

**Innovation Series 2006**



# Innovations in Planned Care

We have developed IHI's Innovation Series white papers to further our mission of improving the quality and value of health care. The ideas and findings in these white papers represent innovative work by organizations affiliated with IHI. Our white papers are designed to share with readers the problems IHI is working to address; the ideas, changes, and methods we are developing and testing to help organizations make breakthrough improvements; and early results where they exist.

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# Innovations in Planned Care

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## **Executive Summary**

Despite significant efforts to improve the care provided to patients in clinics and office practices, it is still not nearly what it should be. Patients often cannot access or do not receive the care necessary to ensure positive health outcomes. Compounding this, the structure of service delivery, traditional workforce roles, and the reimbursement system all create barriers to making widespread improvements to primary care. A different system is needed, one that is reliable, proactive, efficient, and engages patients in ways that ensure the best outcomes.

The Institute for Healthcare Improvement (IHI), along with partners across the country, is championing a comprehensive effort to improve care in clinics and office practices by encouraging organizations to create a reliable and lean system of planned care for all patients. Building on significant knowledge and experience, IHI is developing and testing a new design for the delivery of primary care for all patients, which reaches high levels of effectiveness, efficiency, and patient-centeredness.

The design is based on the idea that in order to ensure reliable care delivery, *every patient should have a plan for his or her care*. This calls for changes in four key elements of the service delivery system:

- The care team
- Patient activation
- Clinical information system
- Leadership

Only when all four aspects of the system are changed simultaneously can organizations produce better outcomes without increased costs.

In November 2004, 17 pilot sites in IHI's Planned Care Innovation Community began testing the design and its new concepts, and identifying important challenges in the reliable delivery of care. To further understand the elements of the planned care design and identify solutions to the remaining challenges, IHI has engaged office practices currently participating in its IMPACT<sup>1</sup> network Learning and Innovation Community on Redesigning the Clinical Office Practice and Pursuing Perfection<sup>2</sup> program as additional pilot sites. IHI will continue to identify key lessons and strategies that other primary care providers can use to improve effectiveness and efficiency in their own practices.

In this paper, IHI identifies the challenges faced in the current system, introduces a new design for the delivery of primary care, and encourages office practices and clinics to move ahead with their own efforts to strive for better patient outcomes.

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## **Background**

As medical care has become more complex, so too has the delivery of services to diverse patients in primary care. Recognizing this challenge, policy makers, researchers, payers, and professional associations have sought models to improve the delivery of care. Out of that effort comes the recognition that mandating or rewarding the use of guidelines is only a small part of the solution.<sup>3</sup> In order to achieve dramatically better health outcomes for patients, we need a more systematic approach to improving care.

### **Problems with the Current System of Ambulatory Care**

The problems with the delivery of care in ambulatory settings are well known. For example, do the following scenarios sound familiar?

- Mr. Jackson has asthma. On a recent visit to his primary care physician, he is given instructions on how to monitor his disease and identify when he is experiencing an asthma attack. He is also instructed on the actions to take should his asthma reach a certain point. During the visit, Mr. Jackson does not write down any instructions, and he is not provided with any written information. Two days after Mr. Jackson returns home from the doctor's office, he doesn't feel well; he is experiencing acute asthmatic symptoms but can't remember what to do next. Mr. Jackson goes to the emergency room.
- Ms. Holton has diabetes and visits her doctor to discuss the disease, receive treatment, and identify any issues related to her blood glucose levels. The focus of her visit is her diabetes and discussion about the disease takes up most, if not all, of her physician's time. Consequently, even though Ms. Holton is due for a mammogram, a flu shot, and a cholesterol check, these were not addressed during her visit.
- Dr. Smith has 200 patients, 45 of whom have diabetes. While she provides individualized treatment to all her patients, she does not have a way to monitor the diabetic patients as a group. She does not know that the patients with poor blood sugar control also have high blood pressure, have not had any follow-up patient education and support, and visit her infrequently. She has no way to find out that there are common problems for patients with diabetes or other patient groups that she could easily address within her practice.
- Mr. Dunne has diabetes, congestive heart failure, and depression. He sees several different specialists for these chronic conditions and has three separate care plans. His physicians do not talk with each other about his care, and the three care plans are not coordinated. Mr. Dunne spends a good portion of his doctor visits updating the physician on his medications and on the actions and advice of his other physicians. When he has a problem, he does not know which physician to contact.

