positive Outcomes Associated with Efforts to Improve Patient Satisfaction and Involvement</th>
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<tbody>
<tr>
<td>In the 1980’s, Greenfield and Kaplan\textsuperscript{[25]} designed a randomized controlled trial to assess the impact of increased patient involvement in care. The patients were visiting a clinic that specialized in ulcer disease.</td>
</tr>
<tr>
<td>During a 20-minute session before their regularly scheduled visit, patients in the experimental group received help in reading their medical record and were coached to ask questions and negotiate medical decisions with their physicians. The intervention relied on a treatment algorithm as a guide. Patients in the control group received a standard educational session of equal length.</td>
</tr>
<tr>
<td>Six to eight weeks after the trial, patients in the experimental group reported fewer limitations in physical and role-related activities, preferred a more active role in medical decision-making, and were as satisfied with their care as the control group. Analysis of audiotapes of physician-patient interactions showed that patients in the experimental group were twice as effective as control patients in obtaining information from physicians.</td>
</tr>
<tr>
<td>Results of the intervention included the following:</td>
</tr>
<tr>
<td>■ Increased involvement in the interaction with the physician;</td>
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<tr>
<td>■ Fewer limitations imposed by the disease on patients’ functional ability;</td>
</tr>
<tr>
<td>■ Increased preference for active involvement in medical decision-making; and</td>
</tr>
<tr>
<td>■ Improved patient and physician satisfaction with the encounter.</td>
</tr>
</tbody>
</table>

Teaching Concepts and Methods

Once assigned to CAHPS-related QI teams, staff members will need basic training in specific QI concepts (such as microsystems, change concepts, small tests of change, and the diffusion of innovation) and methods. To learn about these concepts and methods, refer to the “Quality Improvement Steps”.

Depending on their role in the team, many staff will also benefit from more advanced training in the effective use of statistical methods, graphic analysis, and multidisciplinary teams.

Teams that have had basic training in QI techniques and group work or team building are usually able to achieve success much faster than teams that have had no previous training or experience. However, sometimes teams focus on the training as the “end goal,” making it important to set clear aims for the success of any QI project at the outset.

It is important to note that physicians are unlikely to be familiar with QI methods. While many professionals and managers receive some kind of QI training in their basic education, most physicians do not.

“Nothing about medical school prepares a physician to take a leadership role with regard to changes in the system of care.”

— Donald Berwick

Doctors are trained to succeed as individuals but not as members of a team, despite the reality that almost everything they aspire to accomplish is dependent on successful relationships with other staff and their patients.

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D. Paying Attention to Customer Service

The ability of health plans and medical groups to deliver high-quality clinical and administrative service to their members and patients depends in part on their understanding of basic customer service principles and their ability to integrate these principles into clinical settings. This section briefly reviews why excellent service is so critical and suggests some steps for achieving better service at the physician, group, and plan level.

“Excellence is an art won by training and habituation. We are what we repeatedly do. Excellence, then, is not an act, but a habit.”
— Aristotle

Why Worry About Customer Service?

There are several reasons for health care organizations to pay attention to customer service:

- First, better service translates into higher satisfaction for the patient – and subsequently, for the employer who pays most of the bills.

- Second, as in any other service industry, a satisfied (and loyal) member or patient creates value over the course of a lifetime. In the context of health care, this value may manifest itself in the form of repeat visits, trusting relationships, and positive word-of-mouth. A dissatisfied member or patient, on the other hand, generates potential new costs. Patients who are not happy with their plan or clinician may not follow clinical advice, can develop worse outcomes, and are likely to share their negative stories with friends and family members.

- Third, existing patients and members are an invaluable source of information that can help health care organizations understand how to improve what they do and reduce waste by eliminating services that are unnecessary or not valued.

- Finally, poor customer service raises the risk of a negative “grapevine effect.” Over 50 percent of people who have a bad experience will not complain openly to the plan or the medical group. But research shows that nearly all (96 percent) are likely to tell at least 10 other people about their bad experiences. Word-of-mouth reputation is important because studies continue to find that the most trusted sources of information for people choosing a health plan, medical group, doctor, or hospital are close family, friends, and work colleagues. When a recent survey asked people whom they would go to for this kind of information, over two-thirds of respondents said they would rely on the opinions of family members and friends.

In a study conducted by General Electric, “the impact of word-of-mouth on a customer’s purchase decision was twice as important as corporate advertising.”

Health care organizations also need to pay attention to customer service because service quality and employee satisfaction go hand-in-hand. It is almost impossible to find high employee satisfaction in organizations that have low patient satisfaction. And organizations that place a premium on customer service tend to have high employee satisfaction as well.

Employees often are frustrated and angry about the same things that bother patients and members: chaotic work environments, poor systems, and ineffective training. No amount of money, signing bonuses, or other tools currently used to recruit hard-to-find staff will offset the negative impact of these problems on staff. The real cost of high turnover may not be the replacement costs of finding new staff but the expenses associated with lost organizational knowledge, lower productivity, and decreased customer satisfaction.

**Some Advice on Achieving Better Customer Service**

The most successful service organizations pay attention to the factors that ensure their success: investing in people with an aptitude for service, technology that supports front-line staff, training practices that incorporate well-designed experiences for the patient or member, and compensation linked to performance. In particular, they recognize that their staff value being able to achieve good results, and they equip the staff to meet the needs of members and patients. For health plans, this could mean developing information systems that allow staff to answer members’ questions and settle claims quickly and easily; for provider organizations, it could mean providing the resources and materials that clinicians need to provide high-quality care in a compassionate, safe environment.

Experts on delivering superior customer service suggest that health care organizations adopt the following set of principles:

- Hire service-savvy people.
- Establish high standards of customer service.
- Help staff hear the voice of the customer.

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Remove barriers so staff can serve customers.

Reduce anxiety to increase satisfaction.

Help staff cope better in a stressful atmosphere.

Maintain your focus on service.

Many customer-service programs have been developed for companies outside of health care. Although the strategies are similar, Leebov and Scott have adapted this work for health care settings in ways that increase its credibility and buy-in, especially from clinical staff. Their books and articles are packed with practical, step-by-step instructions about how to identify and solve customer service problems through the health care delivery system.

E. Recognizing and Rewarding Success

The pursuit of better performance benefits greatly from positive incentives, whether at the organizational level or the individual level. Rewards can be financial or non-financial, but what matters is that they are directly linked to either the effort to improve or, ideally, the actual improvement.

External Rewards

The last several years have seen a growing interest in the idea of rewarding health care organizations that exhibit good quality or a commitment to improving their performance. In many cases, these rewards have come in the form of public recognition. Some purchaser organizations point out high-performing health plans to consumers, while some health plans do the same with medical groups and even individual physicians to steer members to better performers.

Superior performance also receives public recognition through the growing use of health plan and provider organization “report cards.” Many large employers, local buying coalitions, and government purchasers (such as Medicare and state Medicaid agencies) are producing printed and Web-based reports with comparative information on the quality of health care organizations such as health plans, hospitals, and medical groups. Their goal is to provide employees and beneficiaries with better information for making health care decisions.

These public reports often highlight organizations that achieve better results than others on standardized measures such as CAHPS and HEDIS. While the impact of public reporting has not
been extensively evaluated, there is some evidence that making performance information public stimulates quality improvement activities in areas where performance is reported to be low.\textsuperscript{31}

More recently, purchasers and payers have explored ways of offering either increased market share or higher financial payments for good quality. Prominent examples include the Integrated Healthcare Association and the Bridges to Excellence program:

- The Integrated Healthcare Association (IHA), a multi-stakeholder leadership group in California, administers a statewide “pay for performance” program. Through this program, health plans use common measures to evaluate the performance of their contracted physician groups serving commercial HMO enrollees, and develop individual bonus programs that pay significant financial incentives based on that performance. Learn more at http://www.iha.org.

- The “Bridges to Excellence” program is a national group of employers, physicians, health plans and patients committed to realigning everyone’s incentives around higher quality. Participants in the Bridges to Excellence program encourage increased accountability and quality improvements through the release of comparative provider performance data, as well as through higher payments to providers that meet specified quality goals. Learn more at http://www.bridgestoexcellence.org.

**Internal Rewards**

External reward systems motivate the leadership and the staff of an organization to focus on quality. Internal reward systems pay close attention to the front-line staff and middle managers who do what is necessary to achieve the external rewards. Reward and recognition programs usually include formal programs, day-to-day feedback, and informal recognition programs.

\textit{“Creating loyalty means giving employees more for their labor than just a paycheck. Both research and personal experience tell us that people work for a sense of accomplishment and the recognition of others.”}\textsuperscript{32}

\textsuperscript{31} Hibbard JH, Stockard J, Tusler M. Does publicizing hospital performance stimulate quality improvement efforts? Health Aff (Millwood) 2003;22(2): 84-94.

**Formal Programs**

Examples of formal programs include:

- Staff Recognition awards that focus on different behaviors, i.e., service excellence, clinical competence, teaching, and mentoring
- Years of service awards: 5, 10, and 25 years

**Day-to-Day Feedback**

Managers provide consistent and timely feedback to employees about their performance. Experts confirm that providing praise in a timely manner does have a positive effect on employee motivation and sense of belonging. Some organizations develop formal coaching programs to assist managers in coaching and providing feedback to their employees and peers.

**Informal Recognition Programs**

Many employees go above and beyond their assigned duties to assist patients, other staff, clinicians, and the community. It is important to encourage the recognition of these individuals for their customer service, teamwork, integrity, or overall positive attitude. Research indicates that informal recognition by managers is a key motivating factor for effective job performance.33

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Read about an example of an informal recognition program. Case Study: R.E.W.A.R.D.

One example of an informal program is called R.E.W.A.R.D., which stands for Recognition of Employees When Achievement & Responsibility is Displayed.

How to Recognize

Some organizations create a J.A.C.K. In-The-Box, where J.A.C.K. stands for Job Acknowledgement Care Kit. The JACK In-The-Box provides a number of rewards that can be used for instant recognition when situations “pop” up. These can include gift certificates, time off, extra vacation days, or other small tokens of appreciation scaled to fit the accomplishment.

Draw on your understanding of the person you want to recognize when selecting the recognition item. Some people like public recognition of their efforts; if you are not sure, ask the person what he or she would be comfortable with.

When to Recognize

There are no rules about how often recognition should take place. Ideally, recognition should take place as soon as possible, whenever you want to say “Thanks” or “Congratulations”

What to Recognize

People can be recognized for many things. Here are just a few:

- Exceptional job performance;
- Excellent team work;
- Outstanding customer service;
- Extraordinary performance of regular duties in a particularly difficult circumstance;
- Extremely good performance of regular duties over a long period of time;
- A “Good Catch” (i.e., the person took the initiative to nip a problem in the bud or avoid a disaster);
- Active participation in projects;
- Applying new skills and knowledge;
- Meeting goals and targets;
- Displaying commitment and loyalty to the organization; and
- Demonstrating innovation through new ideas and initiatives

Orientation

Orientation of new employees is the best place to begin the education about the culture of your organization. It is also an excellent way to highlight how the internal reward and recognition system is linked to the philosophy of care and organizational standards.
The objective of orientation should be to do the following:

- Instill a feeling of self-worth;
- Create a sense of belonging;
- Develop an attitude of pride and confidence in oneself and the organization;
- Spark a desire to succeed; and
- Enhance the relationship between the employee and the organization.

Compensation and Benefits

Compensation and benefits can be designed to reinforce the desired behaviors and performance standards of the organization. Compensation levels can be linked to meeting service-oriented performance standards, coaching and mentoring goals for managers, and other indirect reward activities such as completing performance reviews on time.

Cafeteria-style benefit packages help meet the needs of a diverse work force without creating a sense of inequity in your workforce. Some organizations offer unusual benefits such as pet insurance, health club memberships, flexible spending accounts for medical and childcare expenses and even home financing assistance and education.

In summary, there are many effective ways to reward and recognize employees. The most important consideration in the design of your program is to make sure your program supports your organization’s culture and philosophy of care.

Rewards That Go Beyond the Individual

Rewards can also be actions and changes that support the entire organization and help transform the culture. Examples include the following:

- Improve your systems to “make it easy to do the right thing” and improve quality of life for front-line staff.
• Make sure people have the aptitude, training, and the resources they need to do a job well done.

• Give star performers the opportunity to attend conferences of their choice and/or receive tuition reimbursement for courses that advance their expertise.

• Tell stories, create legends and celebrate “heroes.”·

• Help people get recognition internally and externally through presentations at meetings and conferences, newsletters, and local media.

• Recognize people personally for behavior consistent with the organization’s stated philosophy and rules.

• Use thank you notes, voice mailboxes that allow patients to compliment staff, and public postings of thank-you letters from grateful patients and families.

• Be aggressive about the management of poor performers (i.e., staff who do not uphold the values and culture of excellence).

• Show respect for people. Start everything on time.

• Invite front-line staff to meet with senior management and the board routinely to improve communication and trust in management.

“Most people can’t sleep the night before their first day of a new job. They probably decided two weeks in advance what they’d wear. They can’t wait to get started, meet new people, see everything, do great things. After all of the anticipation, their first day is usually a big yawn. They find themselves hidden away in a room somewhere filling out forms. What a mistake! First impressions are lasting.”
— Hal Rosenbluth

Analysis of CAHPS Results

CAHPS data can help you pinpoint opportunities for improvement at multiple levels, including health plan, medical group, practice site, and individual practitioner. However, it is not sufficient to simply look for the composites with low scores. You need to know how your scores may be changing over time, how they compare to those of other organizations, and which issues are most relevant to your members or patients.

Read this section to learn:

- How to interpret what CAHPS data tell you about your organization’s strengths and weaknesses.
- How to consult other sources of performance data in your organization and conduct further analyses that can confirm or more precisely define the problem(s) you wish to focus on.

Learn about ways to analyze your performance:

- **Analyze CAHPS data to understand performance**
  - Understand trends in your CAHPS scores
  - Compare your CAHPS scores to benchmarks
  - Understand key drivers behind your CAHPS scores

- **Dig deeper with additional quantitative analyses**
  - Identify issues that may be affecting CAHPS scores
  - Examine possible causes of problems: Tools and techniques

- **Dig deeper with qualitative analyses**
  - Identify stakeholders’ views on CAHPS performance issues
  - Gather feedback from stakeholders: Tools and techniques

In some cases, you may be able to obtain sufficient information from using just a few of these methods. However, each one should offer progressively greater insight into the data.
A. Analyze CAHPS data to understand performance

Once you have results of a CAHPS survey in hand, you can conduct different kinds of analyses to identify where your organization performs well and where you may need to focus improvement efforts. Each kind of analysis provides a different perspective on relative strengths and weaknesses.

1. Understand trends in your CAHPS scores

An important starting point in using your CAHPS scores to identify opportunities for improvement is to look at past performance. Unless you are collecting CAHPS data for the first time, comparing your current scores to previous scores can be valuable for:

- Detecting areas where your performance may be improving, declining, or holding steady.
- Increasing your confidence that the scores reveal a true picture of performance and are not just a snapshot of a single point in time.

Case Study: Tracking CAHPS Scores at Both the Clinician and Health Plan Levels

HealthPlus of Michigan is an independent health plan serving commercial, Medicaid, and Medicare enrollees in east central Michigan. This case study illustrates how monitoring changes in CAHPS scores at the level of the individual primary care provider (PCP) can reveal how changes in PCP performance are related to CAHPS scores at the health plan level.

HealthPlus Tracks Trends in Scores for Doctor Rating and Communication Measure

In 2005, HealthPlus began collecting CAHPS Clinician & Group Survey data on the PCPs that direct primary care for enrollees in the plan’s commercial HMO product. The plan conducted the survey annually for 4 years with a total of 260 PCPs. The chart below shows the trend in the Doctor Rating scores (percent rated 9 or 10 on the 0-10 rating scale) between 2005 and 2008:
This chart shows a steady overall improvement in the distribution of scores clustering in the upper percentiles, and a corresponding decline in the concentration of scores in the lower percentiles.
A similar trend can be observed in the Doctor Communication composite scores for the same time period:

HealthPlus attributes this steady, modest but meaningful overall improvement to a combination of strategies implemented since 2005, including:

- Detailed performance feedback to all PCPs.
- Introduction of a pay-for-performance program for PCPs in 2007 based partially on CAHPS scores.
- A public transparency initiative, also started in 2007, to report comparative CAHPS scores for individual PCPs on the HealthPlus Web site.

**Physician Scores Related to Health Plan Scores**

The overall improvement in PCP scores can be linked to improvements in corresponding CAHPS scores at the health plan level. The following chart shows a significant increase in both the Doctor
Rating and Doctor Communication scores at the plan level over the same time period that CAHPS Clinician & Group Survey data have been collected and reported at the individual PCP level:

The steady increase in scores was sufficient to raise the CAHPS scores for the HealthPlus commercial plan to exceed the 75th percentile of scores among all commercial health plans seeking NCQA accreditation.

*Learn More*

Further information on HealthPlus' experience with trending scores for both the CAHPS Clinician & Group Surveys and the Health Plan Survey is available in a presentation delivered at the 12th CAHPS User Group Meeting.
2. **Compare your CAHPS scores to benchmarks**

A review of your CAHPS survey results will yield little useful information about opportunities for improvement unless you are able to answer the question: “Compared to what?” One way to get the information you need to identify specific problem areas, formulate an improvement plan, and select appropriate strategies is to compare your performance to others.

Another strategy is to compare current to past performance. To learn more about using trend data, refer to “Understand trends in your CAHPS scores” section.

To compare your CAHPS performance to that of others, you need to identify benchmarks that are appropriate and relevant for your organization. Your benchmark choices should be guided by your business strategy and improvement goals.

Major sources of national benchmarks include:

- CAHPS Database
- National Committee for Quality Assurance’s (NCQA) Quality Compass (health plans only)
- Centers for Medicare & Medicaid Services (Medicare plans only)

Other sources include:

- Your survey vendor. Many vendors offer access to comparison norms for their clients.
- Community-level data. Depending on the nature of quality measurement activities in your State or region, you may have access to benchmarks specifically for local providers. For example, several community collaboratives—such as those participating in the AHRQ’s Chartered Value Exchanges and the Robert Wood Johnson Foundation’s Aligning Forces for Quality program ([http://www.rwjf.org/qualityequality/af4q/](http://www.rwjf.org/qualityequality/af4q/)) — gather and report comparative CAHPS results at the clinic site or individual physician level.

3. **Understand key drivers behind your CAHPS scores**

Once you have compared your CAHPS scores to your previous scores and/or relevant benchmarks (national, regional, or State), the next step is to determine what specific issues to focus on for improvement.
There are many ways to identify areas for which you want to develop improvement activities. Considerations include:

- How common the problem is.
- How different your health plan or medical group score is from others.
- How the problem has changed over time.
- Existing opportunities for improvement activities.

How important the issue is based on other forms of patient feedback (To learn about qualitative assessment methods, refer to “Dig Deeper With Qualitative Analyses”).

Read this section to learn about a quantitative strategy for determining where to focus your efforts:

- What influences overall ratings?
- Creating a priority matrix

**What influences overall ratings?**

One way to assess the “importance” of a topic in the CAHPS survey is to assess how strongly a score for a particular question or composite measure is associated with a patient’s overall rating of their care or health plan. This is an indirect way of assessing how important different issues are to your patients or enrollees.

The statistic commonly used to assess such associations is called a correlation coefficient, which can range from –1.0 to +1.0:

- **If the correlation coefficient is between zero and 1**, the overall rating (e.g., how would you rate your care?) has a positive relationship with the score for a question (e.g., how often did your personal doctor explain things in a way that was easy to understand?) or composite measure (e.g., doctor communication). This means that the rating increases as the score increases. The higher the value of the coefficient, the stronger that relationship is.
If the correlation coefficient of 1.0, the rating and the question or composite measure are perfectly related, i.e., measuring the same concept.

If the correlation coefficient is zero, the rating and the question or composite measure are independent, i.e., not related.

If the correlation coefficient is between 0 and -1, the rating is inversely related to the question or composite measure, which means that the rating decreases when the score increases. It would be unusual to see a negative correlation in a CAHPS survey.

Using correlations to determine what specific survey topics are related to overall ratings is sometimes referred to as “key driver” analysis. You can conduct this type of analysis on large or small samples of data.

**Correlation Coefficients for the CAHPS Clinician & Group Surveys**

The table below presents correlations between the core composite measures on the Clinician & Group Surveys and the overall rating of the doctor. These correlations are based on the CAHPS Database’s preliminary comparative data for the 6-point scale version of the 12-month instrument. It is important to analyze your own data for such correlations because they can be different for each sample.

The table shows a very strong association between the Doctor Communication composite and the Doctor Rating and a very weak relationship between Access to Care and Office Staff scores and the Doctor Rating. These relationships are not surprising given the important role of communication in influencing patients’ perceptions of their doctors. This finding also underscores the importance of focusing improvement efforts on Doctor Communication to affect overall Doctor Rating scores.

<table>
<thead>
<tr>
<th>Composite Measure</th>
<th>Doctor Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Care: Getting Timely Appointments, Care, and Information</td>
<td>.07</td>
</tr>
<tr>
<td>Doctor Communication: How Well Doctors Communicate With Patients</td>
<td>.74</td>
</tr>
<tr>
<td>Office Staff: Helpful, Courteous, and Respectful Office Staff</td>
<td>.05</td>
</tr>
</tbody>
</table>
**Correlation Coefficients for the CAHPS Health Plan Survey**

The table below presents correlations between the Health Plan Survey composite measures and the overall ratings of doctor, care, and plan, based on data from the 2007 Medicare managed care CAHPS survey. The white boxes indicate composite measures that appear to be important predictors of ratings because the correlation coefficients are greater than 0.45. Determining what is a high or low correlation is often a matter of judgment and should be informed by looking at analyses of several different samples to see how they compare.

<table>
<thead>
<tr>
<th>Composite Measure</th>
<th>Doctor Rating</th>
<th>Care Rating</th>
<th>Plan Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Needed Care</td>
<td>.54</td>
<td>.57</td>
<td>.75</td>
</tr>
<tr>
<td>Getting Care Quickly</td>
<td>.49</td>
<td>.44</td>
<td>.71</td>
</tr>
<tr>
<td>How Well Doctors Communicate</td>
<td>.90</td>
<td>.48</td>
<td>.72</td>
</tr>
</tbody>
</table>

* Based on an analysis of the Medicare Advantage data from the 2007 Medicare CAHPS Survey.

**Creating a Priority Matrix**

One very useful way to hone in on areas for improvement is to plot a “priority matrix” that graphically displays relative performance on survey composites along with the relative “importance” of the composite as it relates to either an overall rating of care question or a question about willingness to recommend the practice to family and friends.

The following example is drawn from the practice-level reports compiled by Massachusetts Health Quality Partners for each of the practice sites participating in its statewide patient experience survey. This survey combines the CAHPS Clinician & Group instrument with some additional items.
**Relative Performance on the Y-Axis**

On the Y-axis, the chart displays where the practice site’s scores stand in relation to all other practices included in the survey. That is, scores below the “50” line denote measures for which the practice’s performance is below the 50th percentile, and those above the 50 line denote measures for which the practice’s performance is above the 50th percentile.

**Relative Importance on the X-Axis**

On the X-axis, the chart shows the relationship between each survey measure and patients’ willingness to recommend their personal physician to family members and friends (i.e., the correlation between the measure and “willingness to recommend”). The further to the right a measure is on the chart, the more strongly it is associated with patients’ willingness to recommend their physician.

**Priority Matrix Combines Performance With Importance**

By combining these two pieces of information, the chart helps to indicate the priority areas for improvement in the practice. For example, measures in the bottom right quadrant reflect those that should probably be the highest priorities for improvement in that they are both important to patients (as revealed by high correlations with patients’ willingness to recommend the doctor) and areas in which the practice performed below the 50th percentile of the market. Similarly, the other quadrants convey information about how the practice performed on each aspect of care and the relative importance of this area to patients. Note that this priority matrix is an illustrative example; where you choose to place the lines to form the quadrants should be based on your own goals and priorities.
B. Dig deeper with additional quantitative analyses

If it is not clear why you are doing well on some measures and not so well on others, you may need more detailed information to help you identify actions that can improve performance. To get that information, you need to go beyond the CAHPS data to do some additional analyses targeted at one or more specific topics addressed by CAHPS items or composites. The purpose of these analyses will be to “drill down” to find very specific, underlying performance problems that are actionable—i.e., that you can change through quality improvement activities.

Consider a clinical practice whose score for the composite “Getting timely appointments, care, and information” is lower than average. This section uses the example of this practice to address two questions:

1. How do you identify issues that may be affecting CAHPS scores?
2. What are some tools and techniques you can use to examine causes of performance problems?

1. Identify issues that may be affecting CAHPS scores?

Imagine that an initial analysis of the practice with poor performance on the access composite found that a key driver of the composite score was a low score on this CAHPS question: “When you made an appointment for a check-up or routine care, how often did you get an appointment as soon as you thought you needed?”

Why might patients be having trouble getting a timely appointment for check-ups or routine care? Various operational issues in the practice could contribute to this problem:

- The physicians may not be available sufficient hours to handle all the patients served by the practice.
- Problems in scheduling appointments may have a seasonal pattern related to when physicians take vacations or are otherwise not available.
- Routine appointments may be bumped frequently by last-minute emergency visits.
- Limitations of office hours may make it difficult to find visit times that are convenient for patients.
The staff working on the appointment calendar may not be interacting well with patients to identify their needs and priorities.

To find the issues that are most important for you to address, start by identifying and examining a number of possible contributing factors.

**Step 1**: Map all the steps involved in the process that is your target for performance improvement. For example, the practice in the example above would list each step involved in scheduling appointments for routine care. A useful tool for this step is process mapping.

**Step 2**: For each process step, identify the factors that might be influencing how effectively it is being carried out. For example, this practice might identify physician schedules as one factor affecting the availability of appointment times.

**Step 3**: Narrow in on the steps and factors that you think are most likely to be contributing to poor performance on the target process. To do this, you probably will need to collect some additional information about the process steps.

**Step 4**: For the most important process steps and factors, drill down to identify the specific problems that are causing them to fail or be weak. Root cause analysis (under “Tools and Techniques for Diagnosing Performance Problems”) is a useful tool for this step.

2. **Tools and Techniques for Diagnosing Performance Problems**

This section provides a brief overview of several key tools and techniques you can use to collect and analyze data on your processes and the factors that may be affecting them. Although many of these approaches were developed for use in industrial settings, they apply equally well to health care.

a) Process mapping
b) Process observation
c) Analysis of administrative data
d) Small-scale surveys
e) Root cause analysis
More information about these tools and techniques is available at the following Web sites:

- Six Sigma: http://www.isixsigma.com
- Lean: http://www.lean.org
- Institute for Healthcare Improvement (IHI): http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods

a) **Process Mapping**

To improve a process, start by mapping it. A process map is a picture showing the steps involved in transforming the inputs to the outputs of the process. The picture below shows a simple process map for an appointment process in a medical practice. It includes:

- The process steps (best described using nouns [blue boxes]),
- The activities between the steps (best described using verbs [white boxes]), and
- For each activity, the inputs and outputs involved (arrows).

