WHAT WORKS

Effective Tools & Case Studies
To Improve Clinical Office Practice

Suzanne Houck
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This book is dedicated to you,
The healthcare professional,
Working day in and day out
To serve the lives of others with integrity.
Let your light shine.
About The Author

Sue Houck is the President and founder of Houck & Associates, Inc, a health care consulting firm based in Boulder, Colorado, serving clients nationwide. For over ten years she has assisted hospitals, physician groups and integrated delivery networks to achieve sustainable improvements in ambulatory care.

A graduate of Georgetown University, Sue holds an MBA from the University of Colorado and has served on an advisory board of the American Accreditation Healthcare Commission. In addition to extensive national consulting work, Sue speaks regularly at national healthcare conferences sponsored by the American Medical Group Association, the American Hospital Association, the National Association of Community Health Centers, the National Managed Healthcare Congress, the Healthcare Financial Management Association and the Medical Group Management Association.

Before founding Houck & Associates, Sue served as a healthcare manager and nurse practitioner in ambulatory care. She also worked as Chief Operating Officer of Critical Care Incorporated, Director of Professional Services at GeriMed of America and as a consultant with KPMG Peat Marwick.
Preface

What Works: Effective Tools & Case Studies to Improve Clinical Office Practice brings the user practical tools for sustainable improvement in outpatient care and physician office practices. Case examples from a variety of sites highlight how-tos for successful improvement. This book is based on experience with hundreds of physician practices, hospitals and outpatient departments nationwide in teaching and non-teaching settings.

To simplify discussion, I use the terms provider, site, practice, group, and clinic interchangeably in referring to ambulatory care providers. Healthcare Matrix®, Access Pathways®, and Healthcare Equation® visually display key concepts and relationships.

What Works also refers to practices and tools of lean production. This term was coined by Daniel Jones, Daniel Roos, and James Womack in their 1990 book, The Machine That Changed the World, to describe Toyota’s production system. In my experience, lean production has definite application to the clinical office practice because of its focus on managing capacity and demand, leveraging teams, standardizing procedures, reducing rework, and bringing linked processes near one another.
After many months of working on this book, I would much appreciate hearing from people regarding what does and doesn’t work in their own improvement efforts. May *What Works* bring you interesting examples and fruitful ideas. May it serve you in writing your own improvement story, which indeed is what really matters.

**Acknowledgements**

Thanks to the participants who contributed their experiences to the case studies. They include: Cory Sevin, V.P. of Operations and Dr. Carolyn Shephard, Medical Director at Clinica Campesina, Ann Lewis, CEO of CareSouth, Dr. Gregg Omura at Primary Care Partners, Dr. Pete Knox and Randi Burnham, NP, Team Leader at Bellin Health System. Thanks also to Dr. Charlie Burger at Norumbega Medical Specialists and Dr. Jim Kennedy, Director of Clinical Operations at the University of Colorado Health Sciences Center.

I would like to express heartfelt thanks to Dr. Charles Kilo. Chuck’s tireless commitment to finding workable solutions for providers, patients, managers, and employers is truly exceptional. His unbounded enthusiasm and caring are the embodiment of possibility, a shining example of genuine stewardship. A great mentor and chum, Dr. Kilo has provided countless insights in how to best serve clients embarking on the work of improvement.
I would also like to acknowledge the contributions of the Institute for Healthcare Improvement (IHI) and its founder, Dr. Don Berwick to sustainable improvement throughout the healthcare system of the United States and beyond. During the course of improvement work, I actively encourage clients to participate in IHI. The meetings and events focus on real-world improvements. Many participants report that IHI events are the best they have ever attended.
Chapter 1

Why Improve?

Now more than ever, healthcare in the United States is challenged. Working hard and doing good work no longer ensure success. The demands placed on providers leave little time for anything that is not urgent. Finances are tight and patients expect more. Despite these challenges, innovative providers have found that, over time, consistent, practical improvements can have a major impact on operational, satisfaction, and financial outcomes. Because clinical operations are the productive engine of healthcare, a commitment to improvement can significantly affect results.