- Mrs. Cortez has diabetes. In her most recent visit to the doctor, she complains of a low-grade backache, neck ache, and headache and says she has been having difficulty getting out of bed in the morning. The nurse makes a note of her comments but does not perform a screen for depression. The physician also does not order a depression screen, and Mrs. Cortez's mild depression goes untreated.
- On his last visit to the doctor, Mr. Davenport is diagnosed with high blood pressure. He is given medication that includes some written information that is quite worrying. Unfortunately, the staff do not have time to review the information carefully with Mr. Davenport or to answer his questions about medication side effects, diet, and self-care. Mr. Davenport is overwhelmed by the diagnosis but feels he cannot approach the staff with questions. He goes home and does not take his medication.

While these stories are fictional, the situations they describe happen every day in health care. They reflect care that is not reliable (i.e., all the right care, in the right way, at the right time, every time) and is neither planned nor patient-centered. The stories illuminate what many experience as failures in primary care, resulting in poor outcomes for patients and frustration for both patients and clinicians.

The problems with the delivery of care in ambulatory settings are well described in *Crossing the Quality Chasm*,<sup>4</sup> the 2001 report from the Institute of Medicine. This report reveals the following key issues, which are also well documented in other studies:

- **Care delivery is not effective or safe enough.** A study by RAND Health reveals that Americans with common health problems receive only about 50 percent of recommended care.<sup>5</sup> This failure reaches beyond people with chronic illness to those who are well but at risk for serious health problems in the future.
- **Care does not engage and help patients enough.** Clinicians usually have time to diagnose and suggest treatments for patients, but have insufficient time to mobilize health care's most abundant resource—the patient's ability to manage his or her own care. Goal setting, education, self-management support, and making connections to community resources are not reimbursed in the fee-for-service payment system and, as a result, are not provided reliably, even though clinicians know these interventions are needed and effective.<sup>6,7,8</sup>
- **Delivery of care is not timely or efficient enough.** To receive health care in most ambulatory organizations, patients with non-emergent problems must gain access to a complex system of interdependent services, currently structured around the conventional office appointment model. This system may work for some acute problems, but does not effectively accommodate the diverse and complex care needs of the elderly and people with chronic illness, nor does it reliably deliver the preventive care and screening recommended in the literature. The result is both overuse and underuse of health care resources.<sup>9</sup>

With these limitations, patients are frustrated because they are not receiving the care they want and need. This frustration is reflected in data from *How's Your Health*, a nationally available patient assessment system ([www.howsyourhealth.com](http://www.howsyourhealth.com)), which shows the percentage of people who say they have perfect care is no more than 35 percent—and even less for people with chronic illness. Providers are just as frustrated as patients.<sup>10,11</sup> They spend their days devoting small amounts of time to large numbers of patients without the confidence that they can consistently provide evidence-based care and help patients manage their health or condition. In the end, patients, providers, employers, and payers pay the consequences of a flawed system of care—prolonged pain and disability, unnecessary and expensive services, and excess mortality.<sup>12</sup>

### Past Improvement Efforts Yield Good Results

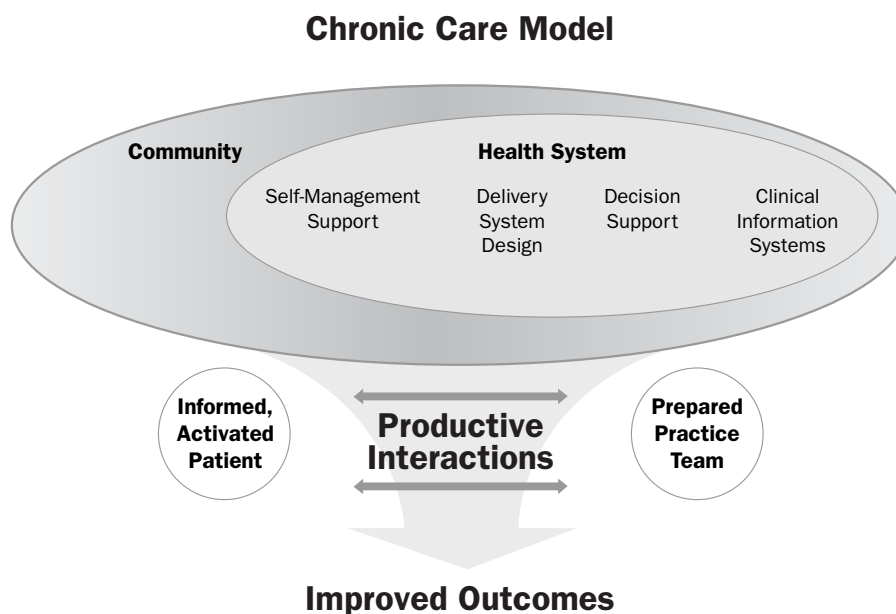
Long before *Crossing the Quality Chasm* was published, efforts to improve primary care were underway. Each demonstration or improvement program has contributed new understanding of how to deliver primary care that is safe, effective, equitable, timely, patient-centered, and efficient. The following is a summary of major quality improvement efforts.