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You can choose from a variety of formats for preparing your process map. But within any given process map, use consistent symbols for each type of process component, such as process steps, activities, and decision steps. This will support clear communication among participants as you develop and work with the process map to guide improvement decisions. Learn more about developing this kind of picture at http://saferpak.com/flowchart_articles/howto_flowchart.pdf.

Process mapping can address two aspects of process improvement:

- Developing an initial understanding of how things are done currently. It is critical to start by depicting the process the way it really works, not the way you think it should work.
- Examining and testing alternative changes to improve the process.

For best results, this method needs to be accurate and fast; it should also involve a high degree of staff ownership.

**Steps in Developing a Process Map**

- **Start with the big picture.** Draw a macro-level process first, after which you may want to develop other diagrams with increased levels of detail.

- **Observe the current process.** Walk through the current process, observing it in actual operation.

- **Record the process steps you observed.** Document the steps as they actually occur. Start by writing the steps separately on index cards or sticky notes.

- **Arrange the sequence of steps.** Lay out the cards or sticky notes exactly as you observed the steps. Using cards lets you rearrange the steps without erasing and redrawing and prevents you from discarding ideas simply because it’s too much work to redraw the diagram.

- **Draw the final process map.** Depict the process exactly as you observed, recorded, and arranged the sequence of steps.

**Common Weaknesses of Process Maps**

Take steps to avoid and correct for these common pitfalls that can interfere with your interpretation and full understanding of the process.
Those working on the map may have drawn it for the process as they envision it, not as it really is.

People may be reluctant to depict the obviously illogical parts of the process for fear they will be asked to explain why things have been working that way.

Rework loops are either not seen or not documented because people assume rework is small and inevitable.

The people drawing the map do not really know how the process works.

b) Process Observation

Process observation is a way of confirming exactly what is happening during any particular process. It allows you to gather useful information about almost any process, activity, or human behaviors that you can use to refine your process map, as well as to help uncover issues that are compromising the effectiveness of the process.

Often you will not be able to observe all relevant activities by people, location, or over time, so you can observe only a sample of activities. If you sample, you should consider how important it is to have a probability sample, which would allow you to generalize to the entire process.

Common Questions About Observation

When is observation most useful? Observation is useful when:

- You want direct information on a process.
- You are trying to understand an ongoing process.
- Physical evidence, products, or outcomes of a process can be seen readily.
- Written or other data collection procedures seem inappropriate.

Who should do the observing? Your observers should be neutral parties. They should not be someone who has day-to-day contact with people in the process being observed. The observer must pay close attention to capture details well. He or she will also need to discern what is important in the process being observed and help to interpret the meaning of what was observed. Once the observation is complete, you may want to verify it by either having the observer go back to collect more information or asking others to do additional observation to validate the findings.
Should the observer be open about what he or she is doing? Observations may be either overt or covert, depending on the situation and the purpose of the assessment. Covert observation is helpful because people often behave differently when they know they are being observed. But if you use covert observation, take care that neither the observation nor the resulting report will harm the people being observed.

Methods of Observation

To choose an observation method, start by answering these questions:

- What do you want to learn from the observation?
- What will the users/stakeholders view as credible and useful information?

You may use either structured or unstructured observation methods, depending on the type of information you want to collect.

- **Structured observation** looks for certain things that have already been identified and can be tracked in a preset guide, checklist, or rating scales. This method generates quantitative data from frequency counts, rankings, and ratings.

- **Unstructured observation** looks at what is happening in a process or activity without confining the observer to preset items. The observed activities are recorded during the observation period, which produces qualitative data.

Observation Tools

Several types of tools are available to record observation data. Choose your recording methods—alone or in combination—based on your observation design.

- **Observation guides**. These printed forms provide space for recording observations, which allows for the consistent collection of information across observers or sites. The more detailed you make the guide, the easier it will be to get results, but the less flexibility it will provide for recording findings.

- **Recording sheets or checklists**. These forms are used to record observation in either yes/no or rating scale formats. They are used when observations are looking for specific items or activities that are easily identified.
Field notes. This tool is the least structured way to record observations. When the observer sees or hears something of import, he or she records it in a narrative, descriptive style, typically in a notebook. Observations should be accompanied by the date, location, and relevant contextual information.

Pictures or videos. The observer can also record pictures or videos, which can be analyzed later and used to illustrate points in a report.

c) Analysis of Administrative Data

Health plans and providers typically have access to a great deal of administrative data that you can “mine” to identify performance issues that may be affecting your CAHPS scores. Types of administrative data include:

- Telephone logs
- Employee work hours
- Complaint records
- Compliment letters
- Medical records
- Visit appointment records

The types of data you may choose to use for further analysis will depend on the issues you identified in examining your CAHPS data. Administrative data can provide the additional information you need to guide the actions you might take to improve performance on those issues. For example, if you are interested in improving patients’ experiences in getting appointments when they needed it, you could:

- Examine visit appointment records to assess missed appointments.
- Analyze telephone logs to assess how many dropped calls or failed appointment queries occurred.
- Search your complaint records and tabulate the number of complaints received about appointment problems.
d) **Small-Scale Surveys**

A survey is a standardized data collection tool that usually contains closed-ended questions (questions with a set of fixed response choices). You can conduct a small-scale survey with a convenience sample of as few as 10 individuals and usually no more than 100; examples of a convenience sample include:

- All patients who visit a specific clinic on a given day.
- All patients who report a problem scheduling appointments.
- Staff who participated in a specific training exercise.

A small-scale survey can be used to drill down on the experience behind CAHPS scores or to survey staff about barriers they encounter when trying to schedule patients.

These kinds of surveys are useful in that they provide information that you can act on or help you to understand what kinds of experiences may be driving your CAHPS scores. However, it is important to recognize that the results of small-scale surveys are not generalizable to your patient population because they are not based on a scientific sample. That is, they reflect only the experience of the patients you surveyed, who are not representative of your total patient population.

e) **Root Cause Analysis**

Root cause analysis, also called “5 Whys”, is a method for identifying the root causes of a problem and determining the relationship among different root causes. Repeatedly asking the question “Why” peels away the layers of issues to uncover the fundamental source of a problem. You may find that you will need to ask “why” fewer or more times than five to reach a conclusion. This tool, which does not involve a statistical hypothesis or analysis, is most useful when problems involve human factors or interactions.

Use the following steps to complete a root cause analysis:

**Step 1: Write down the specific problem.** Articulating the issue in writing helps you formalize the problem and describe it completely. It also helps everyone on a team focus clearly on the same problem.
Example: A medical practice has received low CAHPS scores for the item on getting an appointment scheduled as soon as patients would like. It also is receiving a large number of complaints from patients on this issue.

Step 2: Ask why the problem happens and write the answer down below the problem.

Why? (#1): There are not sufficient times available on the calendar for scheduling the number of patients calling in a timely manner.

Step 3: If the answer you just provided does not identify the root cause of the problem that you wrote down in step 1, ask why again and write that answer down. Why? (#2): The practice only has office hours 4 days a week and is not open on Saturdays.

Step 4: Loop back to step 3 until the team is in agreement that the problem’s root cause is identified. Why? (#3): The physicians in the practice are not willing to work on Saturdays, and many of them are not always available to see patients for all of the weekday hours.

C. Dig Deeper With Qualitative Analyses

Your analysis of performance issues can benefit from good information on the views, experiences, needs, and motivations of the various stakeholders who are involved in or affected by the processes you’re addressing. To help identify and examine the causes of your performance problem, consider contacting the relevant stakeholders to find out what they know, how they feel about issues, and their ideas for improvement. Different stakeholders have unique perspectives that you need to consider together to understand the full dynamics involved in delivering and receiving health care and how those dynamics influence patients’ experiences with care.

Consider a clinical practice whose score for the composite “Getting timely appointments, care, and information” is lower than average. This section uses the example of this practice to address two questions:

1. How do you identify relevant stakeholders?
2. What are some tools you can use to gather feedback from stakeholders?
1. **Identify Stakeholders’ Views on CAHPS Performance Issues**

You can gain important insights regarding the factors that may be affecting your CAHPS performance by asking key stakeholders how the current process operates and what is needed to improve it. Stakeholders involved in health care include:

- Physicians
- Nurses
- Other clinical personnel
- Clerical staff
- Patients
- Family members of the patients
- Managers of the health care organization
- Staff of other involved organizations.

Imagine that an initial analysis of the practice with poor performance on the access composite found that a key driver of the composite score was a low score on this CAHPS question: *“When you made an appointment for a check-up or routine care, how often did you get an appointment as soon as you needed?”* What can you learn from stakeholders about the problems with timely appointments for care and how to fix those problems?

**Step 1:** Working as a team, identify the groups that are key stakeholders for the CAHPS performance issue you’re addressing. You should include groups who are involved in the process (such as nurses) as well as others who are affected by it (such as patients), both of whom would be affected by any changes you make during quality improvement work. For example, for a problem related to the appointment process, stakeholders may include:

- The physicians in the practice
- The patients who are getting appointments for care
- The office staff who handle the appointment process
- Nursing staff who initiate the office visit with patients
- The office manager who supervises the practice operation
People on the “front line” of care typically have the best understanding of what works well and what doesn’t because they live with it every day. However, front-line caregivers sometimes become so accustomed to working in a “broken” system that they accept some problems as inevitable (“just the way it is”), when the problems can—and should—be fixed.

**Step 2:** Develop a list of the topics you want to discuss with the stakeholder groups to learn:

- How the process works
- What they think is wrong with it
- How they think it needs to be improved

**Step 3:** Use qualitative data collection methods to gather information from people in each of your stakeholder groups. The exact methods you choose to use will depend on which types of stakeholders you will be talking with, and whether you want to have group discussions or talk separately with individuals.

To learn about methods for collecting qualitative data, refer to “Gather Feedback From Stakeholders: Tools and Techniques”.

**Step 4:** Summarize your findings. With feedback from all your stakeholder groups on each of the topics, you can compare responses to find similarities and differences in views and concerns across the groups.

**Step 5:** Use the information from the stakeholders to refine your process map and your list of possible issues affecting performance (Refer to the section on “process mapping”). You can also use this information to help guide strategies and actions for improving performance on the CAHPS measures. (To learn about implementing improvement strategies, refer to “Quality Improvement Steps”).

2. **Gather Feedback From Stakeholders: Tools and Techniques**

This section describes several tools and techniques you can use to gather information on the experiences and views of stakeholders related to performance problems:

a) **Focus Groups**
Another potential source of information on the experiences of patients and their families is a Patient and Family Advisory Council, which is often created to ensure that those on the receiving end of health care have a voice in the organization’s decisionmaking process.

a) **Focus Groups**

A focus group is a moderator-led discussion among staff and/or patients that is designed to collect more precise information about a specific problem and new ideas for improvement strategies. This approach allows for in-depth exploration of the drivers of dissatisfaction and can provide excellent ideas for reengineering services.

In addition, videotapes of focus groups can be very effective at changing the attitudes and beliefs of staff members because the participants’ stories often bring to life the emotional impact of excellent service as well as service failures.

When conducting a focus group, the moderator uses a written topic guide to ensure that the group addresses all key topics in the discussion; another person usually serves as a notetaker. The moderator typically uses various techniques during the discussion so that everyone in the group has a chance to speak and discussion among group members takes place. Examples of these techniques include going around the table to ask each person to give their views on a topic being discussed and specifically asking people who have not said much for their opinions.

b) **Semi-Structured Interviews**

A semi-structured interview is a technique for in-depth exploration of the drivers of satisfaction and for generating ideas for reengineering services. In contrast to focus groups, interviews allow you to collect a great deal of rich, detailed information on the experience of an individual. They also offer greater flexibility in terms of the order in which topics are discussed. Interviews are also useful when you want to:

- Collect information that is not influenced by the opinions of others in a group discussion.
- Collect information from staff that is not influenced by the presence of supervisors or managers.
Semi-structured interviews are conducted one-on-one or in groups of no more than three people. The interviewer typically uses a topic guide and is accompanied by a notetaker.

c) Walkthroughs

A walkthrough, which recreates for staff the emotional and physical experiences of being a patient or family member, is an easy way to give your staff the patient’s perspective and the fastest way to identify system, flow, and attitude problems. Walkthroughs provide a different perspective and bring to light rules and procedures that may have outlived their usefulness.

How a Walkthrough Works

During a walkthrough, one staff member plays the role of the patient and another accompanies him or her as the family member. They go through a clinic, service, or procedure exactly as a patient and family do. They do everything patients and families are asked to do and they abide by the same rules. They do this openly, not as a mystery patient, and throughout the process ask staff members a series of questions to encourage reflection on the processes or systems of care and to identify improvement opportunities.

The staff conducting the walkthrough take notes to document what they see and how they feel during the process. They then share these notes with the leadership of the organization and quality improvement teams to help develop improvement plans. For many who do this, it is the first time they have ever entered their clinics, procedure rooms, or labs as the patient and family do. Clinicians are routinely surprised about how easy it is to hear staff comments about patients from public areas and waiting rooms. Walkthroughs usually turn up many problems with flow, signage, and wasteful procedures and policies that can be fixed almost immediately.

This method was developed by David Gustafson, Ph.D., at the University of Wisconsin in Madison and adapted by Susan Edgman-Levitan of the John D. Stoeckle Center for Primary Care Innovation to incorporate the staff perspective.

As an alternative to a walkthrough, you could use a similar technique called “patient shadowing,” where a staff member asks permission to accompany a patient through the visit and take notes on the patient’s experience. Since this approach does not require taking a slot away from a real patient, it can be useful in settings where visits are at a premium.
**Tips on Conducting a Walkthrough**

- **Let the staff know in advance that you will be doing this walkthrough.** As a result of this warning, they will probably be on their best behavior. However, experience suggests that it is far better to have them part of the process than to go behind their backs. Ask them not to give you special treatment.

- **Go through the experience just as the patient and family member would.** Call in advance, if the patient would have to.

- Drive to the emergency department, drop the patient off, find a place to park, and check in. Try to act as if you have never been there before. Follow the signs. Tell the clerk that you are simulating a patient’s experience and that you want to go through whatever a normal patient would have to do (e.g., the check-in process). Actually fill out the forms if there are ones to fill out. Find out how long a patient would typically wait and sit in the waiting room for that amount of time. Wait your turn. Do the same in the examining room. If the patient undresses, you should undress. If the patient does a peak flow meter, you should too. Ask each health care provider to treat you as if you were a real patient. If you are doing a walkthrough of the cardiac catheterization service, hold the sandbags on your leg the required amount of time. Experience it all.

- **As you go through the process, try to put yourself in the patient’s (or family member’s) position.** Look around as they might. What are they thinking? How do they feel at this moment?

- **At each step, ask the staff to tell you what changes (other than hiring new staff) would make the experience better for the patient and what would make it better for the staff.** Write down their ideas as well as your ideas, and also write down your feelings. As you do the walkthrough, think about how you would answer the following questions and ask the staff you interact with to answer them when you can:
  - What made you mad today?
  - What took too long?
  - What caused complaints today?
  - What cost too much?
  - What was wasted?
  - What was too complicated?
  - What involved too many people or too many steps?
  - What did you have to do that was just plain silly?
Finally, between the two of you (patient and family member), make a list of any issues you identified and any improvements that could be made. Keep track of the things that can be fixed the next day versus problems that will take longer to remedy.

Quality Improvement Steps

Once you have used CAHPS survey and other data to identify opportunities to improve patients’ experiences with care, the next step is to identify and implement appropriate strategies for correcting these problems. The process of improving health care practices requires staff to give up their old standards and practices and adopt new ones. Introducing and reinforcing changes in behavior that ”stick” in the form of sustainable practices will take some work and time to succeed.

When you succeed, the payoff is significant, with benefits for not only patients but also providers and staff. Organizations have often found that job satisfaction for their staff rises with improved patient experiences because the new, better practices usually reduce frustrating inefficiencies in the system that created extra work for staff.

This section offers tips on managing the improvement process and reviews key steps for implementing strategies and actions aimed at improving performance.

A. Three Tips for Facilitating the Quality Improvement Process
You can smooth the process of improving patients’ experiences by implementing three tips that facilitate organizational change.

B. Organizing for Quality Improvement
Successful quality improvement requires attention to the key people who will lead or participate in implementing improvements, other stakeholders who will be affected by the changes being implemented, and the ways in which the work is performed.

C. Choosing Improvement Methods or Models
The many quality improvement models used by health care organizations may differ in their specifies, but they share several common features. Your choice of specific methods should be guided by the needs and preferences of your organization.
D. Implementing the Improvement Cycle

To improve your performance on the CAHPS measures, you will need to develop goals and an action plan, select measures to monitor progress, test actions on a small scale, and expand implementation to achieve and sustain improvements.

A. Three Tips for Facilitating the Quality Improvement Process

A quality improvement (QI) process often requires significant changes in people’s attitudes and behaviors. As a result, you can expect pushback from some staff as you introduce new processes and habits. Many staff, however, will “get it” early and pitch in enthusiastically; as others see positive progress, they too will become more engaged and supportive.

The following three tips can help you anticipate and address these likely responses to change:

- **Place a priority on encouraging communication, engagement, and participation for all of the stakeholders** involved with or affected by the changes required by your QI work. Look for ways to help them embrace the changes and begin to take ownership of them.

- **Start your implementation of improvements with small-scale demonstrations**, which are easier to manage than large-scale changes. Small-scale demonstrations also allow you to refine the new processes, demonstrate their impact on practices and outcomes, and build increased support by stakeholders.

- **Keep in mind and remind others that QI is an iterative process**. You will be making frequent corrections along the way as you learn from experience with each step and identify other actions to add to your strategy.
B. Organizing for Quality Improvement

When you embark on quality improvement (QI) work, it can be helpful to organize an implementation team and set up a structure and process for how that team will work together in managing the improvement activities. Some organizations create highly formalized structures; in others, a small, informal group leads the QI effort. Your choices about team membership, roles, and meeting schedule should reflect what will work best for your organization and the people who will be involved.

**Build an Implementation Team**

The “right” team can play a major role in determining the success of a QI initiative. The key is to carefully select people with the right skill set and mindset for quality improvement: people who are opinion leaders, are respected by their peers, and have appropriate expertise for the purposes of the intervention.

- **Identify a leader for the team who can serve as the “champion” for the QI initiative.**
  
  This person will not only be the key to energizing the team and keeping the work moving forward, but also a visible spokesperson for the initiative within the organization. The champion should be someone who is well respected professionally, has influence in the organization (formal or informal) that can help garner support for the work and overcome challenges, and has a passion for improving the experience of care for patients.

- **Choose people for the team who are enthusiastic about the chance to improve care, even if they lack some of the formal skills or responsibilities.**
  
  Sometimes QI leaders select staff for a team because of their titles or their clinical or administrative expertise, even though they are clearly not convinced that quality improvement is effective or that patients’ experiences matter. These teams are rarely successful because they spend most of their time debating whether they should even be involved or they simply do not show up or do the work.

- **Recognize that there is no one “correct answer” for how a team should be organized.**
  
  A team may consist of only one or two people, especially in a smaller medical practice where each staff person may have multiple responsibilities. This approach is fine, as long as it is a conscious decision rather than an oversight. In larger organizations, effective performance improvement teams typically include:
— A senior leader responsible for providing resources, removing barriers, and publicizing the work of the team through the organization.

— A physician or nurse leader if the intervention involves any aspect of clinical care.

— A team leader who is usually someone with administrative or clinical responsibility at the microsystem level. This person could be a nurse, a practice manager, a pharmacist, or the supervisor of a call center, depending on the focus of the team.

— A data analyst to track the performance measures and share them with the team and senior leader.

— Other team members who represent the different disciplines or types of staff who own a “piece of the problem.”

**Engage Stakeholders Affected by Changes**

It is critical to understand the perspectives and concerns of the variety of people who will be involved in or affected by the improvements being made. Many improvement efforts have failed or been slowed because changes were implemented that were not acceptable to one or more stakeholder groups essential to success. On the other hand, some of the strongest efforts have been those that thoroughly engaged stakeholders and empowered them to contribute to achieving sustainable changes.

The team leaders need to answer two questions regarding stakeholder involvement:

- **Who are the important stakeholders for this QI initiative?**

  Think broadly to identify the groups who may have an interest in the particular improvements you are pursuing. For most initiatives, stakeholders typically include patients, physicians, nurses, and administrative clerks. Depending on the specific services involved, they may also include pharmacists, health educators, therapists of various types, attorneys, staff in other departments in the organization, and representatives from external organizations.

- **How should these stakeholders be involved in the improvement process?**

  Ideally, your implementation team will include representatives of the stakeholder groups that are important for your initiative. You should engage front-line staff and other stakeholders throughout the implementation process by establishing mechanisms for open communication and regular opportunities to provide feedback on the process and related tools and practices. For example, as you begin to develop ideas for changes, ask the people who will be implementing those changes for their suggestions.
Then seek their feedback on proposed actions before you begin implementing them. One effective way to do this by conducting small-scale tests of new practices before fully implementing them. To learn more about small-scale tests, refer to “Do and Study: Test and Refine Actions on a Small Scale”.

**Establish a Team Process and Structure**

The team’s job is to initiate the process of improving performance by assessing issues underlying performance problems, setting goals for improvements, developing a strategy and action plan for making changes, and then overseeing the implementation of those actions. During the early part of this work, the team members will be learning how to work together as a group. The leaders can reinforce the positive aspect of this (often messy) process by encouraging team members to express their views, by listening carefully, and by helping them reach consensus on how the team can best carry out the work.

The team will have to make several decisions about managing its QI work:

- What is the role of the implementation team?
- How often will the team meet?
- What method will the team use to make decisions and achieve consensus on improvement strategies and actions?
- Should it create other committees for specific parts of the improvement work?
- How will the team interact with others who will be involved or affected by the changes they introduce?
C. Choosing Improvement Methods or Models

To have the best chance for success in improving patients’ experiences as measured by the CAHPS surveys, it is important to use a systematic, structured approach that gives feedback on your progress.

Learn about:

1. Quality Improvement as a Continuous Activity
2. The Plan-Do-Study-Act Cycle (PDSA)
3. Some Well-Known Quality Improvement Models

The methods you can use to improve patient experience are the same ones you would use for any other improvements to quality. If your organization has not already established a QI model, you can choose or adapt one of the models to pursue improvements in your CAHPS survey scores. If your organization has already adopted a QI model, you will be able to apply its system and methods to improve performance on CAHPS scores. As you work with any QI method, the key is to carefully choose interventions that have the best chance to improve how your organization interacts with patients and engages them in health care decisions and processes.

1. Quality Improvement as a Continuous Activity

Although quality improvement (QI) models vary in approach and methods, a basic principle underlying all of them is that QI is a continuous activity, not a one-time thing. As you implement changes, there will always be issues to address and challenges to manage; things are never perfect. You can learn from your experiences and then use those lessons to shift strategy and try new interventions, as needed, so you continually move incrementally toward your improvement goals.

The various QI models also share many other common features. These include:

- Emphasis on leadership in the form of management support and QI leads (or champions).
- Use of measurement and analysis to identify issues and guide decisions.
- Emphasis on stakeholders as participants and audiences for the improvement processes.
Use of structured, iterative processes to implement improvement interventions.

Use of many of the same tools to support analysis and implementation.

Monitoring of front-line clinical activity through collection and reporting of process data as feedback on the effect of changes or to track the progress of the implementation process.

2. The Plan-Do-Study-Act Cycle (PDSA)

At the heart of many quality improvement (QI) models is a basic cycle of planning and implementation called the Plan-Do-Study-Act (PDSA) cycle (see diagram). The cycle illustrates that the effort to improve performance is not a linear process with a beginning and end. It is a cyclical process that leaves room for testing, tweaking, and expanding interventions along the way.

The concept of PDSA is that systems are made up of interdependent, interacting elements that are unpredictable and nonlinear in operation. Therefore, small changes can have large effects on the system.

Short-cycle, small-scale tests, coupled with analysis of test results, are helpful because health care teams can learn from these tests before they implement actions more broadly.\textsuperscript{36} [37]


The approach also closely involves front-line staff in assessing problems and suggesting and testing potential solutions. This bottom-up approach increases the likelihood that staff will embrace the changes, a key requirement for successful QI.38

3. Some Well-Known Quality Improvement Models

As the use of proactive quality improvement (QI) strategies by health care organizations has increased, numerous models have emerged for implementing effective improvement actions.

- **Total Quality Management (TQM) (or Continuous Quality Improvement [CQI])**

  This is the original QI model based on the Plan-Do-Study-Act (PDSA) cycle. Over time, TQM/CQI has become viewed as a general approach to improving quality, with many specific models adapted from it. In the context of TQM/CQI, quality improvement is a normal and integrated ongoing activity within an organization, (not a special project). This model emphasizes getting a process right the first time, improvement as a continuous process, empowering cross-functional teams to identify and solve quality problems, and regular measurement of processes and output. It focuses attention on systems rather than the individual, and it calls for leadership and management involvement on project teams.

- **Rapid Cycle Improvement (RCI)**

  This model is based on the CQI process, but it accelerates the process by employing shorter change cycles. RCI is a practical and real-time approach that involves testing interventions on a small scale (e.g., one physician), permitting experimentation, and discarding unsuccessful tests. Numerous small cycles of change can successfully accumulate into large effects. For example, a medical practice could improve quality by working on a series of cumulative and linked PDSA cycles in different aspects of care at the same time, e.g., medication use, diagnostic testing, and patient scheduling. RCI also uses less extensive measurement than CQI, limiting measurement to what is sufficient to track progress.

- **The IHI Model for Improvement (MFI)**

  The MFI is a two-part model based on a “trial and learning” approach using RCI and the PDSA cycle. In the first part, a QI team guides development of its strategy and action plan by answering the following questions:

  - What are we trying to accomplish?

  - How will we know that a change is an improvement?

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– What changes can we make that will result in improvement?

In the second part of the model, the QI team uses RCI and the PDSA cycle to implement its action plan with small-scale interventions introduced rapidly to learn from them and then modified for implementation in another cycle.

For detailed examples of how organizations are implementing this cycle, visit the Institute for Healthcare Improvement’s Web site at http://www.ihi.org.

- **Lean or Toyota Production System**

“Lean thinking,” which was developed by Toyota in the 1950s, aims to achieve waste reduction and efficiency while simultaneously improving product quality. The core principle in lean thinking is the need to provide what the internal or external customer wants, i.e., to provide “value” to the customer, with minimal wasted time, effort, and cost. Correcting or removing any actions or processes that do not create value (i.e., waste) will lead to additional capacity and hence enhanced performance.