Many providers feel overwhelmed just keeping up with each day’s workload. However, reacting only to today’s urgent demands without addressing the important issues that shape the workload can lead to chronic frustration and even burnout. As one physician commented, “When I look at the meeting minutes, they never change from year to year. We’re always dealing with the same unsolved problems.” Overbooked schedules and ringing phones demand a response now. Only by stepping back to look at how resources are being used, why processes are done a certain way, as well as what a group’s underlying values are, can sustainable solutions be found. (See Table 1.1)

<table>
<thead>
<tr>
<th>Table 1.1 Urgent Versus Important</th>
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<tbody>
<tr>
<td><strong>Urgent</strong></td>
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<tr>
<td>Fit more appointments into today's overbooked schedule</td>
</tr>
<tr>
<td>Answer ringing phones now</td>
</tr>
<tr>
<td>See patient with diabetes</td>
</tr>
<tr>
<td>Process today’s batch of prescription</td>
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Although the reported percentage of overall patient satisfaction is high, Consumer Reports researchers found that 15% of patients complained of rushed visits with their providers, and more endured long waiting periods before being seen. From the provider’s perspective, physicians in one survey described the “best” patient as one who understands the doctor’s time, seems to understand what the doctor says, and is compliant (Consumer Reports, 1999, February).

Some groups start with big improvements, committing early to significant changes. More often, improvement starts with small process changes that demonstrate results and build momentum for larger efforts. After sifting through 1,435 companies to see how the top 11 transitioned from good to great, author Jim Collins describes the central role of ongoing improvement in their success:

> The good-to-great companies understood a simple truth: Tremendous power exists in the fact of continued improvement and the delivery of results. Point to tangible accomplishments—however incremental at first—and show how these steps fit into the context of an overall concept that will work. When you do this in such a way that people see and feel the buildup of momentum, they will line up with enthusiasm (Collins, J., 2001).

Collins found that over time, the common denominator for the organizations which went from good to great was not strict financial controls or the latest technology, but a consistent effort to improve. For some groups, the initial impetus can be a major bump in the road. As described Case Study #2, Bellin Health System had acquired 20 sites with little in common:

> The physicians were frustrated. They thought they had joined a system and what they had expected was not occurring. It was a chaotic group that was losing money. A decision was made as an organization to bail out of the primary care network or to make it work.

For those who stay the course, the rewards of improvement can be substantial. Most patients at Bellin are now offered an appointment on the day that they call, patient satisfaction has improved for five straight quarters, and 77% of Bellin’s clinics have improved operating margins between 5% and 50%. CareSouth Carolina, Inc. (see also Case Study #5) has reduced average HbA1c in patients with diabetes by more than 30%.
Sustainable improvement energizes physicians, managers, and staff, freeing up a greater sense of possibility in their daily work as opposed to focusing on problems. In fact, when people focus primarily on fixing problems, they become depressed. When they identify the type of future they’d like to create, however, they become energized (Lippitt, R., Watson, J., & Westly, B., 1958). The reader will find practical tools for moving beyond a current state that’s filled with inefficiency and waits toward the goals of immediate access to healing and enabling relationships from a system that’s constantly removing waste. (See Table 1.2.)

Table 1.2 Current State Versus Perfect State

<table>
<thead>
<tr>
<th>Current State</th>
<th>Perfect State</th>
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<tr>
<td>Transaction</td>
<td>Healing relationships</td>
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<tr>
<td>Waits</td>
<td>Immediate access</td>
</tr>
<tr>
<td>Compliant patients</td>
<td>Enabled patients</td>
</tr>
<tr>
<td>Inefficiencies</td>
<td>Constantly removes waste</td>
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Healthcare has never been in greater need of souls committed to creating possibility in the face of today’s challenges. Start somewhere. Begin to show results and have fun. Join like-minded others to build a critical mass of possibility.
Chapter 2

Improving the Invisible

On any given day, office staff can be observed busily completing various work processes, but it’s not always clear exactly where those processes begin and end. In fact, much of the work isn’t tangible or easy to see. To some extent, improving care is like improving the invisible.

The Healthcare Matrix®, Access Pathways®, and Healthcare Equation® are designed to help make the intangible easier to see. The Healthcare Matrix illustrates the interface between key phases and resources involved in an episode of care. Access Pathways and process maps delineate steps in high-volume activities. The tools can be used to assess problems as well as compare improvement options. The simplicity of the tools is intentional to make improvement concepts clear for a variety of users—from managers and providers to medical assistants and even patients. The tools can also provide a common reference point for improvement work.