#### *The Chronic Care Model*

Perhaps the most visible evidence of efforts to improve primary care is the increasing use of the Chronic Care Model (Figure 1), developed by Ed Wagner, MD, and colleagues at the MacColl Institute.<sup>13</sup> The Chronic Care Model describes an effective system of care for people with chronic conditions within the primary care environment. Using this model, coupled with sound improvement methods learned from IHI and others,<sup>14</sup> hundreds of providers have improved care for patients with chronic illnesses such as diabetes, asthma, congestive heart failure, and depression.

IHI developed the Chronic Care Collaboratives in the mid-1990s to help organizations apply the Chronic Care Model to their particular environments. Use of the Chronic Care Model through the Collaboratives has greatly increased awareness that a complete system of care is needed to improve chronic care in ambulatory settings. The model shines a spotlight on the importance of proactive providers who engage patients in their own care. As a result of the Chronic Care Model, every year more office practices can demonstrate much better outcomes and satisfaction for patients with specific chronic diseases.<sup>15</sup> For example, Christus Schumpert Health System in Shreveport, Louisiana, used the Chronic Care Model to help improve its treatment of patients with congestive heart failure. Using the model, the organization decreased hospital admissions in the pilot group of patients by 50 percent and increased to 90 percent the rate of patients self-monitoring their weight, diet, medications, and activities.<sup>16</sup>

Figure 1. Chronic Care Model



Source: Wagner EH. *Effective Clinical Practice*. 1996;1:2-4. (Note: The American College of Physicians is not responsible for the accuracy of this translation.)

### *Health Disparities Collaboratives*

Based on the success of the Chronic Care Collaboratives, the US Health Resources and Services Administration's Bureau of Primary Health Care determined that all community health centers should also be using the Chronic Care Model and, with IHI, developed the Health Disparities Collaboratives in 1998. These Collaboratives introduced the Chronic Care Model to community health centers throughout the country and made the systematic treatment of chronic illness more widespread. For example, at the end of the first Health Disparities Collaborative on diabetes care, the number of patients meeting the national goal of two HbA1c tests per year was 300 percent greater than before the Collaborative.<sup>47</sup>

To date, more than 750 health centers have learned and used the Chronic Care Model with positive results.<sup>48</sup> Furthermore, these health centers continue to test innovative uses of the Chronic Care Model for prevention and cancer screening, expanding our knowledge of how office practices and clinics address the many needs of their patients, whether or not they have a chronic illness.



*Reducing Waits and Delays*

At the same time that improved chronic care was becoming a focus, many practices were learning how to make services more accessible and efficient for their patients. Building on knowledge from the 1995 IHI Breakthrough Series Collaborative on Reducing Delays and Waiting Times Throughout the Healthcare System,<sup>19</sup> all types and sizes of office practices in North America and Europe have reduced the waiting time to get an appointment with a physician from months to days to hours. Hundreds of office practices have achieved same-day “open access” for their patients.<sup>20</sup> Improved access to care has led to a more streamlined appointment system and elimination of time consuming tasks, such as triage systems, which are no longer necessary.

*Idealized Design of Clinical Office Practices*

In order to combine the work of improving access to care with efforts to improve chronic illness care, IHI launched, in 2000, the Idealized Design of Clinical Office Practices (IDCOP) project.<sup>21</sup> IDCOP focused on four themes in office practices: patient access, interaction between the patient and the care team, system reliability, and practice vitality. Participants in the IDCOP project improved the structure and function of office practices to make them more efficient and effective.