- **Six Sigma**

This model is driven by a close understanding of customer needs; disciplined use of the facts, data, and statistical analysis; and diligent attention to managing, improving, and reinventing care processes. The basic intention of Six Sigma is to increase the reliability of a process so that it will deliver care in the same way to all eligible patients every time they need it. A key focus is the use of statistical tools and analysis to identify and correct the root causes of variation. Six Sigma differs from other QI methods in its intensive technical training and coaching by “master black belts” and its highly structured analytic approach.

- **Human Factors**

Human Factors is the science of designing tools, tasks, information, and work systems to be compatible with the abilities of human users, including both physical and cognitive abilities. It starts by diagnosing the type of error (planning errors, errors in executing the plan, or intentional violations of plan), and then designing and implementing interventions based on the error type.
D. Implementing the Improvement Cycle

When you are ready to apply the PDSA cycle to improve performance on CAHPS scores, you will need to decide on your goals, strategies, and actions, and then move forward in implementing them and monitoring your improvement progress. You may repeat this cycle several times, implementing one or more interventions on a small scale first, and then expanding to broader actions based on lessons from the earlier cycles.

Learn more about each of these steps:

1. Plan: Develop Goals and Action Plan
2. Do: Select Measures to Monitor Progress
3. Do and Study: Test and Refine Actions on a Small Scale
4. Act: Expand Implementation To Reach Sustainable Improvement

1. Plan: Develop Goals and Action Plan

Establish Improvement Goals

The team’s first task is to establish an aim or goal for the improvement work. By setting this goal, you will be better able to clearly communicate your objectives to all of the sectors in your organization that will be needed to support or help implement the intervention.

The goal should reflect the specific aspects of CAHPS-related performance that the team is targeting. It should also be measurable and feasible. One of the limitations of an annual CAHPS survey as a measurement tool is the lag time between the implementation of changes, the impact on people’s experiences, and the assessment of that impact. For that reason, the team needs to define both ultimate goals as well as incremental objectives that can be used to gauge short-term progress.

For example, a team concerned about improving performance on the “getting care quickly” composite may set a 1-year goal of a 10-percent increase in its composite score.
At the same time, it could specify goals for the number of days it takes to get an appointment for a non-urgent visit, or the length of time that patients wait to see a clinician. Similarly, a team focusing on overall ratings may set goals for complaint rates for the plan as a whole or for individual medical groups and then review those rates monthly.

**Identify Possible Strategies**

With objectives in place, the next task of the team is to identify possible interventions and select one that seems promising. Keep in mind that all improvement requires making a change, but not all changes lead to improvement.

The CAHPS Improvement Guide presents a number of different strategies that health care organizations can use to improve different aspects of their CAHPS performance. In addition, you may want to consult several case studies of health care organizations that have implemented strategies to improve performance on CAHPS scores (available on the CAHPS site).

These sources of QI ideas offer an excellent starting point, but they are by no means comprehensive. There are many other sources for new ideas or different ways of doing things both within and outside of health care. Consequently, QI teams should make an effort to develop and maintain systematic ways of identifying effective solutions.

New ideas and innovative solutions can be found:

- At conferences or workshops.
- In the academic literature, the media, and/or the popular press.
- Through the identification of benchmark practices in health care as well as other industries, i.e., noncompetitive benchmarks.
- Through patients and their families—whether through direct interviews and focus groups, as partners on quality improvement teams, or as members of Patient and Family Advisory Councils.
- In the Agency for Healthcare Research and Quality’s searchable clearinghouse of health care innovations at [www.innovations.ahrq.gov](http://www.innovations.ahrq.gov).
“Ideas for change can come from a variety of sources: critical thinking about the current system, creative thinking, observing the process, a hunch, an idea from the scientific literature, or an insight gained from a completely different situation. A change concept is a general idea with proven merit and sound scientific or logical foundation that can stimulate specific ideas for changes that lead to improvement.” — Paul Plsek

One useful way to develop and learn innovative approaches is to travel to other organizations or industries. Resistant or hesitant staff members are often “unfrozen” by visiting another highly respected site that has successfully implemented a similar project or by visiting an industry or company outside of health care to get new ideas. Some health plans, for example, have learned how to improve their call center operations by sending staff to visit mail-order catalog houses or brokerage firms. The Cleveland Clinic requires every doctor and senior administrator to make one “innovation site visit” a year to learn about different approaches that can be brought home and tested.

**Choose Specific Interventions To Implement**

To decide which new ideas or benchmark practices to implement, the quality improvement (QI) team needs to consider several factors:

- **Compatibility with the organization and local culture.** Serving Cuban coffee in the waiting room of the clinics of a Miami health plan may be very member-friendly, for example, but it is not likely to be viewed with the same enthusiasm by plan members in Arizona or Massachusetts.

- **Technical merit.** The ideas that are most likely to be adopted are those that provide significant advantages over existing practices for both patients and providers – whether in the form of increased efficiency, higher patient and employee satisfaction, or improved outcomes. All QI efforts ultimately have to answer the question: “What’s in it for me?”

- **Fit with the problem.** The best intervention will be one that suits the specific problem you need to address (or can be tailored as needed). To ensure a good fit, the QI team should seek input from both affected staff as well as patients or members. If you ignore either source of information in your planning, you may choose an intervention that will not fix the real problem.

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Depending on the nature of the intervention, you may want to break it down into a set of related but discrete changes.

For example, if the team decides to implement a new specialist referral process, you could begin by making changes to the procedures used to communicate with the specialist’s office. The communication process with the health plan might then be the target of a separate change.

**Prepare a Written Action Plan**

Although there is no one “correct” way to write an action plan, it is important to have some form of written document that states your goals, lists your overall strategies to achieve those goals, and then delineates the specific actions you will take to implement the interventions you have selected to address the identified problems. For each action:

- Describe the action briefly.
- Identify the lead staff and other staff responsible for carrying it out.
- Record your planned start and end dates for the action.

It also helps to lay out the calendar for all actions in a Gantt chart format, so you can verify that the timing of sets of actions makes sense and are feasible to complete with the staff and time you have available. Finally, the action plan should present the measures you plan to use to monitor progress in achieving the desired changes to organizational processes and CAHPS scores.

2. **Do: Select Measures to Monitor Progress**

When a team establishes its goal, it typically specifies one or more performance metrics to assess whether a change actually leads to improvement. These measures should be clearly linked both to the larger goal and to the intervention itself. For example, if the goal is to speed specialist referrals, you could measure the time it takes to get a response from the specialist’s office or an approval from the health plan.

**Tips on Selecting Measures**

Have measures to track each of three steps in the improvement process:

- Test whether the new practices you introduced really are being used.
Examine how much the new practices are affecting the process of care.

Assess how much patient experience of care is improving.

Seek a feasible number of measures that address the most important aspects of the improvements you are trying to achieve.

Too many measures could create a burden on the staff, leading to loss of attention due to information overload; too few measures may omit tracking of important aspects of the changes you are making.

Review a detailed example of measures and goals for an intervention to improve asthma care. (Appendix 1)

Producing Visual Displays

Once you have established practical measures, you will be able to produce visual displays of your performance over time by tracking the metric on control or run charts. Control and run charts are helpful tools for regularly assessing the impact of process improvement and redesign efforts: monthly, weekly, or even daily. In contrast to tables of aggregated data (or summary statistics), which present an overall picture of performance at a given point in time, run and control charts offer an ongoing record of the impact of process changes over time.

A run chart can show different data collection points plotted over time for a specific survey question, e.g., an item about patients’ ability to reach the practice by phone. By measuring and tracking results to this question at regular and frequent time intervals, managers can discern how process improvement interventions relate to changes in survey results. If an intervention appears to have positive results, it can be continued and sustained; if not, it can be modified or discontinued.

Learn more about run charts at: http://www.ihi.org/knowledge/Pages/Tools/RunChart.aspx.

3. Do and Study: Test and Refine Actions on a Small Scale

Once you have selected interventions, the next stage of the cycle is to develop and test specific changes. It helps to think of this stage as a number of “mini-cycles” within the larger improvement cycle, in the sense that the team is likely to go through multiple iterations of testing and refining before the specific changes add up to a real intervention.
Small-scale tests of the interventions you wish to implement help refine improvements by incorporating small modifications over time. Because interventions are tested by one or two staff at a time with just a few patients, you can easily modify them to resolve problems as you receive feedback from patients and/or staff. Look for staff who are open to new ways of doing things to conduct the tests.

Small tests of change are very powerful for several reasons:

- They allow for incremental modifications of interventions to fix problems, which helps the larger implementation run smoothly.
- You don’t have to convince an entire unit or team to try a new idea. You can test new ideas quickly and then implement them if they prove to be effective with volunteers who are ready to try new strategies.
- Failures are low-risk because you have not tried to change the entire culture.
- You create enthusiasm and positive “word-of-mouth” for early successes.
- It is easier to accumulate evidence for implementation when people are engaged in making something work rather than focused on the “failure analysis.”

Most improvement strategies require some adaptation to the culture of the organization. Patient-centered improvement strategies have to consider the needs of patients and their families as well as the staff. Moreover, front-line staff will frequently resist new ideas if they are not allowed to modify them and test their own ideas.

The adages about “not invented here” and “sometimes you have to do something once so you never do it again” are alive and well in the culture of health care. To succeed in implementing improvement strategies, it is wise to let staff adapt change concepts in small tests of change rather than insist they be followed like a recipe.

➢ Read an example of a small test of change.
Example of Implementing a “Small Test”

A Kaiser clinic in Atlanta wanted to improve communication with patients by implementing a strategy known as “doc talk” cards. (To learn about this strategy, go to Tools to Help Patients Communicate). But the staff and doctors were resistant, fearing that it would create an even bigger demand for time with the physician. The clinic administrator found one receptionist and one doctor who were willing to pilot the concept.

What They Did

The receptionist gave out index cards to the doctor’s patients and asked them to write down their questions. When the receptionist and doctor realized that patients did not know how to organize their questions, they added topics to the cards (e.g., “Symptoms,” “Medications,” “Tests”) to help patients focus their concerns. In other settings, staff have also used questions, such as “What are your top three questions for your doctor today?”

What Happened

The patients and their doctor found this method very helpful at maximizing the time they had in the visit. Word of mouth about the success of this approach spread quickly to the rest of the practice. Soon enough, the other doctors in the practice were knocking on the administrator’s door wanting to use the “doc talk” cards and upset because they hadn’t been invited to try them. The administrator had gained support for the method, resolved problems with the cards quickly, and rolled out the new system in a quarter of the time it usually took to implement changes in the practice.

4. Act: Expand Implementation To Reach Sustainable Improvement

Building off of the development and testing of specific changes, the final stage of the PDSA cycle involve implementing the intervention (i.e., the combination of discrete changes) and evaluating it against the goals of the quality improvement (QI) project and the measures established for tracking improvement progress. For example:

- Did the intervention succeed in reducing the time required to see a specialist?
- Are members and patients reporting better experiences with regards to getting care quickly?
This part of the improvement cycle is really the ongoing work of health care and where your teams will spend most of their time. There are no set rules about how long this part of the cycle takes. It depends in part on how frequently you monitor your CAHPS scores and other QI measures.

However, it is important not to let the work go on too long without ongoing measurement in order to make sure you are making progress toward achieving your aims. Most monitoring takes place on a monthly to quarterly basis. The team can use this data to review the impact of the intervention to see if its making progress towards the goals and to determine whether to conduct a new set of analyses of its CAHPS performance. The purpose of this effort is to get some sense of what worked, what did not work, and what further or new interventions may be needed. To the extent that the intervention was successful, the team must also think about ways to sustain the improvements over time.

Read how one plan tracked and evaluated the impact of a medical group’s interventions to improve performance on the “doctor communication” composite (Appendix 2).

**Identify and Deal with Barriers**

As part of its work, the team will need to take a hard look at the psychological, physical, and procedural barriers it has to address in order to accomplish its aim. Barriers to improvement come in many guises. Psychological barriers such as fear of change, fear of failure, or fear of loss of control or power can be significant impediments to overcome. Other common barriers include the following:

- Lack of basic management expertise.
- Lack of training in customer service, quality improvement methods, or clinical areas such as doctor-patient communication.
- Inadequate staffing levels.
- Poor information technology systems.
- Outdated or misguided organizational policies. For example, many organizations are so concerned about violating HIPAA regulations that they do not want to give information to a patient about their own care for fear of violating patient confidentiality.
Despite the serious nature of some of these barriers, few are large enough to bring a project to a halt. Typically, they are cited as excuses for two of the fundamental barriers to change: the fear of new ways of doing things and the fear of failure.

**Identify and Cultivate Facilitators**

The team also needs to identify factors that could facilitate their work. Facilitators can include financial or nonfinancial incentives, such as gain sharing for staff if a specific target is met or better quality of life for the staff when a problem is fixed. Other facilitators include picking an aim that is part of the organization’s strategic plan or one that will improve other goals the staff care about, such as clinical outcomes. Sometimes, the facilitator is the ability of a change to help achieve secondary goals. For example, improvements in doctor-patient communication may decrease medication errors, or the development of shared care plans may improve clinical outcomes and reduce no-shows for appointments or procedures.

**Harness Social Interaction To Spur Adoption of Innovations**

Research on the diffusion of innovation has found that social interaction plays a crucial role. Most people do not evaluate the merits of an innovation on the basis of scientific studies; they depend on the subjective evaluations of “early adopters” and model their behaviors after people they respect and trust. For that reason, choosing the right team members and opinion leaders (i.e., people within an organization who informally influence the actions and beliefs of others) is critical to efforts to diffuse innovation.

Depending on the project, you may want to try to identify the opinion leaders that would be helpful to involve (assuming they are open to change and new ideas). Interpersonal communication works best when the people communicating the message are respected opinion leaders within the same staff group whose behavior they are trying to change. For example, an innovation to change the behavior of receptionists will often move quickly if it is led by a respected receptionist or office manager. This same person would probably not be as effective at getting physicians in a medical group to change their communication style with patients.

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Ask people whose opinion they respect. Who do they follow when they have adopted new clinical or improvement practices? Who do your staff look to when they want advice or information about the organization?

**Communicate Internally**

One important step that is often neglected is the communication of successes throughout the organization— to organizational leaders as well as clinical and administrative staff. By discussing successful projects, the team helps to reinforce the culture of quality improvement, build credibility for the intervention, reward those involved, and foster the spread of effective innovations.

The organization’s leaders can also:

- Use media and interpersonal communication to promote the work of specific QI teams.
- Highlight successful innovations in staff newsletters and in staff and board meetings.
- Reinforce the importance of the project by sitting in on QI team meetings or visiting the practice site or unit involved in the project.

A related practice is the communication of changes beyond the walls of the organization to members or patients. By telling people about innovative practices – whether through newsletters, Web sites for members, or handouts in the office – you can raise the standard of expectations.
Browse All Interventions

- Open Access Scheduling for Routine and Urgent Appointments
- Streamlined Patient Flow
- Access to Email for Administrative Help and Clinical Advice
- Internet Access for Health Information and Advice
- Rapid Referral Programs
- Changes in Policies and Processes and Applications of Information Technology
- Training to Advance Physicians’ Communication Skills
- Tools to Help Patients Communicate Their Needs
- Shared Decisionmaking
- Support Groups and Self-Care
- Delivery of Evidence-Based Information
- Planned Visits
- Group Visits
- Listening Posts
- Patient and Family Advisory Councils
- Service Recovery Programs
- Standards for Customer Service
- Reminder Systems for Preventive Services and Immunizations
A. Open Access Scheduling for Routine and Urgent Appointments

The Problem

Most managed care enrollees report that they always or usually received care as soon as they needed it, but in some populations, more than a fifth of respondents say they never or only sometimes got the care they needed as soon as they needed it – even in urgent cases.

How Often Respondents Got Needed Care

<table>
<thead>
<tr>
<th>Percent Answering Never or Sometimes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When consumers needed care right away in a clinic, emergency room, or doctor’s office, how often they got care as soon as they needed it.</strong></td>
</tr>
<tr>
<td>13%</td>
</tr>
<tr>
<td><strong>Not counting times consumers needed care right away, how often they got an appointment for health care as soon as they needed it.</strong></td>
</tr>
<tr>
<td>15%</td>
</tr>
</tbody>
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Studies have shown that inadequate access to a primary care provider remains a major source of patient dissatisfaction. Other studies cited in a recent JAMA article confirm that patients are not getting the care they need when they need it:

- In a survey of insured adults under 65, 27 percent of those with health problems reported difficulty gaining timely access to a clinician.
- From 1997 to 2001, the percentage of people reporting an inability to obtain a timely appointment rose from 23 percent to 33 percent.
- In 2001, 43 percent of adults with an urgent condition reported that they were sometimes unable to receive care as soon as they wanted.


28 percent of women in fair or poor health reported delaying care or failing to receive care because of an inability to obtain a timely physician appointment.

**The Intervention**

Open access – also known as advanced access and same-day scheduling — is a method of scheduling in which all patients can receive an appointment slot on the day they call, almost always with their personal physician. (Note: “Open access” sometimes refers to the elimination of gatekeepers in HMOs so that patients have direct access to specialists. In this context, it refers only to same-day appointments.) Rather than booking each physician's time weeks or even months in advance, this model leaves about half of the day open; the other third is booked only with clinically necessary follow-up visits and appointments for patients who chose not to come on the day they called (typically no more than 25 percent of patients).

This model breaks away from the traditional approach of differentiating between urgent and routine appointments, which results in the routine visits being put off until a later date. Instead of triaging callers by clinical urgency, front-desk staff simply sort the demand for appointments by clinician. According to experts in the design and implementation of the model, it is effective in both managed care and fee-for-service environments.[43]

*"It has one very simple yet challenging rule: Do today’s work today."*

In essence, the open access model applies the principles of queuing theory and industrial engineering in an effort to match the demand for appointment visits with the supply (i.e., the time of clinicians). It is based on the supposition that the problem is not lack of capacity but an imbalance between supply and demand.

**Benefits of This Model**

While the open access model has not yet been formally evaluated with systematic controlled studies, [44] anecdotal evidence points to several benefits of this approach:

- It enables practices to reduce or eliminate delays in patient care without adding resources. Better access to care typically results in higher levels of patient satisfaction; physician

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satisfaction also improves as long backlogs and angry patients are no longer a daily source of frustration.\footnote{Murray M and Tantau C. Must patients wait? Jr Comm J Qual Improv 1998;24(8): 423-5.}

- In contrast to what many physicians anticipate, patient demand for appointments decreases, mostly because patients are more often able to see their own clinician.\footnote{Murray M and Berwick DM Advanced access: reducing waiting and delays in primary care. JAMA 2003;289(8): 1035-40.}

- The ability of patients to see their personal physician enhances continuity of care, which is associated with both better health care and higher patient satisfaction.

- Finally, medical practices often realize cost and efficiency savings. Because patients no longer have to deal with long waits, the number of “no-shows” is likely to decrease, so clinical time is used more efficiently. Also, less staff time is required to manage the no-shows and the backlog of patients.

\textit{Implementation of This Model}

The literature on open access suggests that medical practices can implement this model in a few months by working through the following steps:

1. Measure supply and demand as precisely as possible.

2. Establish a test team of providers who are willing to try the system out.

3. Reduce the backlog of appointments. This may take six to eight weeks of extra work. To facilitate this difficult task, practices may want to set a target date and agree that visits will not be pre-scheduled beyond that date. Another useful recommendation is to apply the concept of “max packing.” The idea is to reduce the demand for future visits by taking care of any upcoming preventive or screening needs whenever the patient comes in for a necessary visit – regardless of the reason for that visit.

4. Simplify the appointment types and make them all roughly the same length. One recommended tactic is to minimize complexity by limiting the practice to three appointment types:

- Personal, where the patient is seeing his or her physician;

- Team, where the patient is seeing someone else on the clinical team; and

- Unestablished, where the patients does not yet have a specific physician.

Appointment times can also be specified as either short or long, where a long appointment is roughly equivalent to two short ones.\footnote{Murray M and Tantau C. Same-day appointments: exploding the access paradigm. Fam Pract Manag 2000;7(8): 45-50.}
■ Develop a contingency plan for days (or parts of the day) when demand far outstrips the availability of physicians. This plan should identify who can supplement or substitute for each physician, if and when needed. Also, the group should be proactive about planning for those times when they can predict increases in demand, such as visits for school physicals or flu shots.

■ Reduce demand for one-on-one visits with patients. One helpful tactic is to identify and address sources of unnecessary visits based on outdated clinical protocols, such as routine follow-up visits for urinary tract infections or annual Pap smears. Another approach is to implement group visits to better manage care for patients with the same chronic condition. (To learn more, refer to Group Visits.) Finally, clinicians can use the phone and email effectively to address concerns that do not require a visit.

■ Once the practice is able to offer same-day appointments, it should assess its effectiveness by measuring appointment availability on a daily basis (e.g., third next available appointment). (For more information on the specific measures that you can use to evaluate and monitor the model, refer to Murray M, Berwick DM. Advanced Access: Reducing Waiting and Delays in Primary Care. JAMA. Feb. 26, 2003. 289(8);1035-1040.)

**Challenges of This Model**

While the implementation of open access scheduling may seem daunting, the primary barriers are psychological rather than logistical. For both clinicians and their staff, this approach seems unintuitive; it defies both their beliefs and their experiences with scheduling systems. Because routine and urgent requests are treated similarly, the model also forces them to abandon the solidly ingrained notion that routine care can wait. Finally, clinical and administrative staff are typically skeptical that existing resources can meet demand.  

That said, the logistical challenges should not be discounted. First, the model requires accurate data on the size of the patient population (for each doctor), the level of demand for visits, and the number of appointment slots available each day. In particular, it relies on the ability to accurately predict demand for same-day appointments. But demand is hard to measure retrospectively because the number of past appointments is more a factor of the supply of clinical time than of the demand for services. Medical groups need to obtain this data prospectively, usually by tracking patients’ calls for appointments as well as requests by clinicians for follow-up appointments. Some practices rely on mathematical models for predicting demand, with mixed success. Computer-based

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information systems that integrate billing and scheduling can be useful for providing the initial data input for such models.\textsuperscript{50}

The second major challenge is reducing the backlog of appointments. To do this, the group may need to see more patients each day for six to eight weeks.\textsuperscript{51} A study of practices that had implemented open access scheduling found that all of them had trouble working down the backlog. Moreover, the task was especially difficult for larger organizations, especially when the model was introduced by management rather than by the physicians themselves. One contributing factor was that management recognized benefits in the form of reduced delays in appointment before the physicians saw benefits in the form of a less stressful workday.\textsuperscript{52} Finally, there are some practices where the demand for appointments vastly exceeds the supply of clinical services. While the open access model can handle excess demand on a given day, no scheduling system works effectively if demand is greater than capacity on a permanent basis.

To overcome both the psychological and logistical barriers, medical groups may want to join a collaborative, where they can learn from others dealing with the same issues, or hire a consultant who can guide them through the more challenging terrain.

\textit{Some Examples}

In the late 1990’s, HealthPartners of Bloomington, Minnesota, identified members’ dissatisfaction with access to care as a major concern. CAHPS data indicated that access to appointments remained a source of frustration for patients; this finding was corroborated by complaints data (specifically, complaints related to access had been increasing over the past year and represented 51 percent of quality of care complaints) as well as a survey of satisfaction with behavioral health. In addition, an analysis of internal data found that appointment wait times had steadily increased over the course of the last several years.

In 1999, several HealthPartners’ medical groups participated in “Action Groups” supported by the Institute for Clinical Systems Improvement (ICSI) in collaboration with IHI. Through the action groups, the teams learned about the Advanced Access model and received support in implementing it at some of the clinics within their medical groups.


Initial assessments revealed little progress in improving patients’ experiences with appointment access, primarily because the clinics were struggling to overcome some of the challenges of this model – including the backlog reduction and the skepticism of clinical and other staff. However, over time, the clinics have made measurable progress, including a statistically significant increase in the percentage of respondents that were very satisfied with their ability to get an appointment at their clinic at a convenient time.  

Other examples of successful implementation of open access scheduling include the following:

- **Kaiser Permanente in Roseville, Northern California:** This clinic – which was the site at which the open access strategy originated – succeeded in lowering the wait time for routine appointments from 55 days to one day in less than a year. It also increased the chances that a patient would see his or her own physician from 47 percent to 80 percent.

- **The Mayo Clinic’s Primary Care Pediatric/Adolescent Medicine Team:** Implementation of an open access model resulted in a reduction of the wait time for routine appointments from 45 days to within two days. The strategy also succeeded in lowering the number of daily visits on average.

- **The Alaska Native Medical Center:** At this medical center, open access led to a drop in the wait time for routine appointments in family medicine and pediatrics from 30 days to one day. They were also able to increase the percentage of patients seeing their own physician from 28 percent to 75 percent.

- **Fairview Red Wing Clinic, Red Wing, Minnesota:** In addition to reducing the wait time for routine appointments, this clinic succeeded in reducing the time required to cycle patients through the office from 75 minutes to 40 minutes. At the same time, it increased their time with physicians.

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53 HealthPartners. Quality Improvement/Preventive Health Activity Summary: Improving Satisfaction with Appointment Access - Submission of HealthPartners to NCQA; 2003.

B. Streamlined Patient Flow

The Problem

Dissatisfaction with timely access to care often reflects unhappiness with the all-too-common waits for diagnostic tests, test results, treatments, hospital admission, and specialty services. While the waits seem unavoidable, they are often the result of redundancies, inefficiencies, rework, and other variations on waste in administrative and clinical processes.

The Intervention

There are many ways to address the problems that result in unnecessary and inappropriate delays in care, including the following:

- System changes, such as eliminating redundancies, understanding and adjusting demand, and doing things in parallel (e.g., by using standardized x-ray and lab protocols that are ordered as a part of the registration process)
- Operational analyses of flows and applications of queuing theory
- Collaborative improvement programs that pool the ideas from multiple clinics, hospitals, or health systems — Organizations in both the U.K. and the U.S. have developed collaborative programs that bring groups of health care organizations together to make system changes aimed at achieving substantial improvements in waits and delays. IHI and the Veterans Health Administration have offered many collaborative learning programs to improve access to care, flow through the ambulatory care setting, and patients’ experiences of care.

Benefits of This Intervention

Strategies that reduce delays in care have multiple benefits, particularly with regards to patient and clinician satisfaction. Other benefits include better outcomes, increased capacity to care for patients, and cost and efficiency savings.55

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Implementation of This Intervention

Because there are a number of ways to proceed, depending on the setting and the type of flow problem, it is difficult to describe concrete implementation steps in this guidebook. However, while some tactics require significant changes to well-established systems, others are fairly basic and easy to implement. For example:

- **Identifying and eliminating logjams.** For instance, an ophthalmology clinic found that patients who needed their pupils dilated were slowing down the flow because their appointment slot did not take this into consideration. The solution was to identify such patients and have them come 30 minutes prior to their consultation with the physician.56

- **Shifting tasks previously handled by specialists to other health professionals such as physician’s assistants and nurse practitioners.** These tasks may include performing histories and physical exams, basic prescribing, and ordering x-rays.

- **Developing and using standardized order sheets for common conditions or procedures.** By making it easier and faster for clinicians to communicate orders, this intervention enables them to spend more time with the patient. It also makes it more feasible for clinical staff to take on some of the clinician’s responsibilities.

- **Developing standardized patient information and instruction sheets,** possibly in conjunction with standardized order sheets and related protocols. These materials help staff streamline the patient education process while still ensuring that they meet the patient’s need for appropriate education and information.

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C. Access to E-mail for Clinical Advice and Administrative Help

The Problem

One issue that affects patients, clinicians, and staff is the health system’s reliance on conventional office visits and phone calls to relay information. In particular, patients are often frustrated in their attempts to get non-urgent advice and information from their clinician or from administrative staff without visiting the practice. First, calling hours are often inconvenient, especially for working patients. Second, when patients do call, they are typically put on hold, only to leave a message and hope they can avoid a game of “phone tag” with the clinician. Finally, unless the patient takes excellent notes, some of the information delivered over the phone may be lost or misunderstood.

The Intervention

One way to facilitate communication is to offer some or all patients the ability to exchange e-mail with their clinicians’ offices. Patients, clinicians, and office staff can use e-mail for multiple purposes:

- To request and provide information or advice related to non-urgent concerns.
- To request administrative help (e.g., with forms) and schedule appointments.
- To request referrals.
- To communicate results of lab and diagnostic tests.
- To request and refill prescriptions.
- To transmit patient-monitored clinical measures, such as blood pressure, glucose levels, or temperature.
- To provide patient education and other materials, including links to appropriate Web sites.
- To send reminders.
- To clarify billing issues.

A recent survey indicates that about 75 percent of adult patients are interested in communicating with their doctors online. When asked whether the use of e-mail by a physician would have an effect
on their decisions, 62 percent said that it would influence their choice a great deal or to some extent.  

“When so many people want something—in this case the ability to communicate online with their physicians—the system (or the marketplace) will eventually provide it. It seems safe to predict that within a fairly short space of time many doctors will be communicating with their patients on the Internet. This will happen because some doctors and health plans will use this as a way to differentiate themselves from their competitors. Some doctors will embrace this as an opportunity to grow their practices. Some health plans will require, or incent, physicians to be accessible online. It is only a question of how quickly this will happen.”

Benefits of This Intervention

E-mail communication offers several benefits. It is convenient, fast, asynchronous (i.e., both people do not have to be available at the same time), unintrusive (i.e., it does not interrupt the recipient on either end), and easy to track and manage, unlike telephone messages. Because it facilitates communications between patients and their doctors, e-mail has the potential to improve patient-centered care and increase self-management, while increasing timeliness and efficiency. Another possible benefit is improved adherence to treatment and medication, and a general increase in patient involvement in their own care. A recent study has also found cost savings associated with the use of online communications.

Another advantage of e-mail is that it provides a written record of what transpired and what information was conveyed to the clinician and patient; copies of this documentation can be incorporated into the patient’s medical record. However, the ability to integrate e-mail into the


medical record raises issues of informed consent and the adequacy of safeguards to protect privacy and confidentiality.62

**Implementation of This Intervention**

A number of organizations offer guidelines regarding the use of e-mail in health care settings. Key sources include:


- The American Medical Association’s *Guidelines for Physician-Patient Electronic Communications*

The guidelines cover e-mail content, informed consent, turnaround time, acknowledgements of receipt, documentation and record keeping, appropriateness of tone, and limitations (e.g., concerns about discussing sensitive subjects). Perhaps the biggest consideration in these guidelines is the security of personal health information and the liability risks associated with e-mail communications, particularly in light of the HIPAA regulations. (HIPAA refers to the Health Insurance Portability and Accountability Act of 1996.) HIPAA requires that health care organizations take steps to safeguard patient confidentiality by:

- Ensuring that messages cannot be tampered with (by authenticating the contents),
- Implementing the security standards for Protected Health Information (possibly through encryption), and
- Maintaining records that can be audited.

Review a sample of the guideline recommendations (Appendix 3).

Because of the security issues, there are basically two approaches you can consider if you decide to implement e-mail communications. One option is to use existing e-mail capabilities. This requires that the medical practice or clinic become familiar with the implications of HIPAA and implement various systems and measures to manage the flow of information (e.g., systems to forward the e-

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mails when a clinician is out of the office for a few days) and to minimize risk. However, while it is possible to comply with many aspects of the current guidelines for physician-patient electronic communications, you would not be able to offer a secure network through a standard e-mail system.

A second, albeit more costly, option is to use the services of a secure messaging vendor; current examples include RelayHealth.com, MyDocOnline.com, and HealthyEmail.org. These vendors offer off-the-shelf products that medical groups can use to send and receive information in a secure Internet-based environment. Typically, these products enable communications that are more structured and presumably more efficient than regular e-mail would be, in that patients are submitting forms and templates rather than free-flow text.

**Constraints on Use of This Intervention**

Because electronic communication – whether through standard e-mail or secure networks – is fairly familiar to most patients and clinicians, this intervention does not face some of the technical and logistical obstacles typical of information system strategies. Some clinicians resist due to concerns about the privacy of electronic communications (particularly through standard e-mail systems), while others worry about the potential volume of messages they could be asked to handle.

However, the lack of compensation to clinicians for their time poses the most substantial barrier. In a survey of doctors, over half of those who were not using e-mail and who indicated a preference for “face-to-face” pointed to insurance reimbursement as the most important factor that would compel them to use e-mail. 63(For an interesting perspective on these common concerns, see: Sands DZ. Using E-mail in Clinical Care: A Practical Approach Combining the Best of High-tech and High Touch. Available at http://www.informatics-review.com/thoughts/pat-email.html.)

A small number of health plans are paying doctors to do online consultations. For example, after a pilot program demonstrated improvements in patient satisfaction and health care savings of $3.69 per member per month, several health plans agreed to reimburse physicians for online consults. However, it is not common for physicians to be reimbursed for the time they spend responding to e-mails (nor are they typically compensated for time on the phone).

Some of the secure messaging vendors are working with providers on this issue; in addition, some products incorporate ways to obtain payments directly from patients, especially for online

consultations. In the Harris Interactive survey of patients with Internet access, over a third indicated a willingness to pay for online access to their clinicians. Some health care organizations charge patients for access to e-mail services; Portland-based GreenField Health, for instance, was charging an annual fee of $350 to each patient who wanted to participate in the service.

Example

Several health plans and medical groups have begun to use e-mail to facilitate communications between patients and clinicians. At Washington-based Group Health Cooperative (GHC), for example, about 20,000 of 300,000 eligible patients have signed up for an online service called MyGroupHealth (www.ghc.org). Using the plan’s Internet portal, patients can communicate over a secure network with their personal health care teams, refill medications, and schedule appointments. The site also gives them access to searchable health information as well as discussion groups. (To learn more, go to “Internet Access for Health Information and Advice” and “Support Groups and Self-Care”). In a survey of these online users, GHC found that 92 percent would recommend the service to others, and that 58% say they stay at GHC because of the online services.

Other examples include:

- **PatientSite at Beth Israel Deaconess Medical Center and Caregroup HealthCare System**, Boston, Massachusetts: https://www.patientsite.org/default.asp. PatientSite is a secure personalized messaging system that allows patients to communicate with their health care provider via the Internet. It is designed to facilitate discussion of questions about treatment that may arise between visits.

- **My Health Online at Palo Alto Medical Foundation, Palo Alto, California**: http://www.pamf.org/ Patients who enroll in My Health Online can communicate through a secure network with their doctors and advice nurses.

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D. Internet Access for Health Information and Advice

The Problem

Many health care consumers seek information about specific complaints, conditions or diseases, drugs, nutrition, and fitness. For these people, getting information quickly is a large component of “getting care quickly.”

In the past, patients and their families had to depend primarily on their physicians for this kind of information. In the last decade, of course, the Internet has evolved into an amazing resource for those seeking health-related information. Studies disagree on the number of Americans using the Internet for this purpose. But there is little question that a large number of people are looking for information and advice on the Internet, and that the number is growing rapidly. According to a 2007 poll by Harris Interactive, 160 million Americans were using the Internet to find health information – an increase of 37 percent since 2005. Harris Interactive estimates that 84 percent of all online adults have looked for health information online.

However, the sheer volume often makes information on the Internet overwhelming, hard to navigate, and hard to validate. A search for health information can bring up thousands of sites. It is also hard for people to know whether a source of information is trustworthy. A Pew survey found that many seekers of health information on the Internet do not follow recommended guidelines for checking the reliability and timeliness of information: half reported that they check the date and source of information only occasionally, hardly ever, or never.

The Intervention

A number of health plans and medical groups have been exploring ways to channel consumers and patients to useful and reliable sources of information on the Internet. This strategy is meant to help address the demand for immediate information and to build on and reinforce the relationship of trust that health care organizations have with patients and members. While information on the

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70 Fox S and Rainie L. Vital decisions: How internet users decide what information to trust when they or their loved ones are sick 2002; Washington, DC, Pew Internet & American Life Project.
Internet should not be a substitute for direct communication with personal care providers, it is a useful way to augment information sources for patients, especially when direct access to clinicians is not available.

One way to do this is to expand your own Web site to include health information and relevant tools as well as links to related information. Another simpler approach is to tell patients or members about external sites that could be helpful; this information could be provided during office visits, in printed materials, or in e-mails (which allow you to provide the address [URL] for the site). In a variation on this intervention, some clinicians are directing their patients to specific information on their diagnoses and treatment options; this approach is discussed in “Delivery of Evidence-Based Information” under “Browse Interventions”.

**Benefits of This Intervention**

The benefits of Internet access to health information and advice include improved quality of care, timeliness (i.e., 24-hour access), and efficiency. At least one study has found shorter duration of office visits, more phone consultations, and fewer and shorter hospitalizations due to an interactive, disease-specific networked computer system.\(^{71}\) In addition, consumers may benefit from quality of life gains, including improved psychosocial support, improved information-seeking ability, and reduced emotional distress.\(^{72}\)

For example, in a small pilot study where a family practice provided access to patient education Web sites during the office visit, researchers reported the following results after just one month:\(^{73}\)

- 90 percent were more satisfied with their visit because of the availability of the information.
- 94 percent of users found the information helpful.
- 77 percent felt the information would make them change their health behavior.
- 90 percent said they would use the clinic’s Internet access again.

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**Constraints on This Intervention**

While increasing numbers of health care organizations are embracing the use of the Internet to provide access to health information, some have expressed concerns about confidentiality, legal and liability issues, and reimbursement. Others are waiting for stronger evidence that these applications improve clinician efficiency, satisfaction, or quality of care. Moreover, health care organizations may be reluctant to invest in this kind of functionality because they are not sure how to evaluate the information technology needed to implement it or how to integrate it into existing information systems.

A final obstacle for some organizations is that they are not certain that this strategy makes sense for the populations they serve. One common concern is that members or patients may not have access to the Internet; recent statistics indicate that 42 percent of Americans do not use the Internet, and 24 percent have no experience with it at all. To help overcome the disparity in Internet access (often referred to as the “digital divide”), some health care organizations are taking explicit steps to educate members and patients on ways to get access to information on the Internet (e.g., through terminals available at clinics, practices, libraries, schools, and WebTV; or through family, caregivers, and intermediaries with direct access). A few are even providing access to Internet-based resources at their site (e.g., by installing terminals in clinic waiting rooms). A related concern is that providing better access only addresses part of the problem. The other part relates to Web literacy: the inability of some people with Internet access to navigate the Web efficiently or process all the information it offers.

**Some Examples**

A Web search would yield many examples of health plans and medical groups directly providing health information and serving as portals to other sites. Two examples are provided below to illustrate the kinds of information and support available to plan members and other health consumers.

- **Kaiser Permanente**: At Kaiser Permanente, members who sign in have access to in-depth health information and can refill prescriptions, make appointments, learn about health classes, and get personalized health advice from a clinician. They can also research health conditions,

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take personal health assessments (e.g., disease risks, healthy lifestyle) and join online health discussions.  

- **Harvard Pilgrim Health Care**: At Harvard Pilgrim Online, consumers can research specific health topics, learn about disease management of specific conditions (e.g., diabetes, asthma), and find a specific doctor. Members can also e-mail health questions and get a personalized response from a clinician.  

  (To learn more, go to “Access to E-mail for Clinical Advice and Administrative Help” under “Browse Interventions”).

Other examples include Sharp HealthCare’s site at www.sharp.com and the Mayo Clinic’s site at www.mayoclinic.com. These sites are excellent examples of providing specific information about the health care organizations – practices, hours, policies about appointment waiting times, access to medical records – as well as health information and condition-specific resources.

Learn about links you may want to offer enrollees and patients (**Appendix 4**).

Learn about an online information system for patients called CHESS (**Appendix 5**).

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E. Rapid Referral Programs

The Problem

Both the ease and the speed of the specialist referral process are major concerns for patients and their primary care providers (PCP). For patients, problems getting a referral are reason enough for dissatisfaction. Patients having trouble getting referrals reported the greatest level of distrust, lack of confidence, and dissatisfaction with their PCP.78

“Patients are often informed that they will be ‘referred’ but have little or no influence on the process or knowledge about who they will be referred to or how long the expected wait will be.”79

Compounding their frustration is the possibility of delays in care, which generates greater anxiety and contributes to a greater risk of adverse clinical outcomes.80 This problem is especially salient for members with chronic illnesses, who typically require regular visits with one or more specialists.

In addition, patients unclear on the process or disconcerted by the wait often have little choice but to call their clinician’s office to seek clarification and assistance, which can add to their frustration (and increases the workload for the office). Some patients end up seeking care elsewhere (e.g., emergency departments and urgent care clinics), and become “no-shows” for the eventual referral appointment.

Specialist referrals are a serious problem for some health plan members. In response to the following question “How often was it easy to get appointments with specialists?”, nearly 20 percent of adult enrollees in commercial health plans responded “never” or “sometimes.” Nearly 30 percent of adult enrollees in Medicaid plans gave the same responses, as did 11 percent of enrollees in Medicare plans.81

While several factors contribute to complaints about specialist referrals, one common problem is that physicians’ offices are not set up to handle the referral process efficiently. In particular, they are not communicating well with the specialists, the health plans, or their patients.

**Intervention#1: The Referral Agreement**

Rapid referral programs include a host of strategies intended to reduce the delays associated with specialty referrals and increase satisfaction among patients and doctors. One useful approach is to improve communication between the PCP and the specialist through a referral agreement.

The goals of a referral agreement include the following:

- Speeding the process by which a PCP makes a referral to a specialist.
- Reducing the amount of time between the initiation of a referral and the date of the patient’s appointment with the specialist.
- Providing the PCP with decision support for the referral decision (typically in the form of guidelines).
- Improving the flow of information among the PCP, the specialist, and the patient.

When implemented effectively, this program should result in earlier diagnoses, reduced “no-show” rates at specialists, better patient outcomes, and greater patient satisfaction.

**Key Elements**

The referral agreements are meant to make the process more systematic and more responsive by helping PCPs make appropriate referral decisions and clarifying the expectations for information on both ends. In general, referral agreements require the following elements:82

- Joint development of guidelines by a small group of PCPs and specialists who are willing to think of themselves as creating a cohesive system of care. The purpose of the guidelines is to identify which clinical conditions the PCPs should manage themselves and which should be referred to the specialists.
- An explanation of the benefits to PCPs (e.g., shorter waiting times for patients, more timely and complete information from the specialist). While specialists may get fewer referrals, the

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benefits to them are more obvious: more effective care for patients, higher relative value units (RVUs), and more referred patients who have had a complete work-up.

- A referral process that involves the patient in decision making. This process should be designed to keep the patient informed, identify the work-up required before the specialist appointment, inspect the completeness of the work-up, and make sure that both the specialist and the PCP receive timely information. An electronic referral system can facilitate this process.

- An evaluation of the new referral process based on specific measures, such as waiting time for an appointment, physician compliance with the guidelines, and patient satisfaction with involvement in the referral process.

An Example

An example of an electronic referral system can be found at The University Hospitals of Leicester, England, which have implemented a Web-based electronic referral system for cancer. While this project applies to the UK’s National Health System, which clearly differs in many ways from the system of care in the U.S., it is still illustrative of the improvements that technology can make, in this instance by linking decision support with an electronic referral process.

When the clinician opens the Early Referrals Application (ERA), he or she chooses from among 12 different cancers, and then selects the electronic referral option. Once there, the physician is guided through a series of three screens:

- **Data entry**: This page collects the information needed for the decision support module (e.g., for breast cancer, it has a series of check boxes to describe lumps, skin changes, pain, etc.).

- **Recommendations**: Using the data entered in the first screen, this page indicates whether a referral is recommended and, if appropriate, the degree of urgency. If the physician chooses the “referral” button, the final screen appears.

- **Referral form**: This form captures the patient information needed by the specialist being given the referral. Because of the link to an electronic medical record system, much of the demographic information will already be inserted. When the physician adds additional comments or notes and clicks on “Email Referral,” the form is sent to the referral hospital.

For more information on the Early Referrals Application:


**Intervention #2: The Referral Expert**

Doctors and group practices that care for patients covered by multiple plans and insurers often expend a great deal of time and energy getting approvals from the plan/insurer for referrals to specialists, hospital admissions, tests, and procedures.\(^{83}\) This task has become increasingly complex as the number of insurance products has grown, since each one has its own rules and requirements.

One way to address this problem is for a group practice to develop a “referral expert” – in the form of a person, a computer system, or a combination of the two – that is responsible for tracking and managing each plans’ requirements. This strategy helps to increase the speed of approvals, which has multiple benefits. For the patient, it can mean reduced or eliminated delays for referrals, tests, and procedures, which increases satisfaction with care.\(^{84}\) For providers, health plans, and payers, quicker approvals save costs associated with the phone and paper-based approval processes,\(^{85}\) as well as costs resulting from grievances and complaints.

**Key Elements**

A referral expert would expedite insurance authorization by doing the following:\(^{86}\)

- Knowing which plans require authorizations.
- Staying abreast of changes in plan regulations.
- Knowing what actions to take when referrals are denied.

However, this intervention can be as simple as developing matrices (or ideally, a database) of referral requirements, co-pays, etc., for each insurance product and designating a person to keep the matrix or database up-to-date.

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Other Interventions To Consider

In addition to becoming familiar with each plan’s requirements, medical groups may want to explore other ideas for managing referrals more effectively, such as:

- Standardizing referral forms across multiple plans.
- Developing forms that specialists’ offices can fill out so that the PCP has all the information needed to get preauthorization.
- Hiring a referral coordinator who can keep track of all referral requests and follow-up items, and facilitate communication with patients, specialists, and plans.

F. Changes in Policies and Process and Application of Information Technology

The Problem

Several related factors contribute to members’ experiences with claims and paperwork:

- When bills are not paid accurately or in a timely fashion, providers may pass their dissatisfaction along to their patients, and sometimes pass their bills along as well. In some cases, providers resubmit the claim, which can clog the system and add to further delays.
- Members who receive a bill for a covered service often see that as a failure on the part of the health plan, even when the problem may have originated with the provider.
- Finally, when members call their provider about a bill that they believe was received in error, they are frequently referred to their health plan. This reinforces the perception that the health plan is at fault, whether or not that is true.

In addition, members sometimes experience problems with claims they have submitted directly, as well as those submitted by providers on their behalf.

To address the scenario described above, health plans must start by identifying the most likely causes of two common problems: inaccurate claims payments and delays in claims payments.

Inaccurate payments can occur when providers submit incorrect or incomplete information, which may result in inappropriate denials of payment. They may also be the result of complex benefit designs and/or multiple fee schedules that complicate the plan’s claims processing algorithms and produce errors. Finally, members may perceive that a claim was handled incorrectly because they misunderstood their benefits and/or coverage limitations. (One way to probe this possibility is to check the results for the CAHPS item on understanding information in the health plan’s written materials.)

Delays in claim payments may be due to:

- Pended claims due to incomplete information submitted by providers.
- Health plan protocols and/or dollar thresholds for pending claims for manual review.
- Backlogs due to pended claims and resubmissions of claims already in the system.
- Submission and processing lags associated with paper claims and manual processing.
Cash flow policies at health plans that can delay payment even when processing has been completed.

The Intervention

While different interventions need to be designed to address each type of problem, some interventions will help to address all or most of the problems. These include changes in policies and processes as well as applications of information technology. The examples of strategies and specific tactics provided below are drawn from the experiences of Harvard Pilgrim Health Care.

Changes in Policies and Processes

Simplification of benefits and payment policies. For example, the plan:

- Implemented contracting guardrails, which limit the customization of provider contracts to be configured in the claims system.
- Reduced reasons why a claim would tend to increase the percent of claims that can be auto-adjudicated.
- Implemented new processes that align Customer Service and Claims to allow claims submitted for reimbursement directly by the member to go through Claims correctly the first time, and for checks to be issued immediately after adjudication is complete.
- Implemented an in-line quality control program to identify and fix claim processing errors before processing is complete. Processors are held fully accountable for claim accuracy.

Provider education around the most common types of problems. For example, Harvard Pilgrim created a highly integrated Payment Policy Team to create, implement, and communicate the plan’s payment policies. Prior to that, providers that submitted claims incorrectly had few tools to educate them on the plan’s payment and billing policies. As a result of the Payment Policy Team’s efforts, the plan released both a hospital provider manual as well as a major revision of a physician manual to aid providers with billing.

Restructuring, training, and support tools for staff. For example, the plan:

- Created a dedicated Provider Claims Focus Team to address specific provider issues and root cause analysis. This team increased analysis of second submissions and appeals to address the root cause of the top issues for re-submission.
— Standardized all claims policies, procedures, and processing guidelines and placed them on an internal Web site. Processors were required to use the Web site as the “truth” copy of guidelines.

— Improved performance of the claims processing staff by:

1. Introducing training and cross-training initiatives to address quality control issues.

2. Restructuring teams to specialize in claim types, which helps with accuracy and other aspects of performance.

3. Implemented a quality incentive program enabling staff to earn bonus dollars for meeting criteria for quality and productivity.

4. Implemented a formal quality control program including re-training and progressive disciplinary action for staff unable to maintain quality and productivity standards.

— Payment arrangements that do not depend on claims processing (such as capitation).

**Applications of Information Technology**

— **Electronic data interchange for claims processing.** Harvard Pilgrim increased claims submission through EDI by participating in the New England Health EDI Network (NEHEN) and developing online Web-based claims submissions. [Learn about NEHEN at [http://www.nehen.net](http://www.nehen.net).]

— **Imaging system for paper claims.** This system manages inventory and assists the Provider Call Center in answering provider phone calls regarding submitted claims. This helped to reduce the number of claims that were re-submitted by providers and improved the efficiency of the Provider Call Center, enabling a quicker response to provider inquiries.

— **Automated phone/online eligibility checking to prevent denial of services.** Harvard Pilgrim implemented automated tools for providers to check a member’s eligibility for services prior to delivery. This helped reduce the likelihood that members would receive services that were not covered without being informed of this in advance.

— **Automated phone/online tools for providers and members to check on claim status.** At Harvard Pilgrim, these automated tools helped them quickly determine whether or not a claim had been paid and why a claim was either pended or denied.
Results of Interventions

As a result of these interventions, Harvard Pilgrim saw improvements in both its internal metrics (percent of claims resolved in 30 days) as well as the pertinent CAHPS items.

Review charts showing the impact of the plan’s interventions on:

- Internal Metrics: Percent of Claims Resolved in 30 Days
- Composite Score: Percent Responding Always/Usually to Claims Items

Impact of Interventions on Harvard Pilgrim’s Internal Metrics: Percent of Claims Resolved in 30 Days
Impact of Interventions on Harvard Pilgrim’s Composite Score: Percent Responding Always/Usually to Claims Items
G. Training to Advance Physicians’ Communication Skills

The Problem

People rarely complain about the technical aspects of the health care they receive because – in the absence of an obvious error – patients are generally unable to judge technical competence. However, they and only they are well-equipped to judge the ability of clinicians to communicate with them effectively. Even though a clinician explains a diagnosis, test result, or treatment option to a patient, if the person walks away and does not understand the explanation, it has not been an effective communication.

Poor communication can have a serious impact on health outcomes. Patients may not provide the clinician with adequate information on their health or related concerns; they may not comply with the physician’s orders – and in some cases, they may not even understand what they have been told. According to a study at the University of Kansas School of Medicine in Kansas City, patients’ reports of their understanding of the post-discharge information and instructions they had received was significantly less than what their doctors perceived. For example, while the physicians thought that 89 percent of the patients understood the potential side effects of their medications, only 57 percent of patients said that they understood.87

In addition to affecting the patient’s experience with health care, poor patient-physician communication has important consequences for medical practices. One study found that, in a three-year period, 20 percent of Massachusetts state employees voluntarily left their primary care physician because of the poor quality of their relationship, which was a function of trust, the patients’ sense that the physician knew them, the level of communication, and personal interaction.88 Poor communication is also a contributing factor in a majority of malpractice suits.89

“With patient characteristics and structural features of care taken into account, those with the poorest-quality physician-patient relationships in 1996 were 3 times more likely to leave the physician’s...

While the curriculums of most medical schools now include some form of training in communications skills, this is a fairly recent phenomenon. Traditionally, medical education has paid little attention to the skills that promote effective interactions with patients. Most practicing physicians have not been taught to appreciate the patient’s experience of illness; nor do they learn how to partner with patients and serve as a coach or guide. As a result, they typically do not know how to communicate with patients in a way that maximizes understanding and involvement in decision making, lets the patient know that his or her concerns have been heard, and ensures that the care plan meets the needs of the patient.

**The Intervention**

To compensate for this deficiency in medical education, numerous health plans and medical groups are training practitioners in the communication skills they need – either through in-house programs or through communications programs offered by outside organizations. Most of these programs are optional, but a few organizations require the participation of all doctors. In some organizations, the program is mandatory only for those doctors who consistently receive low scores in this area.

**Read about organizations that offer communication training (Appendix 6).**

The purpose of these programs is to improve providers’ effectiveness as both managers of care and educators of patients. It is also believed that trained physicians may allocate a greater percent of clinic-visit time to patient education, leading to increased patient knowledge, better compliance with treatment, and improved health outcomes.

The most effective and efficient way of offering training in physician-patient communication is in the form of seminars or workshops where you can cover many strategies for improved communication in a relatively short period of time. Workshops may also use case studies to illustrate the importance of communication and suggest approaches to improving the physician-patient relationship.