*Pursuing Perfection*

In 2001, IHI, with support from The Robert Wood Johnson Foundation, began the Pursuing Perfection program,<sup>22</sup> anchored by a shared desire to transform health care delivery. Thirteen participant organizations in the US and Europe have been engaged in learning how to achieve results beyond those previously thought possible in both acute and primary care. Taken as a whole, their efforts to “raise the bar” in health care offer some of the best evidence yet that fundamental improvement in patient care is possible across and within a wide range of health systems. Four of the Pursuing Perfection organizations picked up where the IDCOP program and the Chronic Care Collaboratives left off, focusing on ambulatory care issues with the stated aim of “raising the bar”—achieving results for patients and for the organization far beyond what had been previously seen. As with the Collaboratives, care has improved, in some cases dramatically,<sup>23,24,25</sup> but persistent challenges remain. The practices cannot yet claim high levels of reliability for more than a few hundred patients at a time.

Because of the efforts in these programs, we now know how to improve access to care and chronic illness care in office practices for many groups of patients. Nevertheless, ensuring that large populations of patients receive the right care reliably is still out of reach. A new design is needed.

### **Pursuing a New Approach**

IHI is focusing redesign efforts inside the office practice, to create new models of care capable of providing care to thousands of patients at high levels of reliability. In August 2004, experts and leaders working with IHI in the area of planned care, including those involved with the Chronic Care Collaboratives and IDCOP, met to study and discuss how to design a system of care that would overcome the barriers of complexity and lack of financial and human resources. This faculty group reviewed the progress of organizations that had achieved improved outcomes for patients with a range of chronic illnesses. They identified the approaches and results these successful organizations had in common. Then, to stimulate the creative and ambitious thinking required when designing a new model, they established targets for a new design:

- Greater than 95 percent of patients say they are confident they can manage their health or condition;
- Greater than 95 percent of patients receive the evidence-based care for their condition; and
- The organization realizes a sustained reduction, or at least no increase, in cost.

These “raise-the-bar” aims helped the designers think creatively about care delivery in office practices. Such goals cannot be achieved by making minor adjustments to the existing system; they call for a dramatically different approach.

With these targets in mind, the faculty considered what attributes a delivery system must have to produce such results. First, they understood that the system would have to be highly reliable in ensuring that every person received the care he or she needed. Further, because clinical staff resources are scarce, they identified the need to find abundance in other places, such as by reducing wasted activity in the practice. Familiar examples include unnecessary return visits; failure to order tests, causing duplicate work at a later date; and nurse time spent on phone triage because no appointments are available on a given day when patients call. A second source of abundance can be found by channeling scarce resources, such as a physician’s time, where they are most needed. Allocating the physician’s time to more complex medical care, while other staff take care of education and administrative tasks, is the best demonstration of this principle. A third source of abundance is the richest one of all: mobilized patients capable of self-care and following through on treatment. Patients and their families have the motivation and the time to be very effective “self-care givers,” and to take on day-to-day planning, monitoring and treatment. All they need is the knowledge and skill.

The faculty then asked themselves, “What structures would make this level of reliability possible?” (IHI had already investigated the lessons from highly reliable organizations, and learned that ensuring the reliable delivery of care requires more than good intentions, hard work, and vigilance.<sup>26,27</sup>) To answer this question, the faculty looked for models both within and outside the health care industry

where delivering reliable service happened both during and between encounters with the service deliverers. They visited health care organizations with very good outcomes for patients. They also visited other service industries that were reliable, successful, and used high levels of customer involvement. These included a home improvement store chain, local and thriving craft stores, and a successful private school. They noticed that in successful settings there was *a plan for every customer*, which both the customer and the providers (those providing the services) believed would work to achieve the customer's goals.

This concept of establishing a customized plan for each customer (or patient, in the health care context) was most appealing because it embodies the key principles of reliability science. For example, the principle, “decision aids and reminders are built into the system,” becomes real and tangible when guidelines for care are embedded in the care plan and when follow-up phone calls are part of the routine. Another principle from reliability science is “specifying and articulating the process so that all involved can describe and follow it.” In health care a shared care plan is an example of this principle—a living document that specifies the process to be followed.