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For clinicians, workshops may serve multiple purposes, including increasing their understanding of the physician’s roles, offering insight into the importance of connecting with patients, and increasing confidence in their interviewing skills. In addition to basic communication skills, the training can cover:

- History-taking skills,
- Issues related to communicating across cultures,
- Communicating with “problem” patients,
- Interviewing techniques (including skills to help promote behavioral change), and
- Empathic responses.

Learn more about promoting behavioral change (Appendix 7).

Some programs also address weaknesses in written communications, which can be a serious problem for clinicians who use e-mail to communicate with some patients. Group Health Cooperative in Seattle, for example, offers a training curriculum on how to write e-mails to patients.

**An Example**

One of the best known examples of an in-house program to inculcate strong communication skills in clinicians is the **Thriving in a Busy Practice** program developed by Terry Stein, MD, at Kaiser Permanente. This comprehensive communications curriculum strives to develop the ability of physicians to relate to patients effectively in both routine and difficult settings. In particular, it is intended to help physicians learn and practice techniques for dealing with difficult patient encounters. Over the past decade, the workshops have been expanded beyond the issues that typically confront primary care physicians to include guidance pertinent for different specialists (such as emergency physicians).

Evaluations of this program have found a positive impact on the clinicians. One study found that clinicians reported improved confidence in their ability to conduct effective medical interviews and handle difficult situations. It also found that, after taking the course, fewer clinicians reported frustration with patient visits (specifically, the percent reporting frustration with 11 percent or more of patient visits fell from about half before the course to about one-third afterwards).92 However, the

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impact on patient satisfaction is not yet clear: One study found that the program had no impact, but noted that other factors may have influenced that finding.93


H. Tools to Help Patients Communicate Their Needs

The Problem

Communication is a two-way street. While the communication skills of physicians and other providers certainly play a large role in shaping the patient’s experience, that patient’s ability to express herself clearly, process and interpret the information she receives, and act upon it (e.g., by changing behavior) also contributes to the experience of care.

One issue is that many, if not most, patients are just beginning to become comfortable with relationships with clinicians that are based on a partnership model rather than the traditional paternalistic model. This shift is especially difficult for older patients and people who do not speak English or who come from cultures where this kind of a relationship with a doctor is unheard of.

But even those who embrace the idea of working collaboratively with physicians may lack important communication skills, which can inadvertently undermine their interactions with the health care system. Beginning in childhood, people are socialized to restrain themselves with doctors, answering only what they have been asked. While this attitude is changing, it is still a big step for people to accept that their agenda is as important as the doctor’s, and an even bigger one for them to learn how to satisfy that agenda while still respecting the clinician’s constraints.

The Intervention

Health plans and medical groups can help patients improve their ability to share information with providers by suggesting or even giving them one or more simple and inexpensive communication tools. Patients who can communicate effectively with their clinicians tend to be more satisfied with their care and less likely to sue in case of an error. Their clinicians are likely to be more satisfied with their caregiving experience as well.

There are several ways to implement this strategy, including the four tactics discussed below:

- Record Sharing
- Patient Question Lists (a.k.a. Doc Talk Cards)
- Feed Forward
- Coached Care
**Record Sharing**

Record sharing involves using the patient’s medical record as a way to facilitate information sharing and generate discussion in the context of primary care. It typically consists of giving patients a copy of their physicians’ progress notes (on paper or electronically) together with a glossary of terms. Access to this information enables patients to better understand their condition and treatment plan, to feel more in control of their health, and to identify and correct inaccurate information. Two factors may drive record sharing to become more commonplace: the HIPAA regulation that requires health care organizations to allow patients to review and amend their medical records, and the emergence of electronic medical records, which will make it easier to share legible (and therefore less confusing) information. Some health plans are already taking advantage of this capability: Geisinger Health Plan in Danville, PA, for example, offers members access to portions of their electronic medical record through the Internet. (Visit [https://mygeisinger.geisinger.org/](https://mygeisinger.geisinger.org/).)

Proponents believe that this intervention has the potential to increase compliance, improve patient safety, and enhance quality of care. Controlled studies indicate that the sharing of medical records has a consistently positive impact on doctor-patient communications, as well as modest benefits in other areas; with the exception of psychiatric patients, it appears to have little downside.\(^\text{94}\) It has been found especially effective for patients with repeated visits, such as those with chronic conditions\(^\text{95}\) and pregnant women.

**Patient Question Lists (a.k.a. Doc Talk Cards)**

Another tactic is to encourage patients to write down questions they wish to ask their doctor and bring the list to their visit; these lists are sometimes referred to as “Doc Talk” cards. Typically, patients are asked to generate two to five questions about their medical problems or their reason for the visit that they would like their physician to answer during the office visit. The cards are often designed to prompt patients for questions by listing topic areas such as symptoms and medications. These questions can be attached to the patient’s chart for the physician’s review. This intervention is simple, requires few resources, and is effective at generating communication and increasing patient satisfaction with their care.

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One tactic is to provide a form on the Web that patients can print out prior to their visit. Some health plans, for example, offers members a form that suggests they write out answers to the following two questions and bring their response to the visit:

What do I want to **tell** my doctor today?

What do I want to **ask** my doctor today?

Patients can also use the form during the visit to write down what they and the doctor agreed the patient would do after the visit.

Another approach is to maintain an ongoing record of health issues and concerns that the patient could share with his or her caregivers.


**Feed Forward**

The Feed Forward concept is part of a model developed by Eugene Nelson and John Wasson that aims to use information to improve the ability of the microsystem to deliver effective care that addresses the patient’s needs. (To learn more, go to the section on “Microsystems”). The basic idea is that, prior to a visit, each patient completes a questionnaire that asks about perceptions of the care received to date, functional health status, clinical health status, and health risk status. The clinical team can then use that information to design and deliver a treatment plan that is appropriate for that individual. After the visit, the team collects similar information that can be used to redesign care for future patients (i.e., information for feedback). The model encompasses other steps as well, including a “prescription” that includes self-care assignments and tailored instructions.

For more information, see

Coached Care

“Coached Care” programs are designed to prepare patients to be more effective participants in their care by teaching them how to ask the right questions, how to interrupt, and how to get their needs met in the encounter. Coaching sessions may also address common misconceptions regarding a condition. Its goals include helping people become more assertive health care consumers, improving the quality of interpersonal care, and increasing patient involvement in treatment decisions.

The design of Coached Care programs varies from the inexpensive, where patients receive brochures prior to their visits that contain a list of common questions and other prompts, to more expensive programs involving individual coaching sessions between patients and designated clinic staff. For example, just prior to a doctor visit, a nurse may interview the patient, review the chart together, and generate a list of questions the patient has for the doctor. These more involved coaching programs require larger resources for staff training in Coached Care techniques in addition to financial coverage of staff time. While coaching sessions are usually performed in an office setting, they may also take place through e-mail or over the phone.

Coached care programs have been shown to improve both physiologic and functional outcomes. A 1995 literature review of 21 studies found a definite correlation between effective physician-patient communication and improved patient health outcomes. In addition, anecdotal evidence suggests that Coached Care programs enhance physician-patient communication without requiring an increase in visit length.

Find citations about the impact of coached care on breast cancer decision making (Appendix 8).

Some Examples

The PREPARE Program: The Institute for Healthcare Communication offers a communication improvement model for patients called the PREPARE Program. The PREPARE to be Partners in Your Health Care: Six Steps to Help You Get More Out of Your Doctor’s Visit program consists of a self-
administered audio tape and a guidebook that can be used to prepare patients for medical visits. It is designed to be used in a brief time period such as while waiting to see the doctor. The program takes approximately 20 minutes to complete and is most effective when used immediately before the doctor’s visit and when the guidebook is taken into the visit as a reminder and place to write.

The Six Steps of Prepare

<table>
<thead>
<tr>
<th>Step One: Plan</th>
<th>Think about what you want to tell your doctor or learn from your doctor today. Once you have a list, number the most important things.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Two: Report</td>
<td>When you see the doctor, tell your doctor what you want to talk about during your visit today.</td>
</tr>
<tr>
<td>Step Three: Exchange Information</td>
<td>Make sure you tell the doctor and ask the doctor what is wrong with you.</td>
</tr>
<tr>
<td>Step Four: Participate</td>
<td>Discuss with your doctor the different ways of handling your health problems. Make sure you understand the good things and bad things about each choice.</td>
</tr>
<tr>
<td>Step Five: Agree</td>
<td>Be sure you and your doctor agree on a treatment plan you can live with.</td>
</tr>
<tr>
<td>Step Six: Repeat</td>
<td>Tell your doctor what you think you will need to do to take care the problem.</td>
</tr>
</tbody>
</table>

For more information on the PREPARE kits, visit the Institute for Healthcare Communication Web site at http://www.healthcarecomm.org/index_noflash.php?sec=courses&sub= special&course=1&noflash. For more information about how to implement this program in a clinic, hospital, or managed care organization, please contact the Institute at 1-800-800-5907 or by e-mail at info@healthcarecomm.org.

**Consumer Tips on Patient Safety:** Health plans and medical practices can help patients understand what they can do to get safer care by taking advantage of a communications program launched by several Federal agencies, including the Agency for Healthcare Research and Quality, the Centers for Medicare & Medicaid Services, the Office of Personnel Management, and the Department of Labor. Conducted in partnership with the American Hospital Association (AHA) and the American Medical Association (AMA), this campaign aims to distribute information about improving patient safety to health care providers and patients across the country.

Posters and fact sheets describe “5 Steps to Safer Health Care,” which are evidence-based, practical tips on the role that patients can play to help improve the safety of the care that they receive. These materials, which are available in English and Spanish, emphasize that good communication between health care providers and patients can often reduce a potential source of problems in today’s
increasingly complex health care system. The tips are also included in CMS’s Medicare & You handbook, which is mailed to about 39 million Medicare households each year.

The AHA and AMA are encouraging hospital leaders and physicians to hang the posters in their waiting rooms and exam rooms to help encourage dialogue between patients and providers about health care safety. The groups also are distributing the posters through mailings and meetings.

I. Shared Decision-Making

The Problem

Although patients are far more informed than they were even 20 or 30 years ago, some people express frustration and dissatisfaction with their care because they do not feel like they have adequate (if any) input into the decisions that clinicians are making about their health and their lives. One element of this problem is that patients often do not know enough about their treatment options to make informed decisions. In particular, they may not understand the evidence base underlying the decisions they are being offered.

Another contributing factor is that providers are not always supportive of patient involvement in the decision-making process. In some cases, clinicians are supportive of the concept but do not know how to make it happen.

Complicating the decision-making process is the fact that decisions related to preventive testing, diagnostic work-ups, and treatment options are often driven by physicians’ preferences (which may be shaped by medical training, local norms, or personal experience) rather than scientific evidence. The resulting variations in care across the country are tremendous and well-documented. (For evidence of geographic variations, see the Dartmouth Atlas at http://www.dartmouthatlas.org/.) However, the only preference driving variations should be that of the patient. This is a core principle behind shared decision-making.

The Intervention

Shared decision-making is a model of patient-centered care that enables and encourages people to play a role in the management of their own health. It operates under the premise that, armed with good information, consumers can and will participate in the medical decision-making process by asking informed questions and expressing personal values and opinions about their conditions and treatment options. This intervention can be implemented by medical groups, but it is typically put in place and financed by health plans.
While some critics of shared decision-making maintain that patients are not able or willing to make their own health care decisions, there is considerable evidence that patients want more information and greater involvement in decision making in partnership with their doctors.\textsuperscript{100,101,102}

**Benefits of This Intervention**

Improved quality of medical consultations has been found to have a positive effect on the quality of treatment decisions, the quality of patient-physician communication, and the satisfaction of both patients and physicians. Specifically, research on the impact of this intervention has found:

- Consumer participation can increase patient satisfaction and lead to better health outcomes.\textsuperscript{103,104,105}
- Patients who are empowered to make decisions about their health that better reflect their personal preferences often experience more favorable health outcomes such as decreased anxiety, quicker recovery and increased compliance with treatment regimens.\textsuperscript{106}
- Greater consumer involvement in decision making leads to lower demand for health care resources.\textsuperscript{107}

Research also suggests that the use of interactive presentations can increase the complexity of discussions between physician and patient. In one study, both patients and physicians benefited from an increased level of understanding that allowed discussions to focus on the critical risk/benefit tradeoffs rather than simply describing treatment alternatives.\textsuperscript{108}

\begin{thebibliography}{99}
\end{thebibliography}
Implementation of This Intervention

The first step in shared decision-making is that patients become informed about their medical condition. Consumers have access to a variety of sources for such information, including physicians, friends and family, printed materials such as pamphlets and journal articles, community centers, and the Internet. But the innovation of shared decision-making is the use of interactive technology to inform patients. This method of informing patients may be applied to a variety of medical conditions as well as general preventive medicine.

Since this approach was first developed in the early 1980’s, the use of video and computer technology has been increasingly seen as an effective means of helping patients make informed choices about their care. Interactive presentations can inform patients of treatment options, promote health, and teach self-management skills. Good interactive CD-ROMs and videos do not encourage anyone treatment approach over the others; rather, they explain the issues fairly and clearly, highlighting the pros and cons of each option. Instructional applications may also be used to prepare patients for various procedures or explain what they need to know after surgery.109

The challenge to the technology is to keep pace with rapidly changing developments including new treatment alternatives and new information concerning treatment efficacy and complications.110 Keeping them up-to-date is a major enterprise.111

Learn about sources of interactive decision aids (Appendix 9)

Once the patient is informed, the second step is for the clinician to involve the patient in the decision-making process. However, while the right of patients to be informed decision makers is well accepted, it is not always well implemented.112 Shared decision-making requires a “modification of the relationship between patient and provider and recognition of the ability of the patients to participate in making choices that affect their lives.”113 Thus, one key to success lies in training physicians to help them understand how to facilitate the shared decision-making process and to ensure that they appreciate the importance of respecting patient’s values, preferences, and expressed

needs. It is also helpful to use a team approach to shared decision-making so that the physician’s time is used appropriately.

At the same time, patients must also take some responsibility for identifying and availing themselves of alternative sources of information, such as shared decision-making tools, the Internet, interactive CD-ROMs, and support groups or educational programs offered in the community.

J. Support Groups and Self-Care

The Problem

Patients often express dissatisfaction because they are not getting everything they need from the clinicians – but in many cases, what they need is not something that the clinicians can provide. While many physicians believe that they can (or should be able to) satisfy all of their patients’ needs, including the need for self-care, this presumption is not realistic or helpful for them or their patients – particularly for those with chronic conditions.

Many communities offer multiple resources that serve patients looking for support, advice, better self-care knowledge and skills, and comfort. Rather than setting expectations they cannot meet, clinicians need to accept that this is a role better filled by others and help their patients connect with the outside resources they need.

The Intervention

Health plans and medical groups can play two important roles to counter this problem. First, they can manage the expectations of members and patients by helping them regard their doctors as coaches rather than all-knowing sages. Second, they can offer access to the kinds of educational, behavioral, and emotional resources and support they need. Tactics for providing this support include self-care programs and support groups.

- **Self-Care Programs**: Self-care programs are usually highly structured educational forums where patients with a chronic condition may learn about a variety of topics, including symptom management, nutrition, community resources, medications, managing emotions, and communication skills.\(^{115,116}\) Self-care programs often teach skills that make people better able to manage their medical problems on their own, e.g., taking a blood pressure, giving injections, taking medications, and even performing diagnostic tests such as urine tests and blood glucose. Such programs are based on self-efficacy theory and emphasize problem solving, decision making, and confidence building.\(^{117}\)

- **Support Groups**: Support groups may take the form of face-to-face meetings or on-line chat groups operating under the principle that patients can learn to take responsibility for the day-to-day management of their disease. They help people who have chronic health problems by

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teaching them how to do a better job of self-care, providing emotional support, or offering other kinds of concrete support, like getting groceries or providing transportation to and from medical appointments. Other similar group interventions include survivor groups, 12-step programs, and psychoeducational groups for families of patients with chronic diseases.\textsuperscript{118}

\textit{Benefits of These Interventions}

The use of support groups and self-care programs can increase patients’ knowledge about their disease and, in some cases, improve compliance with prescribed treatment. Additionally, these programs are beneficial to both patients and health facilities in that confident, knowledgeable patients practicing self-management have been shown to experience improved health status while utilizing fewer health care resources.\textsuperscript{119,120} Additional anecdotal evidence suggests that such programs can have a positive influence on long-term health outcomes.\textsuperscript{121}

Studies of support groups formed for chronic arthritis, heart disease, stroke, and lung disease have shown that such groups have beneficial effects on mental and physical health as well as social functioning. Specifically, support groups were found to:\textsuperscript{122,123}

\begin{itemize}
  \item Increase communication with physicians,
  \item Improve self-reported health,
  \item Make enhancements in social/role activities, and
  \item Reduce the need for hospitalizations.
\end{itemize}

These studies did not detect short-term improvement in other factors such as pain and psychological well-being, but there is evidence of significant improvements of these factors over the long-term.

\begin{flushleft}
\end{flushleft}
Inexpensive self-care programs and support groups appear to be responsible for significant cost savings. Evaluations of some of these programs have shown fewer hospitalizations and days spent in the hospital as patients become more confident in caring for themselves. Additionally, one study found a total health savings of ten times the cost of the self-care program.\textsuperscript{124,125}

\textbf{Implementation of These Interventions}

Trained lay persons can effectively moderate support groups and educate patients in self-care techniques; this person need not have the same condition as the patients. Such instructors have been found to be acceptable to both patients and health professionals and are an inexpensive staffing option for these programs.\textsuperscript{126}

Additionally, many guidebooks are available that can serve as a text for self-care programs or as a topical guide for support group meetings. The book \textit{Living a Healthy Life with Chronic Conditions: Self-Management of Heart Disease, Arthritis, Diabetes, Asthma, Bronchitis, Emphysema & Others}, edited by Kate Lorig, has served these purposes for a variety of self-care programs.

Participants typically learn about self-care programs and support groups through referrals, fliers left in physicians’ offices, and/or program announcements posted at senior citizen centers and in patient or member newsletters. Additional cost savings could come from holding these meetings at the health care facility (if sufficient room is available) or at low-cost sites in the community, such as churches, senior centers, or public libraries.


K. Delivery of Evidence-Based Information

The Problem

Consumers and patients may consider their experience with care to be less than ideal because they did not receive sufficient information from the clinician during an office visit. They may want a better understanding of what a diagnosis means, what their treatment options are, what is going to happen to them, how they could better manage their health, what impact their behaviors have on their health, and/or what they can do to prevent or minimize the risk of other problems or further complications.

Unfortunately, a number of factors conspire to limit the ability of clinicians to educate their patients sufficiently:

- Clinicians often do not have enough time with any given patient to convey the information and answer questions.
- Comprehending complex medical information in the face of a stressful diagnosis or chronic condition is an iterative process for most people. One piece of information can easily generate a round of questions long after the office visit is over.
- Patients do not retain much of what doctors tell them. One study found that the average patient forgets half of what the doctor said within five minutes of leaving the room.\(^{127}\)
- Most people also want their families to understand what they have heard, but family members are usually not present at the visit. This problem alone can generate an enormous number of time-consuming follow-up phone calls.
- Clinicians are rarely compensated for spending time on this critical aspect of health care.
- Finally, while clinicians can take steps to be prepared for visits, they do not currently have at hand all the information that their various patients might need when they need it.

Information Therapy is “the prescription of the right information to the right person at the right time in order to help patients make wise health decisions.”\(^{128}\)


The Intervention

One way to facilitate patient education and behavioral change is to give patients access to pertinent and specific evidence-based information that they can use to educate themselves and make better decisions about their behaviors, their health, and their health care. Ideally, this strategy takes advantage of the electronic infrastructure emerging in many health care settings, but computer access is not necessary.

While there are several information products available to clinicians, one of the most prominent examples of this strategy is Information Therapy (IX™), a strategy that aims to overcome many of the barriers that prevent health care consumers from feeling sufficiently informed and empowered to manage their health.

Information Therapy may be “prescribed” by a physician or by a health system or health plan (e.g., patients scheduled for a specific kind of appointment or procedure would automatically receive relevant information). It may also be “consumer-prescribed” in that consumers can independently research information about their health on their own. The information is designed to be accessible over the Web, but it may also be delivered in print.

One drawback to instituting an Information Therapy program is the amount of technological infrastructure required. If this infrastructure is not already in place, this intervention may be costly for some sites or health plans.

The anticipated benefits of delivering pertinent, evidence-based information to patients include better management of chronic disease, prevention of medical mistakes, improved efficiencies within the delivery system, and overall improved quality and experience of care.

However, this strategy has not yet been extensively evaluated. A review of outpatient health behavior interventions utilizing computers as extensions of face-to-face encounters found that 13 out of 14 studies of targeted interventions reported improved patient outcomes.129

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L. Planned Visits

The Problem

When patients with chronic illness report that their clinicians do not explain things well, they are often referring to inadequate support for, or training in, self-management of their illness. In many cases, clinical teams are not prepared to provide this kind of information during the patient’s visit. Sometimes, the problem is that they are trying to fit it into an acute care visit, whether or not the reason for the visit is related to the chronic illness. A recent study by RAND found that patients received adequate counseling and teaching (i.e., interventions known to be a “best practice” for certain conditions) only 18 percent of the time.

“Too often, caring for chronic illness features an uninformed passive patient, interacting with an unprepared practice team, resulting in frustrating, inadequate encounters.”

The Intervention

One antidote to this problem is the planned visit, which is a component of the Chronic Care Model developed by Ed Wagner and colleagues at the MacColl Institute for Healthcare Innovation at Group Health Cooperative in Seattle. (Learn about the Chronic Care Model and the Disease Registries.) The purpose of the visit is to ensure that the clinical team reviews the care for each patient with a chronic illness and is proactive in providing the patient with all the elements of evidence-based care for his or her condition, including training in self-management.

These visits are pre-scheduled one-on-one visits, 20 to 40 minutes in length. During the visit, the clinical team and the patient review the patient’s progress and work on clinical and self-management topics. A typical visit might cover some challenging aspect of self-management, such as medication adherence. Other health professionals, such as pharmacists, nurses, nutritionists, etc., may also play a role by identifying appropriate patients, preparing for the visit, or participating with the primary care physician in the visit. (For more details, see www.improvingchroniccare.org.)

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Planned visits can be used for:

- Specialty services,
- One-on-one visits with the primary care provider,
- Reviews of medications and adherence, and
- Psychosocial support.\textsuperscript{133}

Because this approach gives clinicians and patients the opportunity to review and strengthen the patient’s self-management of his or her chronic illness,\textsuperscript{134} planned visits can fill the gap left by acute care visits which, because of their focus on immediate symptoms, frequently allow little time for this kind of interaction.

Effective planned visits can lead to better clinical control of the illness (e.g., improvements in indicators such as blood pressure, cholesterol, HbA1c), reduce symptoms, improve overall health, and increase patients’ sense of control over their health by providing them with ways to manage their own illness.\textsuperscript{135} They may also lead to fewer acute care visits, reduced costs, and greater patient satisfaction.

Based on their experience with planned visits that focus on better medication management among patients 75 and older, the ICIC program recommends the following steps to conducting planned visits: \textsuperscript{136}

- Choose a patient population to focus on (e.g., diabetics, asthmatics, heart disease patients).
- Generate a list of patients at particular risk within the group. Patients at risk could include:
  - Those who are not adhering to their medications
  - Those with clinical evidence of poor disease control
  - Those who have not received important medications or other services indicated for their condition
- Call patients and explain the need for a visit.

\textsuperscript{133} Wagner E. System changes and interventions: delivery system design. Improving Chronic Illness Care. IHI National Forum, Orlando, FL; 2001.
Schedule the visit and instruct the patient to bring all medications.

Prepare for the visit (e.g., attach patient summaries to the front of the chart; to identify the patient’s concerns, prepare “Doc Talk” cards as described in “Tools to Help Patients Communicate Their Needs” section).

Reviews medications prior to the visit. (Physician consults with the pharmacy, if necessary.)

At the visit:

- Review the patient’s concerns and questions.
- Review the patient’s clinical status and treatment.
- Review medications; eliminate any unnecessary drugs and adjust remaining medications as necessary.
- Discuss and resolve adherence issues with patient.
- Collaboratively develop an action plan that the patient can and will follow.

1. Schedule a follow-up visit.

Learn more: These steps and a case example are reviewed in a video available from the ICIC Website at http://www.improvingchroniccare.org/index.php?p=Planned_Care_Visit_Video&=30

There is little literature on the effectiveness of planned visits because they are only one component of the Chronic Care Model (Refer to Appendix 10). However, more general studies of the effects of follow-up visits for chronic illness found that they improve the management of disease. For example, one study found that children and adolescents with regular follow-up visits for diabetes had better glycemic control, fewer episodes of diabetic ketoacidosis, and reduced likelihood of developing retinopathy compared to children and adolescents with irregular follow up.137

M. Group Visits

The Problem

Dissatisfaction with how providers communicate can arise when people need more attention, support, and information from the health system than they are getting. But in a typically brief office visit, clinicians do not have the time to cover everything the patient may need to know or to discuss all of their concerns (including problems with self-management.) As a result, the patient may feel that no one is listening or making the effort to explain things clearly. While the patient may be receiving various services, many of his or her needs are being missed.

This problem is particularly common for patients with chronic conditions, who are often struggling to understand how to control and live with their disease. A frequent consequence is that these patients become “high utilizers” of the health care system, particularly of emergency departments and urgent care centers – which tends to make them even less satisfied with their health care experience and more likely to have poor outcomes. These visits occur in part because the system of care does not provide patients with the tools, support, and information they need to manage their health problems adequately.

The Intervention

Group visits are an important component of the Chronic Care Model (Refer to Appendix 10). In essence, they are a form of outpatient care that combines medical care, patient education, and patient empowerment in a group setting. In a group visit, patients with a common condition (such as diabetes) meet as a group under the guidance of one or more clinicians; participation in this group becomes part of their regular clinical treatment. This model dates back to at least 1990 when John Scott, M.D., of Kaiser Permanente Denver created the Cooperative Health Care Clinic (CHCC) for groups of 25 chronic care patients, 65 and older, who were high users of health care.138

**Benefits of This Intervention**

The benefits associated with group visits include reduced health care costs, greater patient and clinician satisfaction, patient empowerment, greater patient compliance, reduced repeat hospital admissions, and fewer emergency room and sub-specialist visits.\textsuperscript{139}

As a response to increased pressure for clinician productivity, this format can be an efficient way for patients to have face-to-face contact with their provider, get educational content, and learn from the experiences of fellow patients, without overly taxing the clinician’s time. These groups provide social and psychological support for the participants and help motivate them to follow their treatment plan and to take more responsibility for their own health.\textsuperscript{140} The clinician is spared the repetition of delivering the same educational message to multiple patients in traditional one-on-one encounters,\textsuperscript{141} while patients get to share valuable information and insights with one another about self-management and quality of life issues.

**Implementation of This Intervention**

There are several variations of the group visit concept. For example, in the model known as the drop-in group medical appointment (DIGMA), patients need not make prior appointments.\textsuperscript{142}

To learn about the various ways in which medical practices conduct group visits, go to [http://www.improvingchroniccare.org/downloads/groupvisitmodelcomparison.pdf](http://www.improvingchroniccare.org/downloads/groupvisitmodelcomparison.pdf). The implementation of group visits is not complex, but it does require advance planning and preparation. A few considerations are worth mentioning:

- First, choose an appropriate condition. Group visits are best suited for chronic illnesses, such as asthma, diabetes, arthritis, and obesity.\textsuperscript{143}

- Think carefully about which patients to invite. The goal is to identify patients who seem in need of better care, better advice on self-management, and more support. One way to do this...
is to focus on high-utilization patients, who can often be identified through pharmacy and billing records.

- Keep the group a manageable size, perhaps 10 to 16 patients.
- Pay attention to who is leading the group visit. Physician-led groups can be more effective at reducing no-shows than groups led by nurses or other mid-level clinicians. Also, it is important to avoid the impression that group visits are a way for physicians to avoid time with the patients.
- Be sure to get the permission of participants to share information about them in the meeting. Also discuss the confidentiality of personal health information during the meeting itself.

The meeting might last two or more hours and generally follows this format:

- Introductions
- Educational mini-lecture or discussion
- A break during which clinicians conduct clinical work (e.g., review medication refill needs, check blood pressures and other clinical measures)
- A discussion or question-and-answer period

They often end with clinicians meeting one-on-one with patients who were identified as needing extra follow-up.

Barriers to conducting group visits include privacy concerns, resistance from patients who do not want to participate in a group, and practical issues like adequate meeting space and available personnel. For many practices, the only space large enough to hold a group of people is the waiting room. Some medical groups get around this problem by conducting the group visits in the evenings; other organizations sometimes seek out space in the community that may be more accessible and familiar to their patients.

**The Impact of This Intervention**

Evaluations of group visits have found promising results:

- Randomized trials have shown that diabetic patients involved in group visits achieved better HbA1c levels than patients in a control group.\(^{144}\) Other studies of group education in diabetes

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have also found that HbA1c levels in the intervention groups were better than those of control groups; they also found evidence of improvements in patient self-care and satisfaction, self-efficacy, and body weight and non-fasting triglyceride levels.

In a study that compared a control group to a group of high users of HMO medical care who participated in group visits (all aged 65 and older with chronic conditions), the findings indicated that those in the intervention group were more satisfied with their care; had lower care costs; and had fewer ER visits, sub-specialist visits, and calls to physicians. Nurse contact (phone and in person) was higher among the group visit patients. Also, participating physicians were more satisfied with caring for older patients than comparison physicians who relied on standard one-to-one interactions with their patients.

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N. Listening Posts

The Problem

Quality improvement activities that focus on the needs and experiences of customers – i.e., members and patients – can only succeed in an environment that emphasizes the concepts and responsibilities of “customer service.” One critical element of effective customer service is the capacity to elicit detailed, constructive feedback in a way that assures people that someone is really listening to them. When this is done well, members and patients are more likely to report a positive experience. At the very least, the organization should not be surprised by any negative reports.

However, this hands-on approach can be a major challenge for health care organizations that are not accustomed to communicating with their members or patients in this way. Many assume they understand how to fix the problem and do not probe beneath the surface of complaints and survey responses. For example, complaints that the office staff of a plan or a group are not helpful could stem from many sources:

- Not being given clear instructions about how to get to the practice.
- Not being able to get an appointment when they needed it.
- Being put on hold in the middle of a medical emergency.
- Real rudeness and disrespect during a visit or on the phone.

The solutions to these problems vary tremendously. Without digging deeper with patients or members to understand the true problem, a plan or group could waste a great deal of money on the wrong fixes.

The Intervention

The term “listening posts” refers to a variety of ways to learn about the experiences of patients and staff and involve them in the improvement process. Most already exist in some form in most health plans or clinical practices. The biggest challenge is building a system to routinely synthesize all of the feedback you receive from these different sources into a coherent picture of what they are telling you about the way you deliver care. Once this system is in place, you can perform root cause analyses to identify problems, such as a particular staff member or medical group that accounts for
many of your problems, versus problems that are systemic to your delivery of care such as an antiquated manual appointment system.

Listening post strategies include:

- Surveys
- Focus Groups
- Walkthroughs
- Complaint/Compliment Letters
- Patient and Family Advisory Councils

**Surveys**

You can benefit from analyzing data from the annual CAHPS survey as well as from more frequent, small-scale use of CAHPS composites or individual questions to monitor a specific intervention. To learn more, refer to “Analysis of CAHPS Results”.

**Focus Groups**

You can bring staff and/or patients together in a moderator-led discussion group to collect more precise information about a specific problem and new ideas for improvement strategies. A focus group allows for more in-depth exploration of the drivers of dissatisfaction and can provide excellent ideas for reengineering services. In addition, videotapes of focus groups can be very effective at changing the attitudes and beliefs of staff members because the stories that participants tell often bring to life the emotional impact of excellent service as well as service failures.

Learn more about focus groups:

Walkthroughs

A walkthrough may be the easiest way to give your staff the patient’s perspective and the fastest way to identify system, flow, and attitude problems, many of which can be fixed almost overnight. Performing a walkthrough is an effective way of recreating for staff the emotional and physical experiences of being a patient or family member. Walkthroughs provide a different perspective and bring to light rules and procedures that may have outlived their usefulness. This method of observation was developed by David Gustafson, Ph.D. at the University of Wisconsin in Madison and adapted by Susan Edgman-Levitan of the John D. Stoeckle Center for Primary Care Innovation to incorporate the staff perspective.

During a walkthrough, one staff member plays the role of the patient and another accompanies them as the family member. They go through a clinic, service, or procedure exactly as a patient and family does. They do everything patients and families are asked to do and they abide by the same rules. They do this openly, not as a mystery patient, and throughout the process ask staff members a series of questions to encourage reflection on the processes or systems of care and to identify improvement opportunities.

The staff conducting the walkthrough take notes to document what they see and how they feel during the process. They then share these notes with the leadership of the organization and quality improvement teams to help develop improvement plans. For many who do this, it is the first time they have ever entered their clinics, procedure rooms, or labs as the patient and family do. Clinicians are routinely surprised about how easy it is to hear staff comments about patients from public areas and waiting rooms. Walkthroughs usually turn up many problems with flow, signage, and wasteful procedures and policies that can be fixed almost immediately.

Learn how to conduct a walkthrough (Appendix 12).

As an alternative to a walkthrough, you could use a similar technique called “patient shadowing,” where a staff member asks permission to accompany a patient through the visit and take notes on the patient’s experience. Since this approach does not require taking a slot away from a real patient, it can be useful in settings where visits are at a premium.
Complaint/Compliment Letters

By reviewing these letters systematically, you can often get a better picture of where you need to do more “background research” with staff and patient focus groups or a walkthrough versus when you need to get a manager involved to address a personnel problem.

To learn more about managing complaints, refer to “Service Recovery Programs” under “Browse Interventions” and “Paying Attention to Customer Service” under “Are You Ready to Improve”?
O. Patient and Family Advisory Councils

The Problem

For some patients and health plan members, the issue is not a concern about being heard. Rather, their dissatisfaction with their health care experience reflects frustration with a system that does not involve them in decisions that will affect the design and delivery of care. From their perspective, the system is superficially responsive: It acknowledges that a problem with service or care exists, but does not bother to investigate whether a proposed solution will really address the problem from the patients’ or members’ point of view.

Although patient satisfaction surveys provide extremely useful data, they are not the best source of information for innovative ideas about improving the delivery of care. Also, even plans and practices with high satisfaction scores often have many opportunities to improve services, which may not be revealed by survey data.

The Intervention

A Patient and Family Advisory Council is one of the most effective strategies for involving families and patients in the design of care.\(^\text{149}\)

The councils can play many roles but they do not function as boards, nor do they have fiduciary responsibility for the organization.

Council responsibilities may include input into or involvement in:

- Program development, implementation, and evaluation;
- Planning for major renovation or the design of a new building or services;
- Staff selection and training;
- Marketing the plan’s or practice’s services;
- Participation in staff orientation and in-service training programs; and

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Design of new materials or tools that support the doctor-patient relationship. (for an example, check out the “shared care plan” developed by peacehealth, a health system in the pacific northwest: http://www.peacehealth.org/system/news/sharedcareplan061306.htm.)

These councils help overcome a common problem that most organizations face when they begin to develop patient-and family-centered processes: They do not have the direct experience of illness or the health care system. Consequently, health care professionals often approach the design process from their own perspective, not the patients’ or families’. Improvement committees with the best of intentions may disagree about who understands the needs of the family and patient best. But family members and patients rarely understand professional turf boundaries. Their suggestions are usually inexpensive, straightforward, and easy to implement because they are not bound by the usual rules and sensitivities.

**Implementing This Intervention**

In general, when starting a Patient and Family Advisory Council, it is best to start with members that are recommended by staff. Depending on the size of the organization, most councils have between 12 and 30 patient or family members and 3 or 4 members from the staff of the organization. The council members are usually asked to commit to one 2- to 3-hour meeting a month, usually over dinner, and participation on one committee. Most councils start off with one-year terms for all members to allow for graceful departures in case a member is not well suited for the council.

Look for people who can listen and respect different opinions. They should be supportive of the institution’s mission as well as constructive with their input. Staff members will frequently describe good council members as people who know how to provide “constructive critiques.” They also need to be comfortable speaking to groups and in front of professionals.
P. Service Recovery Programs

The Problem

No matter how well you manage the customer service at your organization, problems are inevitable. Some may be serious, some may be minor, but they all play a role in shaping the member’s or patient’s perceptions of the organization and its responsiveness to their needs. Marketing researchers have found that the most satisfied customers are ones that have never experienced a serious problem or product defect. The next most satisfied customers are those who have experienced service difficulties, sometimes significant ones, that have been redressed by the organization. The least satisfied customers are those whose problems remain unsolved.

“When it comes to service recovery, there are three rules to keep in mind:

1. Do it right the first time.
2. Fix it properly if it ever fails.
3. Remember: There are no third chances.”

In 2007, a substantial percentage of health plan members reported “never” or “sometimes” when asked whether the plan’s customer service gave them the information or help they needed. This was the response of 26 percent of adults in commercial plans and 31 percent of respondents from Medicaid plans.

Most health plans and physician practices have some sense of the cost of replacing a lost member or patient. But many are not aware of how powerfully the “grapevine effect” can affect their reputations. Several marketing studies have confirmed that only 50 percent of unhappy customers will complain to the service organization, but 96 percent will tell at least nine or ten of their friends about their bad experience.

The “grapevine effect” can become an even more powerful force when your members and patients take advantage of the Internet to voice their complaints. Many Internet sites already allow patients to evaluate their experiences with a doctor, group, or plan online and some have the capacity to include written comments. Several health plans also publish ratings of patient experience as part of their online provider directories, and a few are starting to include anecdotal reports as well. Consider the influence that consumer ratings have on restaurants, books, and other products.

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In the same way that it can be helpful to remember that some problems or difficulties will always be with us, it is important to acknowledge that complaints are inevitable. Health care organizations are caring for people who are almost always anxious and afraid, so the stakes are higher. What differentiates member- or patient-focused organizations from others is whether and how they handle these incidents to ensure that unhappy members or patients feel like their concerns have been addressed and that the organization values them.

The Intervention

Service recovery is the process used to “recover” dissatisfied or lost members or patients by identifying and fixing the problem or making amends for the failure in customer or clinical service. Excellent service recovery programs are an effective tool for retaining members or patients and improving their level of satisfaction. Good service recovery programs can turn frustrated, disgruntled, or even furious patients or members into loyal ones.

Service recovery is about restoring trust and confidence in your ability as an organization to “get it right.” When members or patients repeatedly experience breakdowns in service, they begin to lose confidence in the care they receive. If you cannot get the small things right, how can they trust that you will do well with the complicated processes required to deliver high-quality care?

Implementing This Intervention

National experts in service recovery recommend a well-tested process for service recovery. This six-step process details how to handle a range of problems from the mildly irritated to the malpractice case in the making.

1. Apologize/acknowledge
2. Listen, empathize, and ask open questions
3. Fix the problem quickly and fairly
4. Offer atonement
5. Follow up
6. Remember your promises
Service recovery can range from listening to an upset patient to giving free parking to patients who
have to wait more than a specified time for their doctor visit. It can also mean providing solutions or
making amends for problems that the patient created. Making sure that someone gets to see a doctor
when they show up on the wrong day is an example of the kind of customer service patients never
forget. Service recovery programs ensure that patients never hear, “I can’t help you with this. It’s
against our policy.”

According to Dr. Wendy Leebov, a national expert on service recovery in health care, service
recovery is everybody’s job. When people complain, they usually address those complaints to front-
line staff – but these staff do not necessarily have the skills or the resources to fix “system issues”
that are often the source of the problem. Managers and the executive leaders have responsibility for
redesigning dysfunctional work processes, systems, or even staff who may need to be moved to a
different job.

Dr. Leebov has developed a very effective model for service recovery. Her model is described in
detail in a book called *Service Savvy Healthcare: Achieving Impressive Service One Goal at a Time* (Chicago,
IL: American Hospital Publishing; 1998). Based on her experience with hundreds of health care
organizations, the following five components must be in place to handle customer complaints and
consistently impress your members and patients:

- Effective systems for inviting/encouraging customers to complain.
- Guidelines for staff and latitude to act and atone. Learn more about these guidelines
  (*Appendix 13*).
- Documentation and a feedback loop that channels problems revealed through service
  recovery into an improvement or problem elimination process.
- Clear protocols for handling customer complaints effectively.
- Staff skilled in service recovery – aware of protocols, and able to listen non-defensively,
  empathize, handle emotion, solve problems, and follow through to closure. Read the axioms
  of service recovery for an overview of what employees need to understand about complaints
  and service recovery (*Appendix 14*).

Good service recovery programs go beyond the “quick fix.” They include a process for tracking
problems and complaints to help identify the source of the problem so the right improvement can
be put into place. Some complaints arise from experiences with a specific person in the service
process, which reflects a training problem, while others are the result of system problems that
require a totally different process to resolve. The tactic of assigning complaint letters received by the
CEO to middle managers for resolution as if they all reflect a one-time event or an employee that needs disciplinary action is outdated, and will never result in permanent solutions to long-term problems. Many staff know immediately which situations or patients will end up in the CEO’s office. Organizations with good customer service and service recovery programs are proactive and let the CEO, clinic manager, or chief medical officer know about these situations right away so that the person can be contacted before they have the time to file a formal complaint. Learn about encouraging complaints (Appendix 15).

The Impact of Service Recovery Programs

Studies indicate that when customers’ problems have been satisfactorily handled and resolved, their loyalty and plans to use the services again were within a few percentage points of those who had not experienced a problem.151

In other service industries, service recovery has proven to be cost-effective. Also, retention benefits the bottom line: Because of their word-of-mouth referrals and willingness to purchase ongoing services and premium products, customers retained over five years can be up to 377 more profitable than a “reversing door” customer who uses your services once.152

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Q. Standards for Customer Service

The Problem

Achieving high levels of member satisfaction requires two ingredients:

- A deep knowledge of what constitutes high quality service from the perspective of your members and patients.
- Service standards that clearly tell your staff what is expected of them in their interactions with members and patients.

However, while most of the accrediting organizations require such standards in their regulations, most health care organizations do not have a well-defined process for developing effective standards. One barrier is that setting standards takes time. However, Dr. Wendy Leebov and other national experts in this area argue that the absence of standards necessitates spending time on far more unpleasant activities, such as responding to complaints and managing unsatisfactory staff behavior.

Another problem with developing standards is that some of the behaviors are hard to describe. It can be challenging to describe what good and excellent service feel like. Setting standards is also fundamentally about being accountable to high standards of service on a daily basis. That is a challenge in health care systems that are often deeply grounded in a culture of professional autonomy.

The Intervention

Customer service standards are already embedded in many of the CAHPS survey questions. These questions were selected because they measure processes of care that patients and members use to define a “quality experience.” However, that does not mean it will be easy to translate the questions into standards that your staff can measure and evaluate.

In some respects, standards are similar to “service guarantees” – a concept that frightens many health care employees because they do not trust that the systems they need to meet “guarantees” are in place. Organizations that maintain their focus on service often find that the standards evolve over time. As the organization gets better and better at meeting the needs of its patients, the staff are willing to raise the standards they commit to and trust that they will be able to deliver.
Examples of standards that some plans or groups have implemented include the following:

- 90 percent of patients who call for an appointment will receive one for the same day.
- Patients will wait 10 minutes or less in the reception area before being placed in an exam room.
- All telephone calls will be answered within three rings.
- All test results will be communicated in writing to the patient after an ambulatory care visit.

Leebov et al. describe a step-by-step process to help set standards that everyone can abide by. The steps are as follows:

- Work with staff and managers to resolve any mixed feelings or uncertainty about setting high standards and holding staff accountable.
- Help your team to commit to aiming high and setting ambitious goals.
- Engage your customers and staff in identifying basic service behaviors that reflect impressive customer service.
- Use these guidelines to identify job-specific behaviors.
- Crystallize these behaviors into scripts and protocols. Read about the use of talking points (Appendix 16).
- Design and institute measurable service standards that you expect your people to meet regularly. Read an example of service standards (Appendix 17).
- Set service targets – stretch goals – that will have a significant impact on customer satisfaction and that can become standards.
- Monitor performance.
- Hold yourself and your team accountable.

Although this process may require a big change in an organization’s culture, it is very valuable. Without these kinds of standards in place, most organizations cannot sustain a meaningful focus on patient-centered improvements.

Read a case study of a health plan that successfully set standards to improve customer service (Appendix 18).

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R. Reminder Systems for Immunizations and Preventive Services

The Problem

Many patients do not receive important immunizations and other preventive services and advice because they do not know to see their clinical team for these services, they forget to make appointments, or they miss scheduled appointments. One study of family practice clinics found that the rate of missed appointments ranged widely, from close to zero to more than 50 percent. Missed appointments contribute to discontinuity of care, reduce care opportunities for other patients, disrupt the patient-provider relationship, and add to health care costs.

The fact that immunization rates for adults (and children) are below optimal levels supports this finding. In 2006, less than 65% of adults over 65 had had the influenza vaccine and only 57% had been vaccinated against pneumonia. Two common reasons for missed vaccinations are forgetting appointments and in the case of children, parents not knowing their child’s immunization schedule.

The Intervention

Two useful strategies for tackling this problem are Reminder Systems for Patients and Reminder Systems for Clinicians.

Reminder Systems for Patients

One way to tackle the inadequate delivery of preventive services is to institute reminder and recall systems for patients. Reminder systems notify patients a few days before their scheduled appointment, while recall systems contact patients who have missed appointments and encourage them to reschedule.

The benefits of reminder and recall systems include improved immunization rates, fewer missed appointments (no-shows), and more preventive care visits. The higher levels of preventive services are likely to reduce morbidity and mortality from preventable diseases. Also, as more patients come

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for their allotted appointments, the practice can increase its visit capacity and reduce its costs, particularly those associated with the inefficient use of clinician and staff time when slots are wasted.

Reminder systems have been in use for several decades, and except for the more sophisticated computerized phone reminder systems, are not complex either to initiate or to operate. Reminder and recall systems can work through a variety of mechanisms meant to prompt the patient, including phone calls (by clinic staff, by computer, through patient portals, or through centralized programs), letters, postcards, and e-mail. While all types of reminder systems are effective, telephone reminders have been found to be most effective, but also the most expensive compared to postcard and letter reminders.157

Systems to reduce no-shows employ some additional techniques, including:

- Reducing perceived barriers (e.g., providing transportation).
- Providing information (such as pamphlets or videos) on the importance of regular preventive and health maintenance visits.158

Reminder, Recall, and Outreach (RRO) programs are a more resource-intensive version of these systems and have been used effectively to improve immunization rates for hard to reach populations, such as inner-city minority children.159

**The Costs of Patient Reminder Systems**

Barriers to implementation include cost and lack of information about the variety of systems. Costs for immunization reminder programs vary widely; for example, the cost per additional child vaccinated ranges from $7 to $63. Studies have found that a letter reminder system can cost $10.50 per fully vaccinated child, whereas a comprehensive program of reminders and community outreach can cost $63 per child per year, with an estimated cost effectiveness of $316 per year per fully vaccinated child.160


**The Impact of Patient Reminder Systems**

Reminder and recall systems are effective at improving immunization rates in adults and children.\(^{161}\) They also reduce the no-show rate for preventive services. Increases to immunization rates ranged from 5 to 20 percent in intervention groups compared to control groups. Effectiveness was shown for adult pneumococcus, tetanus, and influenza vaccines and for childhood vaccines, including the influenza vaccine. While all types of reminder systems were effective, telephone reminders were the most effective.

A review of studies of appointment reminder systems also found that they resulted in improvements.\(^{162}\) The rates of kept appointments increased an average of:

- 40 percent for patient contracts,
- 120 percent for letters,
- 190 percent for phone calls and for orientation/information programs (e.g., videos and pamphlets), and
- 660 percent for phone reminders for psychosocial appointments.

In a study comparing the effectiveness of different approaches to improve immunization and screening, patient reminder systems were the fifth most effective method, with an average improvement of 150 percent compared to control groups.\(^{163}\) More effective were organizational change, provider reminders (see discussion below), patient financial incentives, and provider education. Less effective (but still more effective than no intervention) were patient education, provider financial incentives, and provider feedback.

**Reminder Systems for Physicians**

While physicians generally agree with preventive measures and guidelines, there is substantial evidence that physician compliance with such preventive measures is well below optimal.\(^{164}\) Since

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most patient encounters revolve around treating acute illnesses and alleviating symptoms, preventive measures are often overlooked. One way to improve compliance with such secondary tasks is to provide physicians with organized and processed data at key times.

Among physician reminders, the most prominent is the concurrent report, which offers the benefit of timeliness – i.e., it provides information to a physician at a time when she can act on it. Such reports are commonly in the form of a computer-generated printout of suggested preventive procedures that is attached to the front of a patient’s chart. A common computer reminder system reviews the records of patients coming for scheduled appointments and prints out the necessary procedures and tests in the “orders” section of the encounter form.

Other concurrent formats include tagged notes, stickers in patient charts, and cards given to patients to help them prompt physicians. The type or location of the prompt does not seem to matter; that is, reminders at a variety of places in the medical chart (e.g., tagged progress note, computer monitor display) are equally as effective as a printout at the front of the patient medical record. All achieve 12 to 14 percent improvement.

Other categories of reminders include:

- Intervisit reminders (i.e., a reminder sent to the physician after a visit when something is overdue).
- Registry reminders (e.g., an inter-visit reminder for a specific patient group, such as those with chronic condition).

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**Implementation of this Intervention**

Prior to implementing physician reminder systems, the health care organization should address the following questions:

- Do the affected physicians believe that the services they are being reminded about are important?
- Do the physicians agree on the best approach to these issues?
- Do they agree on which steps of the process need the most support?
- Does the reminder system meet physicians’ needs while also incorporating safeguards against process failures?

Failure to consider these questions is likely to undermine the success of the reminder system.

It is important to note that significant rates of non-compliance with preventive procedures may indicate that there are fundamental problems with the underlying systems, which should be addressed before reminder systems are attempted.

**The Impact of Physician Reminder Systems**

There is strong evidence from meta-analytic studies that physician reminder systems for preventive care are effective at increasing preventive procedures.

- Balas et al. reviewed 33 controlled studies and found that reminder systems led to an average improvement in six preventive procedures of 13 percent, ranging from 5.8 percent for Pap smear to 17.2 percent for pneumococcal vaccination. (The other four procedures were fecal occult blood test, mammogram, influenza vaccination, and tetanus vaccination.) Extrapolating these results nationwide, the researchers estimated that reminder systems could save 8,333 lives per year. Shea et al. reviewed 16 randomized controlled trials and found, for six

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preventive practices, an overall 77 percent increase in procedures when computerized reminder systems were used.  

- Litzelman et al. found a 19 percent relative difference in physician compliance with reminders on three procedures when physicians were required to actively respond to a prompt by indicating the action taken, compared to a reminder that required no active response.


Resources

Sections of the Site

- Why Improve Patient Experience?
- Are You Ready To Improve?
- Analysis of CAHPS Results
- Quality Improvement Steps

Topics Addressed by Interventions

- Access
- Communication with Doctors
- Communication About the Costs of Care
- Coordination/Integration of Care
- Customer Service
- Health Promotion/Education
- Preventive Services
- Shared Decision Making
A1. Resource by Section: Why Improve Patient Experience?

Topic: General Resources for “Why Improve”?


A2. Resources by Section: Are You Ready To Improve

Topic: General Resources for “Are You Ready?”


Topic: Cultivating and Supporting QI Leaders


Topic: Focusing on Microsystems

- Clinical Microsystems (http://dms.dartmouth.edu/cms): Sponsored by Dartmouth-Hitchcock Medical Center, this site offers free access to extensive information and other resources related to the use of microsystems in health care organizations.
- HowsYourHealth (http://www.HowsYourHealth.org): Developed by a cooperative network of physicians, nurses, and researchers affiliated with Dartmouth Medical School, HowsYourHealth.org is a simple, free tool that enables medical practices that are applying the microsystems model to get feedback about how it is helping their patients. Choose the “For Physicians and Businesses” link on the home page to learn about the features of this program and how to customize it for your setting. The complementary book, How’s Your Health?, is also available for download or ordering.
- Ideal Medical Home (http://www.idealmedicalhome.org): This site is designed to support medical practices in delivering efficient, patient-centered care. The free curriculum was
developed by the Dartmouth Primary Care Practice-Based Research Network and the Institute for Health Care Improvement.


**Topic: Training Staff in QI Concepts and Techniques**


The following organizations offer training on quality improvement and related resources:
- America’s Health Insurance Plans (AHIP): http://www.ahip.org
- American Medical Group Association (AMGA): http://www.amga.org
- American Society for Quality: http://www.asq.org
- Institute for Clinical Systems Improvement (ICSI): http://www.icsi.org
- The Institute for Healthcare Improvement (IHI) : http://www.ihi.org
- Medical Group Management Association (MGMA): http://www.mgma.org

**Topic: Paying Attention to Customer Service**


**Topic: Recognizing and Rewarding Success**

A3. Resources by Section: Analysis Of CAHPS Results

**Topic: Process Mapping**


**Topic: Process Observation**


**Topic: Small-Scale Surveys**


**Topic: Focus Groups**


**Topic: Semi-Structured Interviews**

A4. Resources by Section: Making Improvements Needed

Topic: The Process of Quality Improvement

- **Institute for Healthcare Improvement** ([http://www.ihi.org](http://www.ihi.org)). The Institute for Healthcare Improvement (IHI) is a not-for-profit organization driving the improvement of health by advancing the quality and value of health care. IHI offers resources and services to help health care organizations make dramatic and long-lasting improvements that enhance clinical outcomes and reduce costs. It offers training programs, conferences, publications, conference calls, and opportunities to participate in collaborative projects to improve the delivery of care.