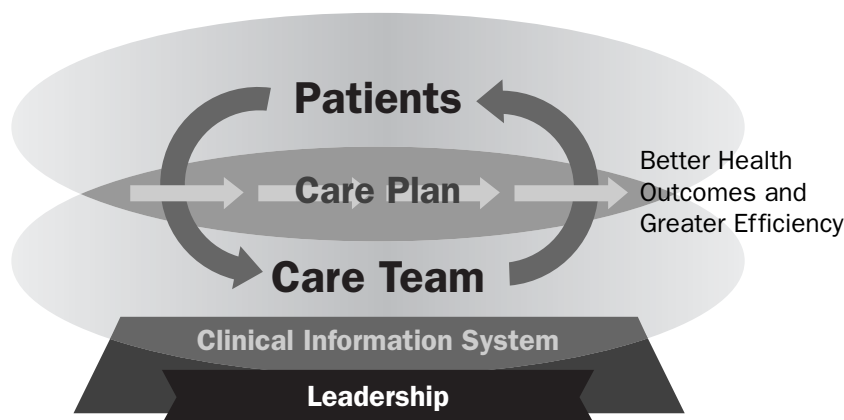
The faculty explored the concept of establishing customized plans in health care and felt it could be an effective strategy for the challenges in primary care. If every patient, including those without chronic conditions, had an evidence-based plan, which had been shared among patient, providers, and other caregivers, then the evidence-based care would be delivered more often, more reliably, and outcomes for patients should improve as a result. The concept that *every patient would have his or her own care plan* became the center of this new design for planned care.

### **A Concept Design for Planned Care**

The IHI faculty knew of no health care organization that had a plan in place for every patient, although some primary care and geriatric practices had made great strides for groups of patients. The faculty considered the necessary structures in a primary care system that would ensure every patient had a plan, while still meeting the design targets for cost containment in the office practice. As a result of their study, they identified the following four key components of a concept design for planned care (Figure 2):

1. A care team approach to service delivery;
2. Patient activation as one of the primary sources of reliability;
3. A clinical information system that supports the care team and the patient; and
4. Leadership in the organization drives and supports these elements of care.

Figure 2. Concept Design for Planned Care



The concept design for planned care centers around patients and their engagement in care. Interactions between the patient and care team result in creating a care plan, ensuring its reliability, and building the patient's confidence in doing his or her part to manage their own care. The care team and patient and their interactions are supported by the clinical information system. Leaders provide the foundation, the vision, and resources for the system to operate. The following sections describe each component of the planned care design concept in more detail.

#### *1. A care team approach to service delivery*

A care team exists when the clinic staff members use all of their skills together in a concerted effort to deliver evidence-based clinical management and self-management support.<sup>28</sup> A care team must be a “real” team in both design and function. In other words, team members must be conscious of their common goals to deliver the right care, every time, together.

The following are characteristics of an effective care team:

- The patient is the center of the care team, and all team members are familiar with the patient, his or her health care needs, and the plan of care.
- Care is provided using evidence-based strategies whenever possible.
- Information is used to effectively plan care for each patient.
- Roles and responsibilities of the care team members maximize the skills within the group.
- Communication between team members is open and conducted in real time.
- Performance of the team as a whole is monitored and improved.

The care team becomes the major vehicle for the reliability of service delivery in the office practice. Some examples of techniques used by effective care teams include the following:

- **Optimizing the care team.** A team consisting of physicians, nurses, medical assistants, other providers, and office staff is formed and assigned a particular panel of patients. The team as a whole is charged with caring for all the needs of this group of patients. Within a care team, work can be distributed in different ways to achieve optimal performance and maximize the skills of the team. The physicians' time is focused on those elements of care that only they can provide: complex diagnoses, prescribing, and problem solving. Other team members perform basic assessments, patient education and coaching, and administrative tasks.
- **Daily huddles.** Effective teams communicate in real time, including a daily gathering for planning and communication. During daily huddles, team members review care plans for patients who are coming in to the office that day or the next. In some cases, these huddles can be scripted to ensure consistent communication. The team creates and implements processes to ensure the delivery of all evidence-based care whenever there is contact with the patient. The huddles allow the team to anticipate the needs of patients and identify any potential issues (called "mindfulness" in reliability science). Working as a group, the team can identify instances when they failed to deliver needed care, or when patients have failed to follow through on care, and initiate needed improvements in their delivery system. This "preoccupation with failure" helps to improve reliability. The existence of a care plan for each patient is fundamental for this process.