- **How’s Your Health** ([http://www.HowsYourHealth.org](http://www.HowsYourHealth.org)). This Web site introduces medical practices to a collaborative program intended to help them assess and improve their ability to deliver high-quality care, particularly to patients with chronic diseases. The training program is sponsored by the Dartmouth Hitchcock Medical Center and the IHI.

- **California Quality Collaborative** ([http://www.calquality.org](http://www.calquality.org)). The mission of the California Quality Collaborative (CQC) is to identify and accelerate the adoption of proven innovations in ambulatory care to achieve the highest attainable value of health care for participating physicians.


**Topic: Teamwork**


**Topic: Innovation**


**Topic: Measurement in the Quality Improvement Process**

B1. Sources by Topic: Access

Rapid Referral Programs


Open Access Scheduling for Routine and Urgent Appointments


For information on collaboratives available to support the implementation of this strategy, contact:

- The Institute for HealthCare Improvement (IHI)
  20 University Road, 7th Floor, Cambridge, MA 02138
  Phone: (617) 301-4800; Toll-Free: (866) 787-0831
  http://www.ihi.org

- The Institute for Clinical Systems Improvement (ICSI)
  8009 34th Avenue South, Suite 1200, Bloomington, MN 55425
  Phone: (952) 814-7060; Fax: (952) 858-9675
  http://www.icsi.org

For information on resources for VA Clinics, contact the Veteran’s Health Administration: http://www1.va.gov/health/index.asp

For information on resources for federally qualified community health centers and other primary care practices, contact:

- The Bureau of Primary Health Care (http://bphc.hrsa.gov/): The Bureau of Primary Health Care is one of six bureaus comprising the Health Resources and Services Administration (HRSA), U.S. Department of Public Health.
The Primary Care Development Corporation (PCDC) of New York City (http://www.pdceny.org): The New York City government and private and philanthropic sectors created PCDC in 1993 to address the lack of primary and preventive health care in economically distressed communities. PCDC delivers programs and promotes public policies that enable health care organizations to develop state-of-the-art facilities and adopt the best primary and preventive care practices.

For information on resources from the United Kingdom: While the United Kingdom’s health care system differs from ours in many ways, clinical practices in both nations struggle with many of the same issues with regards to improving access and patients’ experiences with care. To assist practices in better meeting patients’ needs, the UK’s National Health Service (NHS) offers various resources through its Demand Management Group, including guidance related to reducing waits for routine and urgent appointments and clinical services. To learn more about the NHS Modernisation Agency Demand Management Team, go to http://www.natpact.nhs.uk/demand_management/.

Streamlined Patient Flow

A tool from the Institute for HealthCare Improvement for measuring cycle time in the office: http://www.ihi.org/knowledge/Pages/Tools/PatientCycleTool.aspx.


Access to E-mail for Clinical Advice and Administrative Help

Electronic Patient Centered Communication Resource Center: This site offers a great deal of information on using e-mail effectively in clinical practice.

Healthy E-mail (http://www.healthyemail.org): This nonprofit organization offers educational materials, a secure communications tool, and related information on the use of secure e-mail.

iHealthBeat (http://www.ihealthbeat.org): Sponsored by the California HealthCare Foundation, this news digest reports on technology’s impact on health care.

Informatics Review (http://www.informatics-review.com): This is an electronic journal of the Association of Medical Directors of Information Systems.
Massachusetts Health Data Consortium: This site offers guidelines and related information on e-mail use, including “Guidelines for the Use of Patient-Centered E-mail” by Daniel Z. Sands, M.D., M.P.H., Beth Israel Deaconess Medical Center and Harvard Medical School.


For information on the impact of health information technology on patients:
CAHPS Health Information Technology Item Set (https://www.cahps.ahrq.gov/Surveys-Guidance/ItemSets/HIT.aspx): The CAHPS Clinician & Group Surveys include an optional set of items that ask patients about their experience with health information technology in the physician’s office.

Internet Access for Health Information and Advice

Pew Internet and American Life Project (http://www.pewinternet.org): The Pew Internet & American Life Project produces reports that explore the impact of the Internet on families, communities, work and home, daily life, education, health care, and civic and political life.

Consumer and Patient Health Information Section (CAPHIS) of the Medical Library Association (http://www.caphis.mlanet.org/consumer):

Digital Divide Network (http://www.digitaldivide.net): This site provides information on inequalities in access to the Internet.

Baker L, Wagner TH, Singer S, Bundorf MK, Use of the Internet and E-mail for Health Care Information: Results From a National Survey JAMA. 2003;289:2400-2406.


For guidance on assessing health-related Web sites, refer to:

Gehle JL, Smith RM. The Informed Consumers: Evaluating Healthcare Web Sites. Available at: WoMeN. Quarterly newsletter of the Eastern Virginia Medical School Office for Women's


- How To Evaluate Health Information on the Internet: Questions and Answers (http://www.cancer.gov/cancertopics/factsheet/information/internet): This fact sheet was developed by the National Cancer Institute.

B2. Resources by Topic: Communication with Doctors

**General Resources on Improving Chronic Care**

- **Improving Chronic Illness Care (ICIC) Program** ([http://www.improvingchroniccare.org](http://www.improvingchroniccare.org)): An important national resource for supporting implementation of the Chronic Care Model is the Improving Chronic Illness Care (ICIC) program. This program is funded by the Robert Wood Johnson Foundation and based at the MacColl Institute for Healthcare Innovation at Group Health Cooperative in Seattle. The ICIC program seeks to improve the care of the chronically ill through improvement collaboratives, a targeted research grants program, and a dissemination program providing technical assistance and support to organizations interested in improving chronic illness care. Working in collaboration with the Institute for Healthcare Improvement (IHI), ICIC has completed three national chronic condition collaboratives involving over 100 health care organizations participating in 12 to 13-month quality improvement programs. Each organization used the CCM to design and test system changes to improve care for a single condition such as diabetes. To learn about an evaluation of the three Chronic Illness Care Collaboratives, go to [http://www.rand.org/health/projects/icice](http://www.rand.org/health/projects/icice).

- **Partnership for Solutions** ([http://www.partnershipforsolutions.org](http://www.partnershipforsolutions.org)): The Partnership is an initiative of Johns Hopkins University and The Robert Wood Johnson Foundation to improve the care and quality of life for people with chronic conditions. The Partnership focuses on identifying and communicating promising solutions based on existing research and its own original research on the problems faced by this population.


**Training to Advance Physicians’ Communication Skills**

- **The Institute for Healthcare Communication**, New Haven, CT  
  [http://www.healthcarecomm.org](http://www.healthcarecomm.org)  
  (800) 800-5907  
  The Institute for Healthcare Communication (formerly the Bayer Institute) offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

- **The American Academy on Communication in Healthcare**, Chesterfield, MO  
  (636) 449-5080  
  The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-clinician communication and relationships, and psychosocial aspects of health care.
Healthcare Communication Project, Inc., Stone Ridge, NY
http://www.healthcarecommunication.org/
(636) 449-5080
This not-for-profit provides information and guidance to help patients, their advocates, and health care professionals become skilled in relationship building and shared decision-making. The site offers articles and other sources of information for learning about communication techniques as well as diseases and conditions, treatment options, and other topics.

The Foundation for Medical Excellence, Portland, OR
http://www.tfme.org/
(503) 222-1960
The Foundation for Medical Excellence is a non-profit foundation that sponsors a variety of educational programs and consulting services for licensed physicians. Its programs include education and research in physician-patient communication.

Motivational Interviewing (http://www.motivationalinterview.org/): This Web site offers resources for clinicians, researchers, and trainers.


**Tools to Help Patients Communicate Their Needs**


- The American Academy on Communication in Healthcare ([http://www.aachonline.org](http://www.aachonline.org)): The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-clinician communication and relationships, and psychosocial aspects of health care.

- HowsYourHealth ([http://www.HowsYourHealth.org](http://www.HowsYourHealth.org)): This Web site helps patients communicate more effectively with health care providers by giving them a way to report on their own health and behaviors. This program is sponsored by the Dartmouth Hitchcock Medical Center and the Institute for Healthcare Improvement (IHI).

- The Institute for Healthcare Communication ([http://www.healthcarecomm.org](http://www.healthcarecomm.org)): The Institute for Healthcare Communication (formerly the Bayer Institute) offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

- Government materials you can share: The Federal government offers several free documents that can be used to educate members and patients and prompt them to ask questions and take other steps to communicate more effectively. These materials can be ordered or downloaded from the Internet. Examples include the following:


- Books to recommend to patients: Clinicians may also support their patients by suggesting books that may help them communicate more effectively. Examples include:


Shared Decision Making


Resources for decision-making tools on video and CD-ROM:

The Foundation for Informed Medical Decision Making: http://www.fimdm.org/ (For a comprehensive bibliography on this topic, see: http://www.fimdm.org/resources_rr.php#references.)

Health Dialog: http://www.healthdialog.com

Blue Cross Blue Shield Technology Evaluation Center: http://www.bcbs.com/betterknowledge/tec/


CollaborativeCare.net (http://www.collaborativecare.net): This site is an online service of the Foundation for Informed Medical Decision Making and Health Dialog. Its purpose is to increase the availability of decision support to people making choices about health care. It is intended to help individuals become informed about their medical options, communicate effectively with their doctors, and achieve better overall health outcomes.

The Ottawa Health Research Institute (http://www.ohri.ca/home.asp): This site offers an inventory of international Patient Decision Aids including many of the shared decision-making programs in existence, evaluations of those programs, and information about how to obtain them. To review this inventory, go to http://decisionaid.ohri.ca/index.html.
Support Groups and Self Care


- **New Jersey Self-Help Group Clearinghouse**, Dover, NJ 1-800-367-6274 (in NJ) or 973-989-1122 (outside NJ)
  The New Jersey Self-Help Group Clearinghouse is a non-profit, statewide organization that helps people find and form self-help support groups. It is a department of Saint Clare’s Health Systems in New Jersey. The Clearinghouse provides information, telephone support, guidelines, and training services for anyone interested in finding or forming self-help groups in the state. The first statewide and the first computerized operation of its type in the nation, the Clearinghouse maintains and continually updates a database of information on over 4500 group meetings within the state, over 800 national headquarters and demonstrational models, and over 200 helplines and hotlines.

**Delivery of Evidence-Based Information**


- **Center for Information Therapy** ([http://www.informationtherapy.org](http://www.informationtherapy.org)): The Center for Information Therapy (IxCenter) is an independent, non-profit organization that aims to advance the practice and science of information therapy to improve health, consumer decision making, and healthy behaviors. Launched in 2001, the IxCenter acts as a catalyst for health care delivery innovation by diffusing Information Therapy strategies through research, education, and collaboration. Contact the Center for Information Therapy for information on how to begin an information therapy program.

- **Doctors’ Patient Education Network** ([http://www.drpen.com](http://www.drpen.com)): The Doctors’ Patient Education Network helps physicians and educators quickly and efficiently guide patients to high-quality patient education information on the Internet from well-respected, reputable sources.

**Group Visits**

- **Improving Chronic Illness Care program (ICIC)** ([www.improvingchroniccare.org](http://www.improvingchroniccare.org)): ICIC works with national partners toward the goal of bettering the health of chronically ill patients by helping health systems, especially those that serve low-income populations, improve their care through implementation of the Chronic Care Model. ICIC’s site includes a Group Visit Starter Kit:
  [http://www.improvingchroniccare.org/downloads/group_visit_starter_kit_copy1.doc](http://www.improvingchroniccare.org/downloads/group_visit_starter_kit_copy1.doc)


B3. Resources by Topic: Communication About the Costs of Care

Training to Advance Physicians’ Communication Skills

- **The Institute for Healthcare Communication**, New Haven, CT
  
  [http://www.healthcarecomm.org](http://www.healthcarecomm.org)
  
  (800) 800-5907

  The Institute for Healthcare Communication (formerly the Bayer Institute) offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

- **The American Academy on Communication in Healthcare**, Chesterfield, MO
  
  
  (636) 449-5080

  The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-clinician communication and relationships, and psychosocial aspects of health care.

- **Healthcare Communication Project, Inc.**, Stone Ridge, NY
  
  [http://www.healthcarecommunication.org/](http://www.healthcarecommunication.org/)
  
  (636) 449-5080

  This not-for-profit provides information and guidance to help patients, their advocates, and health care professionals become skilled in relationship building and shared decision-making. The site offers articles and other sources of information for learning about communication techniques as well as diseases and conditions, treatment options, and other topics.

- **The Foundation for Medical Excellence**, Portland, OR
  
  
  (503) 222-1960

  The Foundation for Medical Excellence is a non-profit foundation that sponsors a variety of educational programs and consulting services for licensed physicians. Its programs include education and research in physician-patient communication.

- **Motivational Interviewing** ([http://www.motivationalinterview.org/](http://www.motivationalinterview.org/)): This Web site offers resources for clinicians, researchers, and trainers.


Tools to Help Patients Communicate Their Needs


The American Academy on Communication in Healthcare (http://www.aachonline.org): The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-clinician communication and relationships, and psychosocial aspects of health care.

HowsYourHealth (http://www.HowsYourHealth.org): This Web site helps patients communicate more effectively with health care providers by giving them a way to report on their own health and behaviors. This program is sponsored by the Dartmouth Hitchcock Medical Center and the Institute for Healthcare Improvement (IHI).

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Government materials you can share: The Federal government offers several free documents that can be used to educate members and patients and prompt them to ask
questions and take other steps to communicate more effectively. These materials can be ordered or downloaded from the Internet. Examples include the following:


- **Books to recommend to patients:** Clinicians may also support their patients by suggesting books that may help them communicate more effectively. Examples include:
  
  
  
  
B4. Resources by Topic: Coordination/Integration of Care

Rapid Referral Programs


Training to Advance Physicians’ Communication Skills

- The Institute for Healthcare Communication, New Haven, CT
  http://www.healthcarecomm.org
  (800) 800-5907
  The Institute for Healthcare Communication (formerly the Bayer Institute) offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

- The American Academy on Communication in Healthcare, Chesterfield, MO
  http://www.aachonline.org/
  (636) 449-5080
  The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-clinician communication and relationships, and psychosocial aspects of health care.

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  http://www.healthcarecommunication.org/ (636) 449-5080
  This not-for-profit provides information and guidance to help patients, their advocates, and health care professionals become skilled in relationship building and shared decision-making. The site offers articles and other sources of information for learning about communication techniques as well as diseases and conditions, treatment options, and other topics.

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  (503) 222-1960
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- Motivational Interviewing (http://www.motivationalinterview.org/): This Web site offers resources for clinicians, researchers, and trainers.


Tools to Help Patients Communicate Their Needs


The American Academy on Communication in Healthcare (http://www.aachonline.org): The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-clinician communication and relationships, and psychosocial aspects of health care.

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**HowsYourHealth** ([http://www.HowsYourHealth.org](http://www.HowsYourHealth.org)): This Web site helps patients communicate more effectively with health care providers by giving them a way to report on their own health and behaviors. This program is sponsored by the Dartmouth Hitchcock Medical Center and the Institute for Healthcare Improvement (IHI).

**The Institute for Healthcare Communication** ([http://www.healthcarecomm.org](http://www.healthcarecomm.org)): The Institute for Healthcare Communication (formerly the Bayer Institute) offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

**Government materials you can share**: The Federal government offers several free documents that can be used to educate members and patients and prompt them to ask questions and take other steps to communicate more effectively. These materials can be ordered or downloaded from the Internet. Examples include the following:


**Books to recommend to patients**: Clinicians may also support their patients by suggesting books that may help them communicate more effectively. Examples include:


**Group Visits**

**Improving Chronic Illness Care program** ([ICIC](http://www.improvingchroniccare.org)): ICIC works with national partners toward the goal of bettering the health of chronically ill patients by helping health systems, especially those that serve low-income populations, improve their care through implementation of the Chronic Care Model. ICIC’s site includes a
**Group Visit Starter Kit:**
http://www.improvingchroniccare.org/downloads/group_visit_starter_kit_copy1.doc


B5. **Resources by Topic: Customer Service**

**General Resources on Customer Service**


**Listening Posts**


Service Recovery


Patient and Family Advisory Councils


- Webster, PD, Johnson, B. Developing and Sustaining a Patient and Family Advisory Council. Bethesda, MD: Institute for Family-Centered Care; 2000. This manual is an excellent resource for organizations who are ready to establish these councils. The Institute’s Web site (http://www.familycenteredcare.org) is also a good source of information about related topics, such as creating patient and family faculty programs.
B6. Resources by Topic: Health Promotion/Education

Training to Advance Physicians’ Communication Skills

- **The Institute for Healthcare Communication**, New Haven, CT
  
  [http://www.healthcarecomm.org](http://www.healthcarecomm.org)
  
  (800) 800-5907
  
  The Institute for Healthcare Communication (formerly the Bayer Institute) offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

- **The American Academy on Communication in Healthcare**, Chesterfield, MO
  
  
  (636) 449-5080
  
  The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-clinician communication and relationships, and psychosocial aspects of health care.

- **Healthcare Communication Project, Inc.**, Stone Ridge, NY
  
  [http://www.healthcarecommunication.org/](http://www.healthcarecommunication.org/)
  
  (636) 449-5080
  
  This not-for-profit provides information and guidance to help patients, their advocates, and health care professionals become skilled in relationship building and shared decision-making. The site offers articles and other sources of information for learning about communication techniques as well as diseases and conditions, treatment options, and other topics.

- **The Foundation for Medical Excellence**, Portland, OR
  
  
  (503) 222-1960
  
  The Foundation for Medical Excellence is a non-profit foundation that sponsors a variety of educational programs and consulting services for licensed physicians. Its programs include education and research in physician-patient communication.

- **Motivational Interviewing** ([http://www.motivationalinterview.org/](http://www.motivationalinterview.org/)): This Web site offers resources for clinicians, researchers, and trainers.


Shared Decision Making


Resources for decision-making tools on video and CD-ROM:

The Foundation for Informed Medical Decision Making: http://www.fimdm.org/ (For a comprehensive bibliography on this topic, see: http://www.fimdm.org/resources_rr.php#references.)

Health Dialog: http://www.healthdialog.com

Blue Cross Blue Shield Technology Evaluation Center: http://www.bcbs.com/betterknowledge/tec/

CollaborativeCare.net (http://www.collaborativecare.net): This site is an online service of the Foundation for Informed Medical Decision Making and Health Dialog. Its purpose is to increase the availability of decision support to people making choices about health care. It is intended to help individuals become informed about their medical options, communicate effectively with their doctors, and achieve better overall health outcomes.

The Ottawa Health Research Institute (http://www.ohri.ca/home.asp): This site offers an inventory of international Patient Decision Aids including many of the shared decision-making programs in existence, evaluations of those programs, and information about how to obtain them. To review this inventory, go to http://decisionaid.ohri.ca/index.html.

Support Groups and Self Care


Phone: 1-800-367-6274 (in NJ) or 973-989-1122 (outside NJ)
The New Jersey Self-Help Group Clearinghouse is a non-profit, statewide organization that helps people find and form self-help support groups. It is a department of Saint Clare’s Health Systems in New Jersey. The Clearinghouse provides information, telephone support, guidelines, and training services for anyone interested in finding or forming self-help groups in the state. The first statewide and the first computerized operation of its type in the nation, the Clearinghouse maintains and continually updates a database of information on over 4500 group meetings within the state, over 800 national headquarters and demonstrational models, and over 200 helplines and hotlines.

Delivery of Evidence-Based Information


Center for Information Therapy (http://www.informationtherapy.org): The Center for Information Therapy (IxCenter) is an independent, non-profit organization that aims to advance the practice and science of information therapy to improve health, consumer decision making, and healthy behaviors. Launched in 2001, the IxCenter acts as a catalyst for health care delivery innovation by diffusing Information Therapy strategies through research, education, and collaboration. Contact the Center for Information Therapy for information on how to begin an information therapy program.

Doctors’ Patient Education Network (http://www.drpen.com): The Doctors’ Patient Education Network helps physicians and educators quickly and efficiently guide patients to high-quality patient education information on the Internet from well-respected, reputable sources.
Group Visits

- **Improving Chronic Illness Care program** (ICIC) ([http://www.improvingchroniccare.org](http://www.improvingchroniccare.org)): ICIC works with national partners toward the goal of bettering the health of chronically ill patients by helping health systems, especially those that serve low-income populations, improve their care through implementation of the Chronic Care Model. ICIC’s site includes a Group Visit Starter Kit: [http://www.improvingchroniccare.org/downloads/group_visit_starter_kit_copy1.doc](http://www.improvingchroniccare.org/downloads/group_visit_starter_kit_copy1.doc)


B7. Resources by Topic: Preventive Services

Reminder Systems for Immunizations

- **Case studies from the NCQA’s Quality Profiles: Preventive Care**
  (http://www.qualityprofiles.org/quality_profiles/case_studies/preventive_care/index.asp): The National Committee for Quality Assurance’s Quality Profiles are a series of case studies that explore the implications of quality improvement (QI), the rationale for change, and the barriers to improvements in the context of an expanded discussion of the personal, social, and economic impact of the health care conditions under review.

- Flu Shots for Older Adults: Collaborating to Reduce Missed Opportunities

- Flu Shots for Older Adults: Measuring the Effect of Specific Interventions
  http://www.qualityprofiles.org/quality_profiles/case_studies/Preventive_Care/2_15.asp

- Influenza Vaccination for Senior: Access and Awareness — Dedicated Flu Clinics and Member Outreach
  http://www.qualityprofiles.org/quality_profiles/case_studies/Preventive_Care/1_28.asp

- Influenza Vaccinations for Senior: Removing Financial and Geographic Barriers to Access
  http://www.qualityprofiles.org/quality_profiles/case_studies/Preventive_Care/1_25.asp
B8. Resources by Topic: Shared Decision Making

Shared Decision Making


- **Resources for decision-making tools on video and CD-ROM:**
  
  - The Foundation for Informed Medical Decision Making: http://www.fimdm.org/ (For a comprehensive bibliography on this topic, see: http://www.fimdm.org/resources_rr.php#references.)

  - Health Dialog: http://www.healthdialog.com

  - Blue Cross Blue Shield Technology Evaluation Center: http://www.bcbs.com/betterknowledge/tec/


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The Foundation for Medical Excellence, Portland, OR
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(503) 222-1960
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Motivational Interviewing (http://www.motivationalinterview.org/): This Web site offers resources for clinicians, researchers, and trainers.


### Appendix 1

**Asthma Population: Monthly Measures and Goals**

**Appropriate for a Collaborative**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Monthly population statistic</th>
<th>Typical levels</th>
<th>Appropriate goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptom-free days (Incidence of daytime wheeze and nighttime cough in past 2 weeks)</td>
<td>Average for asthma population</td>
<td>&lt;60%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Functionality measure</td>
<td>Average for asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of health status</td>
<td>Percent reporting improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost time from work or school</td>
<td>Days per 100 asthma patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Balancing Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency department visits for asthma</td>
<td>Percent of asthma population</td>
<td>3-5%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Asthma hospital days for asthma patients</td>
<td>Total days per 1,000 patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total medical costs per patient</td>
<td>Median of asthma population</td>
<td></td>
<td>10% reduction</td>
</tr>
<tr>
<td>Patient satisfaction with asthma care</td>
<td>Percent of patients rating very good</td>
<td>50-80%</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>Number of clinic visits</td>
<td>Visits per 100 asthma patients</td>
<td>&gt;3%</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Hospital admissions for asthma</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Patient Behavioral Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of self-management plan</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of flow meters at home</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone-based medication change</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Process Measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment with maintenance anti-inflammatory medication</td>
<td>Percent of asthma population</td>
<td>&lt;70%</td>
<td>100%</td>
</tr>
<tr>
<td>Written asthma action plan</td>
<td>Percent of asthma population</td>
<td>&lt;50%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Patients with self-management goals</td>
<td>Percent of asthma population</td>
<td>&lt;50%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Patients completing assessment tool</td>
<td>Percent of asthma population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of standardized educational materials</td>
<td>Percent of physicians in office</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from the Institute for Healthcare Improvement's Breakthrough Collaborative College: 2001.
Case Study A Combination of Strategies Improves Performance at Harvard Pilgrim

Read how one plan tracked and evaluated the impact of a medical group’s interventions to improve performance on the “doctor communication” composite.

- **Case Study A Combination of Strategies Improves Performance at Harvard Pilgrim**

In 2002, Harvard Pilgrim Health Care decided to focus an intervention on a particular medical group based on its analyses of CAHPS performance at the plan and medical group level. The plan’s strategy was to offer the group a financial bonus for achieving targeted performance levels on two composites by 2003. In response to this incentive, along with other market influences, the medical group went through a process of identifying the factors underlying their performance and designing an ambitious set of interventions to address them.

Interventions that contributed to performance in the Doctor Communication area include the following:

- Concerned about disruptions in doctor-patient relationships due to physician turnover and dissatisfaction levels among the physicians (which, according to published studies, are associated with dissatisfaction levels among patients), the group implemented changes designed to improve physician satisfaction and reduce turnover. These changes included different staffing levels, a redesign of the care delivery model, and better practice supports.

- To support better physician-patient relationships, the redesign of care delivery also focused on increasing the percent of patients who have a personal relationship with their PCP and their PCP’s team (nurse practitioner, OB-GYN). The group transitioned to a different primary care model where patients are much better able to see their own doctor, rather than a practice partner.

As shown in the table below, these interventions contributed to improvements in the group’s performance in the Doctor Communication measures.
Appendix 3
Example of Communication Guidelines

Example of Communication Guidelines

Published guidelines combine common sense advice on how to make e-mail communications effective and efficient as well specific recommendations for maintaining security and protecting personal information. For example:

- The medical practice should advise patients not to use e-mail for urgent issues since the doctor may not see it right away.
- Clinicians, staff, and patients should avoid disclosing any highly sensitive and confidential information in an e-mail because of the risk of interception or inadvertent transmission to the wrong party.
- Clinicians should respond to all e-mails from patients with whom they have established relationships, ideally by the next business day.
- Patients should include identifying information (e.g., a name and patient identification number) in the body of the message.
- Both clinicians and patients should send automatic replies to indicate that a message was received.
- Patients should be asked for their informed consent prior to using e-mail communications.
- Clinicians and staff should develop and implement specific steps to decrease the risk of unauthorized access to patients' e-mails.
Appendix 4

Links You May Want to Offer

There are literally thousands of sites on the Web that may be helpful to your members and patients, including patient-support networks (such as bulletin boards and patient chat rooms) and disease-specific sites sponsored by medical associations, patient groups, government agencies (such as NIH), and others. You can do your members and patients a huge favor by sifting through some of these sites for them and recommending only those that offer timely, reliable, and objective information.

You may also want to provide links to the following sites, which enable users to conduct their own research:


- [http://www.OncoLink.com](http://www.OncoLink.com): OncoLink provides free information on cancer to the public. It is sponsored by the Abramson Cancer Center of the University of Pennsylvania.

- [http://www.webMD.com](http://www.webMD.com): WebMD offers general information on health and wellness topics as well as a variety of message boards.
Appendix 5
Example of an Online Information System for Patients: CHESS

In addition to the Web sites listed in the box above, there are a number of Web-based resources that offer information and support for people with various conditions. One example of an online service that providers can refer patients to is the Comprehensive Health Enhancement Support System (CHESS). CHESS offers a variety of online services to people with specific diseases such as breast cancer and HIV. The services include disease information, decision-making tools, and support services.178

The full list of services includes:

- **Information Services**
  - Questions and answers
  - Instant library (articles from popular press and health/medical literature)
  - Consumer guide (being a better consumer of health services)
  - Referral directory (contacting local and national agencies)

- **Support Services**
  - Discussion groups (facilitated bulletin boards)
  - Ask an expert (confidential responses to specific health questions)
  - Personal stories of others with the same condition

- **Decision Services**
  - Self-assessment of emotional status
  - Health charts for personal tracking
  - Decision support

An evaluation of CHESS (specifically, the breast cancer resources) found that, compared to a control group, users had better access to relevant information and improved their social support. The benefits were greatest for women from underserved populations, i.e., those from the inner city and with lower socioeconomic status. An earlier study had found that the HIV application of CHESS resulted in patients needing 15 percent less time for office visits, having 47 percent more phone consultations, and experiencing fewer and shorter hospitalizations than patients in a control group.


Appendix 6
Organizations that Offer Communication Training

Two organizations that offer courses and other resources to improve physician-patient communications are The Institute for Healthcare Communication and the American Academy on Communication in Healthcare.

The Institute for Healthcare Communication

The Institute for Healthcare Communication (formerly the Bayer Institute) offers a variety of workshops to help clinicians develop and hone their communication skills. It also offers books, videos, and practical guides on how to improve communication.

Three models of training options are currently available to health care organizations:

- **Train-the-trainer**: The sponsoring organization may choose to have the Institute train one or more of its staff members to present the Institute’s workshops back at the organization. Once they have completed the course, these trainers are considered a member of the Institute faculty and are eligible to receive training in all of the Institute’s workshops.

- **In-house consulting**: The sponsoring organization may hire a member of the Institute’s faculty to conduct workshops on a consulting basis.

- **Individual training**: The Institute also offers training for individual clinicians to improve their performance.

For more information about the Institute, visit the Web site at [http://www.healthcarecomm.org](http://www.healthcarecomm.org) or call (800) 800-5907.

The American Academy on Communication in Healthcare

The American Academy on Communication in Healthcare (AACH) is an interdisciplinary group of medical educators and clinicians that share a common interest in patient-physician communication and relationships, and psychosocial aspects of health care. The organization conducts and publishes research on the patient-physician relationship and offers courses for practitioners to improve and refine their communication style and techniques. AACH also maintains an extensive bibliography of articles on doctor-patient communication and a library of educational videos.
For more information, visit the Web site at http://www.aachonline.org or call (636) 449-5080.
Appendix 7
Influencing Patient Behaviors: Timing Is Everything

Training in behavioral change concepts can help physicians identify patients who are likely to be receptive to their advice and guidance. The Transtheoretical Model, for example, lays out five unique “Stages of Change:"

- **Precontemplation** is the stage in which there is no intention to change behavior in the foreseeable future. Many individuals in this stage are unaware or under-aware that a problem exists.

- **Contemplation** is the stage in which people are aware that a problem exists and are seriously thinking about overcoming it but have not yet made a commitment to take action.

- **Preparation** is a stage that combines intention and behavioral criteria. Individuals in this stage are intending to take action in the next month and have unsuccessfully taken action in the past year.

- **Action** is the stage in which individuals modify their behavior, experiences, or environment in order to overcome their problems. Action involves the most overt behavioral changes and requires considerable commitment of time and energy.

- **Maintenance** is the stage in which people work to prevent relapse and consolidate the gains attained during action. For addictive behaviors, this stage extends from six months to an indeterminate period past the initial action.

A full explanation of this model can be found at: [http://www.uri.edu/research/cprrc/TTM/detailedoverview.htm](http://www.uri.edu/research/cprrc/TTM/detailedoverview.htm).

Some medical groups and health plans are teaching physicians about this model and encouraging them to identify where patients are in these stages and to focus their educational efforts on patients who are ready to change. If patients are precontemplative, physicians do not need to be spending much time convincing them to stop or start a new behavior. But if they are contemplative, then the time required to coach them about things they can do to adopt the desired behavior is well-spent.

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Appendix 8

Coached Care Enhances Breast Cancer Decision Making

To learn about the effects of a coached care program on breast cancer care, see:


Foundation for Informed Medical Decision Making

One good resource for decision aids is the Foundation for Informed Medical Decision Making (FIMDM) in Boston, Massachusetts. FIMDM has developed portfolios of decision aids related to some of the most common and important medical conditions, including coronary artery disease, prostate cancer, breast cancer, back pain, osteoarthritis, benign uterine conditions, depression, diabetes, and benign prostatic hyperplasia.

FIMDM’s programs present current clinical evidence about the risks and benefits of treatment options in ways patients can understand. In addition, they explain why there is sometimes a lack of evidence to support one option over another. Also included are interviews with patients who have undergone treatments and experienced good and bad outcomes, which helps to illustrate the variety of patients’ perspectives and concerns. The programs aim to help patients engage in high-quality decision making with their doctors and carry out their choices with confidence and competence.

A full list of programs currently available through the Foundation for Informed Medical Decision Making is available at http://www.fimdm.org/decision_sdms.php.

Health Dialog

Health Dialog (http://www.healthdialog.com) works with health plans and employers to improve the quality of care and reduce the costs of health care by enhancing the quality of patient-physician dialogs.

Health Dialog’s Collaborative Care Program includes ongoing processes for the following:

- Regularly assessing how scarce care management resources should be deployed (using ever changing morbidity profiles and treatment pattern variation statistics).
- Identifying individuals with “coachable high needs” (using proprietary predictive risk models that include both clinical factors and treatment pattern variation factors).
• Reaching and engaging individuals with “coachable high needs” using an extensive library of direct mail materials and telephonic outreach protocols.

• Providing tailored nurse Health Coach telephonic support (which includes the dissemination of world-class evidence-based video, Web, and printed material produced by or reviewed by the Foundation for Informed Medical Decision Making).

• Measuring and reporting outcomes.

Individuals participating in Collaborative Care better manage their chronic conditions, are more active participants in key treatment decisions, and are more confident about managing their health. The result is improved quality of care, improved satisfaction, reduced absenteeism, and reduced health care costs.

Learn more at http://www.healthdialog.com/hd/Core/CollaborativeCare/.

**Blue Cross Blue Shield Technology Evaluation Center**

Blue Cross Blue Shield has created a Technology Evaluation Center (TEC) on its Web site at http://www.bcbs.com/betterknowledge/tec/. This Internet-based resource provides credible health care information to consumers to help them understand the scientific evidence on the effectiveness of treatments and tests. This service is designed to help consumers make more informed health care choices and communicate more effectively with their physicians in a decision-making partnership.

**The Cochrane Collaboration**

The Cochrane Collaboration is an international nonprofit organization that aims to support clinicians and consumers in making informed decisions based on the best available evidence. The Collaboration produces a Web site (http://www.cochrane.org) that is specifically designed to inform consumers by offering access to evidence reviews, which are summaries of research on health care therapies and advice. The site also helps consumers understand how to interpret the research that is conducted.
Appendix 10
An Overview Of Chronic Care Model

Introduction

Over the past few decades, chronic conditions (such as heart disease, hypertension, diabetes, asthma, and depression) have been rapidly replacing acute and infectious diseases as the major cause of death, disease, and disability in the United States. However, because the prevailing health care system is based on the diagnosis and treatment of acute illness, it is not well suited for the effective care of chronic illness.

Development of the Chronic Care Model

Clinicians and researchers have devoted significant resources to addressing this problem through chronic disease management, which has evolved into a comprehensive strategy for improving care for people with chronic illness. While disease management programs vary in design and implementation, almost all promote one or more of the six core elements of the Chronic Care Model (CCM) developed by Ed Wagner and colleagues as a framework for guiding specific quality improvement strategies.

- **Health care organization and leadership:** An organizational environment that systematically supports and encourages chronic illness care through leadership and incentives results in more successful quality improvement activities.

- **Linkage to community resources:** Community linkages can provide cost-effective access to services not available inside the organization, such as nutrition counseling, peer-support groups, and data for patient registries.

- **Support of patient self-management:** Individual and group interventions that emphasize patient empowerment and self-management skills have been shown to be effective in the management of diabetes as well as asthma and other chronic conditions.

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Coordinated delivery system design: Innovations in delivery system design to coordinate actions of multiple caregivers of diabetics, for example, have led to significant improvements in glycemic control, patient satisfaction, and health care utilization.  

Clinical decision support: Incorporating evidence-based practice guidelines into registries, flow sheets, and patient assessment tools can be an effective method for changing provider behavior.  

Clinical information systems: For example, with access to adequate database software, health care teams can use disease registries to contact patients to deliver proactive care, implement reminder systems, and generate treatment plans and messages to facilitate patient self-care.  

The model is built on the premise that these six elements work together to create productive interactions between an informed, activated patient and a prepared, proactive practice team – which is what leads to improvements in outcomes.

What We Know About the Chronic Care Model

According to a recent literature review and survey of reputable programs, there is substantial evidence that chronic disease management strategies “achieve better disease control, higher patient satisfaction, and better adherence to guidelines by redesigning delivery systems to meet the needs of chronically ill patients.” For example:

Acute Depression: A simple but systematic program of feedback to doctors on treatment recommendations, supplemented with follow up and care management by telephone, was shown to significantly improve primary care treatment of patients with acute depression. 

Diabetes: In a randomized trial to assess the impact of primary care group visits on the process and outcome of care for diabetic patients, the intervention group receiving self-

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management support through “mini-clinics” involving teams of providers exhibited better outcomes (including higher patient satisfaction and HbA1c levels) than the control group.\(^\text{193}\)

### Interventions Based on Model

Several of the specific interventions described in this guide are drawn from the Chronic Care Model. In particular, two interventions are key elements of this model. Both these interventions are included under “Browse Interventions” section:

- **Planned Visits**
- **Group Visits**

For that reason, it is difficult to assess them as stand-alone strategies. Also, while you can implement each of these strategies on their own, it is important to see them as components of a comprehensive and coordinated approach to care. Research studies suggest that the more aspects of the Chronic Care Model you use, the likelier you are to achieve better process and patient outcomes.\(^\text{194}\)

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Appendix 11
The Use of Disease Registeries

Registries are an important tool for monitoring and improving care for patients with chronic conditions. In essence, a registry is a list of patients with specific conditions. At a minimum, this list contains each patient’s:

- Name
- Diagnosis
- Contact information
- Date of last visit

While a registry may be maintained on paper or in a computer system, a computer offers the ability to search, analyze, and manipulate the data. Ideally, a registry is linked with clinical data and guidelines so that providers can easily track their patients’ progress and proactively address their needs for referrals, tests, consults, etc. (For some organizations, “tickler files” offer a low-tech alternative to registries.)

Registries can be very helpful in serving multiple purposes. Some examples of how you might want to use them include the following:

- To track clinical measures for patients
- To identify patients who need increased care management
- To identify patients that are missing important services or treatments across multiple chronic conditions
- To aid in preplanning of visits to ensure that patients’ needs are met (e.g., by pre-scheduling blood work)
- To improve communication with patients with specific needs (e.g., diabetic patients with elevated levels of HbA1c)
- To identify patients needing education (based on pharmacy data)
- To provide feedback to providers on their performance
- To promote compliance with evidence-based guidelines
- To link to community-wide electronic medical records

For tools to help identify and evaluate registry products, go to the Improving Chronic Illness Care (ICIC) Web site: http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2
Appendix 12
How to Conduct A Walkthrough

A walkthrough is your opportunity to experience what patients and family members experience when they receive care at your organization. For example, if you are examining the emergency room, choose a particular type of patient (e.g., one with asthma). You and another team member would then present to the emergency department as a patient with that disease and the patient’s family member. Here are some tips on how to conduct a successful walkthrough:

- **Let the staff know in advance that you will be doing this walkthrough.**
  As a result of this warning, they will probably be on their best behavior. However, experience suggests that it is far better to have them part of the process than to go behind their backs. Ask them not to give you special treatment.

- **Go through the experience just as the patient and family member would.**
  Call in advance, if the patient would have to. Drive to the emergency department, drop the patient off, find a place to park, and check in. Try to act as if you have never been there before. Follow the signs. Tell the clerk that you are simulating a patient’s experience and that you want to go through whatever a normal patient would have to do (e.g., the check-in process). Actually fill out the forms if there are ones to fill out. Find out how long a patient would typically wait and sit in the waiting room for that amount of time. Wait your turn. Do the same in the examining room. If the patient undresses, you should undress. If the patient does a peak flow meter, you should too. Ask each health care provider to treat you as if you were a real patient. If you are doing a walkthrough of the cardiac catheterization service, hold the sandbags on your leg the required amount of time. Experience it all.

- **As you go through the process, try to put yourself in the patient’s (or family member’s) position.**
  Look around as they might. What are they thinking? How do they feel at this moment?

- **At each step, ask the staff to tell you what changes (other than hiring new staff) would make the experience better for the patient and what would make it better for the staff.**
  As you do the walkthrough, think about how you would answer the following questions and ask the staff you interact with to answer them when you can:

  - What made you mad today?
  - What took too long?
  - What caused complaints today?
  - What cost too much?
  - What was wasted?
— What was too complicated?
— What involved too many people or too many steps?
— What did you have to do that was just plain silly?

Write down their ideas as well as your ideas. But also write down your feelings.

Finally, between the two of you (patient and family member), write down a list of what needs you found and what improvements could be made. Keep track of the things that can be fixed the next day versus problems that will take longer to remedy.
Appendix 13
Guidelines for Staff and Latitude to Act and Atone

Staff need to have the authority to make decisions about handling complaints autonomously so they can act quickly. Specifically, they need:

- Clarity about the extent of their authority to act on complaints without getting approval from managers
- Defined courses of actions for most frequent complaints
- Minimal red tape
- A clear system of resource people, clear authority lines, and backup systems for dealing with difficult situations or those with financial, legal or ethical implications
Appendix 14
The Axioms of Service Recovery

When problems with service do occur – and they will – your organization has to be prepared with a service recovery program that is designed to turn a disgruntled patient or member into a happy, loyal one. Based on previous work in this area, researchers have developed what they term the “axioms of service recovery.” The more your staff understand these axioms, the easier it will be for them to respond effortlessly and appropriately to service problems when they arise.

Axiom 1. All customers have basic expectations.
Researchers have found that these five categories of customer expectations account for 80 percent of the differences between high and low customer satisfaction.

These factors are as follows:

- **Reliability** is the most important of the five. It signals organizational competence and promotes confidence and trust in the organization or clinician.

- **Assurance** involves reassurance that everything is going as it should or, if it isn’t, that something will be done to remedy the problem quickly.

- **Tangibles** are the visible, concrete signs that influence the other expectations. When the furnace repair person shows up with dirty hands, no one is surprised. When the doctor walks in the room with a filthy white coat and dirty hands, something else is communicated quickly and convincingly to the patient. Old magazines in the waiting room, dirty bathrooms, and chaotic registration areas all imply an organization that is not under control.

- **Empathy** conveys that you are listening and concerned about the experiences and care of your members and patients. When something happens to disrupt trust, reconnecting with the patient or member in a personal way that conveys you understand is critical to the service recovery process.

- **Responsiveness** refers to the expectation that things should happen in a timely fashion and that people should be kept informed about where they are in the process. The opposite of responsiveness is indifference and lack of communication. Solutions to problems need to be timely and responsive to the person’s need.

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– Being called back when promised.
– Receiving an explanation of how a problem happened.
– Knowing who to contact with a problem.
– Being contacted promptly when a problem is resolved.
– Being allowed to talk to someone in authority.
– Being told how long it will take to resolve a problem.
– Being given useful alternatives if a problem cannot be resolved.
– Being treated like a person, not an account number.
– Being told about ways to prevent future problems.
– Being given progress reports if a problem cannot be solved immediately.

Axiom 2. Successful recovery is psychological as well as physical.
Perhaps the most important step in the recovery process is listening to the person and letting them vent their frustration and blow off steam. Letting the person tell their story and describe the impact of the failure is essential.

Axiom 3. Work in a spirit of partnership.
Involve the person in helping to solve the problem. However, this does not mean that the first question should be, “So what do you want me to do about it?” Work cooperatively to come up with a solution that makes the person feel like part of the problem solving and that acknowledges his or her needs.

Axiom 4. Customers react more strongly to “fairness mistakes” than to “honest mistakes.”
Research on service recovery indicates that the only effective solution when a person feels like they have been unfairly treated is extreme apology and atonement. When a situation like this occurs, the patient or member is a prime candidate for overt retaliation.197 Communication about what went wrong and compensation or atonement are essential in these situations. From the patient safety movement, we know that a critical component of resolution in these kinds of situations is letting the

person know you and your organization will make sure this never happens to the patient or anyone else again.

**Axiom 5. Effective recovery is a planned process.**

In health care, certain problems are highly predictable. Surgeons get delayed in the operating room, flu season packs the appointment schedule, implementing a new call center system inevitably causes service glitches – but we often act like these problems are a surprise. Preparing your staff with solutions for predictable problems and teaching them how to offer and implement these solutions is essential. Even though you may have planned solutions in place, they must be offered in a very customer-sensitive way so that you do not leave people with the impression that the problem is common or your staff behave like robots.

Think about how you could translate these principles into planned protocols for the common problems your patients and members experience.

Appendix 15
Encourage Complaints

Health care organizations that are truly committed to improving the member’s or patient’s experience of care can make this commitment obvious to their staff and their members by encouraging complaints. Moreover, improvements in customer service depend on the organization’s ability to elicit and monitor customer complaints. In particular, service recovery cannot take place if the provider does not know that the member or patient is unhappy.

Many people would rather “switch than fight,” especially in a health care environment, where people fear that complaining could jeopardize the quality of the clinical care they receive. Also, minorities and people from underserved communities tend to avoid complaining, even though they may have significant problems with the delivery of care.198 199

If you make it harder for members or patients to complain, you will continue to miss important service failures that shape your reputation in the community and the quality of care. It is helpful to offer your members and patients multiple ways to give you feedback and help you improve your service. Several tactics for getting feedback are reviewed in the intervention called Listening Posts.

Also, there are many tools for cataloguing patient or member complaints that allow you to track the problems by CAHPS composite or other typologies that support linking the qualitative complaints to improvement activities.


The following table summarizes the most common steps in the process for managing complaints.

### How to Use Complaint Management as an Effective Service Recovery Tool

<table>
<thead>
<tr>
<th>Complaint Management Process Step</th>
<th>Actions to Take</th>
</tr>
</thead>
</table>
| 1. Encourage use of complaints as a QI tool | ▪ Let your staff know that complaints are valued and essential for QI.  
▪ Display complaints in public areas to reinforce the value you place on them.  
▪ Make it easy for customers and staff to complain. |
| 2. Establish a team of people to respond to complaints | ▪ Include in the team people from the front lines as well as senior management.  
▪ Use this team to develop planned protocols for service recovery for your most common service failures. |
| 3. Resolve customer problems quickly and effectively | ▪ Commit the organization to resolving complaints quickly to avoid the waste of repeated contacts.  
▪ Train and empower frontline employees to resolve problems and give them the authority to fix problems on the spot. |
| 4. Develop a complaint database | ▪ Develop a computerized database that catalogs complaints by CAHPS composite or question.  
▪ Use the database to identify trends and generate regular reports to staff and management. |
| 5. Commit to identifying failure points in the system | ▪ Using complaint data, identify failure points that are root causes of low satisfaction.  
▪ Be proactive, not reactive; try to anticipate negative situations from occurring in the first place. |
| 6. Track trends and use information to improve service processes | ▪ Stop handling problems one at a time as if they have never occurred before. |

Appendix 16
Incorporating “Talking Points” Into Everyday Interactions

Talking points or scripts ensure that everyone in the organization is delivering a positive message in a consistent way to your members and patients. These messages make sure that you are meeting your service standards and build these behaviors into predictable, daily routines. Work with your staff to develop the talking points and to help them understand that scripts are not intended to turn your staff into robots. Rather, they are reminders of the minimum that staff can do to create a positive experience for members and patients.

Once people become familiar with the design and intent of talking points, they often realize how helpful they are when dealing with frightened or upset patients. Simply put, scripting:

- Conveys the message of your culture: “This is how we do business around here.”
- Puts words to your behaviors.
- Sets clear expectations for what is supposed to happen in encounters.

Here are some examples of how scripts can help to change communications:

<table>
<thead>
<tr>
<th>Instead of…</th>
<th>Say…</th>
</tr>
</thead>
<tbody>
<tr>
<td>“No, I don’t have the time.”</td>
<td>“Yes! I can help you in five minutes.”</td>
</tr>
<tr>
<td>“We’re short-staffed.”</td>
<td>“We may be busy, but we’re never too busy to help you!”</td>
</tr>
<tr>
<td>“I don’t know.”</td>
<td>“I think I can help you find the answer.”</td>
</tr>
<tr>
<td>“It’s the doctor’s fault and I can’t believe that happened.”</td>
<td>“I’m sorry that happened. What can I do to help?”</td>
</tr>
</tbody>
</table>

Adapted from Best Practice Series: Scripting, Baptist Healthcare Leadership Institute; 2003.

Other examples of the most common and powerful talking points are:

- “How can I help you? I have the time.”
- “How can I make this better for you?”
- “I’d like you to meet (Jane Doe), your doctor, nurse, etc. She will take excellent care of you.”

When staff are resistant to using scripting, remind them that their personalities will always come through yet they will be delivering a consistent message that reflects your organization’s high
standards. Reward employees who use scripting effectively and make it easy for people to remember the most common and important messages by putting them on the back of name badges or other convenient places.

Appendix 17
Example of Service Standards for a Pharmacy Department: Kaiser Permanente, Washington DC

Our department will abide by the following standards to guarantee caring and quality service is provided to our members and in-house customers.

Service Standards for our Members

- We will greet our members in a courteous and professional manner.
- We will listen effectively to our members’ requests and promptly take the necessary actions to assist them.
- We will keep our members informed of unexpected delays in service.
- We will not engage in personal conversations while providing service to our members.
- We will call our members by name and will verify identity by means of address and/or ID card.
- We will inform our members of specific departmental procedures (e.g., refill line, last refill, mail order) to help them maximize pharmacy services.
- We will finish our encounters with our members in a courteous and professional way.
- We will respect our members privacy and will not discuss member-related information in public.

Service Standards for our In-House Customers

- We will interact with our co-workers and company staff in a courteous and professional way.
- We will not discuss staff, organizational policies, problems, or medical care in public areas.
- We will be considerate, and we will cooperate and assist co-workers, staff, and other departments to guarantee quality service.
- Telephone etiquette:
  - We will answer the phone within four rings.
– We will provide our center location, our name, and our department and politely ask: “How may I help you?”

– We will listen to the caller’s request and assist accordingly.

– We will direct the call to the person, department, or service needed to assist the caller.

– We will obtain the caller’s permission before placing the caller on hold.

– We will end the call in a courteous and professional way.

– We will omit personal phone calls while on duty.
Based on its analyses of CAHPS data as well as other data, Harvard Pilgrim designed a set of interventions aimed at improving telephone access as measured by Average Speed to Answer (ASA) and Call Abandonment Rates. Some of the interventions also improved the consistency, clarity, and timeliness of responses to member inquiries and the availability of written member materials.

The plan implemented two types of interventions.

**Interventions aimed at increasing self-service options for members:**

The purpose of these interventions was to improve access and reduce call volume to Customer Service Representatives.

- Installed an Interactive Voice Response (IVR) system to enable members to get quick answers to the most frequently asked questions and to place the most common requests (e.g., new identification (ID) card, change of address, change of primary care provider (PCP)) without the intervention of a service rep. This system operates all day, every day. Through focus groups, members helped to design the IVR, which has been evaluated and fine-tuned over time.

- Installed an after hours’ voice-mailbox so that members could leave an inquiry in the evening or over a weekend and receive a call back from a Customer Service Representative in the morning of the following business day.

- Developed and implemented Web-based FAQ (frequently asked questions) materials, downloadable member materials (e.g., benefit plan descriptions), online service requests (new ID cards, address and PCP changes), and email inquiries. The materials and requests are available around the clock, with service and inquiry responses within 24 hours.

- Currently developing a much broader range of self-service options (e.g., change own address or PCP, see claims status, view prescription history, etc.).

- Implemented financial incentive program for Customer Service Representatives to promote the self-service options to members.
Interventions aimed at increasing the efficiency and responsiveness of Customer Service Representatives:

Simplified and standardized product offerings and benefit policies.

- Installed an intranet-based reference system for service representatives to assure quick and consistent responses to member inquiries: fine-tuned it over time to provide quick links to frequently viewed pages.
- Increased manager and staff training and improved and streamlined staff resource materials.
- Improved internal communication and workflow between Customer Service and Claims departments to resolve members’ inquiries about claims.
- Expanded hours of operation to 7:30 PM on Mondays and Wednesdays (peak volume days).
- Implemented a series of performance incentive programs for Customer Service Representatives that were tied to the goals of reducing ASA and Call Abandonment Rates.

**Results of Interventions at Harvard Pilgrim**

**Performance on Internal Metrics**

<table>
<thead>
<tr>
<th></th>
<th>Current Goal</th>
<th>Q4 2000</th>
<th>Q4 2001</th>
<th>Q4 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed to Answer</td>
<td>30 seconds or less</td>
<td>67 seconds</td>
<td>47 seconds</td>
<td>28 seconds</td>
</tr>
<tr>
<td>Call Abandonment Rate</td>
<td>3% or less</td>
<td>5.6%</td>
<td>2.8%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
Performance on CAHPS Measures

CAHPS Item (for Health Plan Survey 3.0): In the last 12 months, how much of a problem was it to get the help you needed when you called your health plan’s customer service?