## *2. Patient activation as one of the primary sources of reliability*

The concept behind patient activation is straightforward: Because patients care for themselves 99.9 percent of the time, the more they can be effective at self-care, the more reliably they will do what is needed to have healthy outcomes. A patient who understands her illness, knows how to monitor and manage her care, and how to get help when needed will follow through on the plan. Evidence suggests that patients who are confident in their ability to manage their own health and health care have fewer hospitalizations, better outcomes, and incur lower costs for care.<sup>29</sup>

Although recognized as a critical piece of planned care, achieving the goal of patient activation has its challenges.<sup>30</sup> The most pressing is the time and understanding required of clinicians to become effective "activators." Following are four components of patient activation emphasized in the planned care approach:

- Patients and the care team work together to set goals for treatment that are important to the patients. For instance, when the care team and patients agree together to target blood sugar control, weight loss, or symptom management, patients are more likely to take on the appropriate control of the results.
- With the help of the care team, patients create a care plan or action plan for their own self-care. This plan should be one the patients understand and "own." A shared care plan puts the

knowledge of the most effective care in the hands of everyone who needs to know. It ensures that the patients know what to do to care for themselves and when and how to get help.

- Patients learn what they need to know to carry out the plan.
- Patients and the care team review the plan periodically to ensure that it is effective in reaching the desired goals.

In every interaction, the care team emphasizes self-care and self-management. For example, some office practices have been testing pre-visit phone calls with patients to prepare for a face-to-face visit. More than just verifying the appointment, pre-visit planning helps patients and the team prepare for their work together at the visit. During the call, the nurse or medical assistant reminds the patient to bring in all medications, assesses the patient's goals for the visit, and identifies any additional needs in advance. This helps the patient anticipate more involvement in the care, and puts the reliability of the care in the patient's control as well.

Follow-up with patients provides another avenue to ensure that needed care is specified and understood. At the end of each visit, the nurse or medical assistant perform a "check-out" to ensure that patients have the knowledge and resources they need to follow their care plans. For a new patient, or one with less confidence, telephone follow-up by the nurse or care manager in one to two weeks after the office visit enables the patient to get needed information and allows the care team to identify additional needs to assist the patient with self-management.

### *3. A clinical information system that supports the care team and the patient*

An effective clinical information system (CIS) provides the support and infrastructure for delivering planned care and managing groups of patients. Such a system allows organizations to access information about a patient or group of patients quickly and plan care based on that information. It enables care teams to provide the appropriate support and care for patients and assess the results. The CIS is both a decision aid and reminder system.

Care teams can use clinical information systems to identify patients needing specific tests and preventive care prior to the office visit, so the team is prepared to perform all the needed care at the visit. The care team can also use the CIS to identify patients who have missed needed (evidence-based) care, such as immunizations or eye exams, and schedule patients to come to the office for such care. Information from the CIS may be used by the team to routinely evaluate its own reliability and effectiveness in delivering evidence-based care, and to make improvements in care processes. For example, the care team that examines average blood sugar control for all of its diabetic patients, as well as those that are in the danger zone according to ADA criteria, or the percentage of all adult patients who are up to date on age-specific cancer screenings, can identify defects in its care processes, determine which patients the care system has "failed," and devise solutions for meeting the needs of these patients.

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An effective clinical information system for planned care has at a minimum the following features:

- All patients, not just those with chronic conditions, are included in the system.
- The system includes all pertinent patient health status and history data (e.g., demographics, vitals, conditions, medications, laboratory results, risk factors, and referrals).
- Data are located on one easy-to-use page or screen, providing a comprehensive *gestalt* of the patient. This becomes the physical manifestation of the care plan for each patient.
- Data are easily entered and retrieved. Data should be entered only once, thus freeing up staff time to focus on the patient, not on the data collection process.
- Users are able to generate reports on outcomes for a panel or a population of patients. It is very important that the care team be able to ask the CIS any question about its patients, based on any data. Such reports should identify the question and list all the patients that fit the criteria under each statistic.
- Information about patients is available to all the providers that patients encounter in their care. Typically, patients have more than one doctor, and information sharing across providers is critical to planned care.
- The system generates reminders and offers evidence-based recommendations for care. This helps ensure that the most appropriate and timely patient care is provided.

Currently, there are clinical information systems that, when configured properly, have the capability to support the many aspects of a reliable planned care model. One such system was tested by pilot sites in the IHI Planned Care Innovation Community. The Patient Electronic Care System (PECS), originally created by the Bureau of Primary Health Care to support organizations in the Health Disparities Collaboratives, allows organizations to manage patient information and use that information to help plan patient care.<sup>31</sup> The PECS system is an electronic registry that gives the care team access to pertinent clinical information about patients who need preventive care or have chronic conditions. The registry produces a one-page summary that outlines an individual patient's care history and current needs. Queries can be run to help identify trends and patterns within groups of patients. Through the years, the PECS system has been improved to help organizations manage patient information effectively, follow patient activation activities, and create other types of reports. If implemented to its full potential, the PECS system can help care teams create a care plan for each patient, monitor trends among patients, and track team effectiveness in managing patient care.

Although currently available clinical information systems and electronic medical records have enormous promise, it is important to note that many providers have found it difficult to integrate commercial systems into their practice. The challenging issues include: lack of full “interoperability” so that patient

information is available across a patient's multiple providers, care sites, and pharmacy; lack of key features, such as robust registries; and lack of designs to work efficiently with care teams and full patient activation. A functioning CIS is essential for planned care, but an accessible and easy-to-use system is still a distant hope for most office practices. In addition, new functionality is emerging rapidly in home grown and commercial systems that will enable patients to participate more actively in their care from wherever they have computer access. Asynchronous communication with providers; links to additional information about prevention, healthy living and disease management; access to diagnostic reports and personal medical records; and patient-specific reminder systems should greatly enhance care and connectivity.

Together, these three elements—the care team, the activated patient, and the CIS—bring reliability to planned care. Table 1 illustrates how some principles of reliability science<sup>32</sup> are embedded in the planned care design.

Table 1. Principles of Reliability Science Applied to Planned Care

Principles of Reliability Science	Planned Care Concepts Based on These Principles
Prevent failure (by standardizing care)	<ul style="list-style-type: none"> <li>• The care team follows evidence-based guidelines for preventive care (e.g., flu shots, mammograms, cancer screening).</li> <li>• Patients receive evidence-based care for chronic conditions such as asthma, diabetes, congestive heart failure, and depression.</li> </ul>
Identify failures (defects) and mitigate harm caused by failures	<ul style="list-style-type: none"> <li>• The medical assistant takes vital signs and screens every patient for depression and pain at intake.</li> <li>• The clinical information system (CIS) prompts the clinician to complete standard treatments during a visit, based on the patient's age, sex, and diagnoses.</li> <li>• The nurse queries the CIS to find patients with diabetes who have not had their blood sugar checked in over six months and contacts them for follow-up.</li> <li>• The care team huddles daily at 2:00 PM to plan for the care of patients coming into the office that day or the next morning.</li> <li>• Care plans and action plans are developed with the patient and then shared, in writing, with all providers and caregivers.</li> <li>• Visits are planned at regular intervals, and a nurse calls the patient one week before the visit to plan lab tests in advance.</li> </ul>
Redesign the process based on the failures identified	<ul style="list-style-type: none"> <li>• The care team reviews outcomes for patients as a group and identifies which components of care are missed frequently for those patients with poor outcomes. Visits are redesigned to ensure 100 percent compliance.</li> </ul>



#### *4. Leadership in the organization drives and supports these elements of care*

Active leadership support supplies the foundation for successful implementation of reliable planned care. In a primary care practice, the leader could be the executive of the clinic or group, or it could be the most senior physician in the practice. Regardless of who has the leadership role, it is his or her responsibility to lay the groundwork for a care team approach by articulating how more reliable planned care meets important organization and patient goals. Further, leaders create a culture that is conducive to team care, one that is low on hierarchies among staff members and high on collegiality and open communication. Leaders invest resources in staff training, communication, and a clinical information system. They align their organization's administrative and financial systems to support planned care and link these to the business case for the organization. Finally, leaders monitor progress toward meeting ambitious goals in the office practice and plan for sustainability.

The leadership behaviors that foster a more reliable planned care approach include the following:

- Analyze the skills and capabilities of the staff to fill the roles of the care team. Hire or train individuals to ensure the best mix of skills.
- Invest in a clinical information system to support the patient and care team.
- Ensure that the entire care team is located in the same area of the clinic or office.
- Make and foster community connections to provide additional services to patients, such as meals, transportation, care management and supportive services, so patients feel they have “one care team.”
- Encourage innovative approaches to activating patients in their own care.
- Lead improvement efforts using a structured approach, such as the Model for Improvement.<sup>33</sup>

#### **Pursuing All Four Elements of Planned Care**

The four elements of the concept design, when implemented together, are intended to create reliable planned care that reaches the most ambitious targets: outstanding outcomes, confident and activated patients, and reduced waste in the practice. IHI believes that only by working on all four elements of the design simultaneously will organizations achieve these goals.

The components of the concept design are interrelated and synergistic. For example, if the care team's treatments are to be effective, patients must be engaged and activated to follow through with their care plan. Likewise, the care team cannot handle the volume or complexity of the patient population without a clinical information system to access essential information. Leadership must provide resources to support the substantial changes needed in the delivery system to implement reliable planned care; without that support, the care team cannot function appropriately and the clinical information system may not be sufficient.

A well-functioning system helps patients succeed and stay well. It allows the care team to target the right care to the patients who need it every time and not waste resources in the process. In a reliable planned care system, the scenarios described earlier in this paper would be very different and more satisfying care experiences for both patients and providers.

- Mr. Jackson, who has asthma, receives well-written instructions for his asthma care at home during his office visit. He builds an Asthma Action Plan with the one nurse on his care team, and she verifies that he understands it before he leaves the office. She also calls him a few days later to answer his questions. The next time Mr. Jackson experiences worsening symptoms, he adjusts his medications according to the plan, and avoids the asthma attack and an emergency department visit.
- Ms. Holton, who has diabetes, visits her physician for planned visits twice per year. The nurse calls her before the visit to arrange needed blood tests in advance, and identifies Ms. Holton's specific concerns to address at the visit. During the visit, her diabetes is checked, medication adjustments are made, self-management skills are reinforced with education, and all her preventive care and screening are provided.
- Dr. Smith spends one hour every two weeks with the rest of the care team reviewing clinical outcomes for their groups of patients. The team has data from their clinical information system on all 45 diabetes patients, plus 18 patients with congestive heart failure, 12 with asthma, and 24 with depression. The team finds patients who have not come in for routine care, and follows up with them. They also identify patients with worse outcomes and redesign care processes to be sure that each patient gets evidence-based care according to their needs.
- Mr. Dunne has diabetes, congestive heart failure, and depression. He also has a shared care plan and a single medication list that he carries with him in a notebook to all of his physician visits. He no longer has to spend time during office visits to update all caregivers on his care plan.

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## **IHI's Challenge to Office Practices**

The concept design for planned care draws on the best work in improving chronic illness care and redesign of office practices. It is a leaner and more focused attempt to meet the challenge of delivering reliable care to large numbers of patients.

IHI is testing the concept design for reliable, efficient planned care to address major obstacles in primary care service delivery—obstacles for patients and for providers that stand in the way of great health care for patients. While the testing and learning are in the early stages, the design offers hope that a feasible and scalable service model is within our reach. IHI now invites others to get involved. The next step is to test this design in as many office practices and clinics as possible, to learn if it does, indeed, help achieve more reliable and cost-effective care. With many organizations engaged in testing the design, we will learn faster and better how to build such a system of care and what other barriers may still stand in our way.

In November 2004, 17 pilot sites began testing the concept design in IHI's Planned Care Innovation Community.<sup>34</sup> Participants in the IHI IMPACT network Learning and Innovation Community on Redesigning Clinical Office Practices and in the Pursuing Perfection program are currently testing the design as well. Major challenges have emerged as these organizations have begun testing a planned care approach. Some of these challenges include measuring results, building effective information systems, building effective care teams, and finding the financial and personnel resources to help patients become effective in self-management. Clearly, the path to designing reliable planned care for all patients is a long one.

Organizations interested in meeting ambitious goals for planned care need fortitude, creativity, and a commitment to learning. These pilot sites are continuing to test and refine the concept design, identifying the aspects that work and those that need more study. IHI invites other office practices or clinics that want to deliver more reliable and effective care to their patients to join in the testing process. Efforts to change the status quo can take many forms, some of which are relatively easy to begin. For example, organizations can see benefits by testing a care team approach, trying new ways to activate patients, or gathering information on a group of patients and identifying how reliably key care processes are being delivered.

More rigorous integration of reliability science into primary care delivery will be the main thrust of future design and testing for planned care. For updates on the design and testing, preliminary results from the pilot sites, and ideas for ways to test the concept design in your organization, visit the IHI's website and look for emerging content in the Topics section ([www.ihl.org/IHI/Topics/OfficePractices/PlannedCare](http://www.ihl.org/IHI/Topics/OfficePractices/PlannedCare)).

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