Simply stated, healthcare is what happens when provider capacity meets the demand for care to produce outcomes or results. The Healthcare Equation provides a simple visual summary of an organization’s interactions with patients and the results. (See Figure 2.1.)
Demand is total patient requests for care. Capacity is the sum total of a group’s resources, processes, and values. Outcomes are the operational (including clinical), satisfaction, and financial results when capacity and demand interact to produce an episode of care. Satisfaction outcomes include patient and staff satisfaction, while financial outcomes include optimizing costs as well as revenue and income.

A group’s resources include its people, buildings, and equipment (things that can be seen) as well as intangibles like relationships and time. Values can be defined as what matters most to an organization—the core beliefs that drive activities and how resources are used. Processes are a group’s major activities, from care delivery to making appointments.

Any episode of care, from self-care to open-heart surgery can be divided into three phases: information, decision making, and treatment or action. For example, a patient may notice symptoms of an upper respiratory infection (URI) and then use his or her information regarding the symptoms to make a decision to self-treat with an over-the-counter (OTC) decongestant. Outcomes might include control of symptoms, the cost of the medication, and patient satisfaction with these results. (See Figure 2.2.)

Figure 2.1 The Healthcare Equation

Demand + Capacity = Outcomes

Requests For Care: Resources, Processes, Values

Operational, Financial, Satisfaction

Figure 2.2 Phases of Care

1. Patient notices URI
2. Using own information regarding URIs, patient decides to take over-the-counter decongestant
3. Patient treats symptoms with OTC decongestant
4. Outcomes: Symptom control, Cost of medication, Satisfaction with results
An episode of care may involve up to three human resources: patients, nonphysician staff, and physicians. (See also Figure 2.3.) The Healthcare Matrix in Figure 2.4 illustrates both the human resources and processes involved in an episode of care. It provides a framework for the interplay between clinical office activities and resources. Office processes can be mapped onto the matrix to better see opportunities for improving information, decision making, and treatment as they relate to resources.

**Figure 2.3 Human Resources**

![Diagram of Human Resources]

What would be your ideal model of patient, staff, and physician interactions? Would all three groups be functioning at the full limit of their capabilities? How would your facility’s budget be spent differently in the next year? How does this compare with present allocations? Is significant funding going for new treatment technologies while long waiting periods plague access to that treatment? Would enabled patients be better informed about self-care management and how to best utilize your services? Should the traditional command-and-control model prevail where physicians must take time to authorize many decisions, from frequent appointment approvals to each prescription refill? Could patient waiting times and physician interruptions be reduced if more decisions were delegated or standardized?

**Figure 2.4 Healthcare Matrix**

![Diagram of Healthcare Matrix]

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Information gathering is the first step in an episode of care. Access to the right information in the right place at the right time enables effective decision making. Conversely, decision making is hampered when information is lacking or late. (See Figure 2.5.) While robust electronic medical record systems provide immediate access to clinical information, only about 20% of hospitals and 5% of physicians use electronic medical records (Medscape, 2004). (See also http://www.aafp.org/x3697.xml for a discussion of electronic medical record systems.)

**Figure 2.5 Common Information Flow Issues**

- **Patient**
  - Poorly informed patients underuse and overuse healthcare services.
  - Walls and physically dispersed staff impede visual access to information about work flow.

- **Nonphysician Staff**
  - Without a standard form and process, a patient may be asked for a history up to three times during a visit.
  - Cumbersome appointment rules create information overload and potential for error.

- **Physician**
  - Lack of information in a patient’s chart during a visit slows down physician decision making and results in expensive exam room bottlenecks as well as potential for treatment errors.

Process flow from information to decision making and treatment or action can be optimized when decisions are decentralized. Interruptions are reduced and physicians are freed up from tasks that could be done by other staff. Automation also helps. Use of personal digital assistants and computers to automate memory-based decisions that are prone to error (such as selecting prescription medication dosages) ensures accurate prescribing. (See Figure 2.6.)

Staff at Denver’s Clinica Campesina has found that simply color coding or “branding” charts for each team helps to avoid delays in information flow. For example, if a yellow team’s chart is in the blue team’s section, staff can easily see that it belongs elsewhere. Business cards also reinforce a team’s color, reducing confusion for patients upon checking in.

Well-informed patients use provider resources more efficiently and are less likely to overuse care. Books such as *Take Care of Yourself* (Vickery, D., & Fries, J., 1994) and *The Healthwise Handbook* (Kemper, D.W., McIntosh, K.E., & Roberts, R.M., 1993) promote patient participation in care. In addition, practice-specific patient handbooks can help patients learn how to access and use a group’s services. Handbooks also include self-
An integrated delivery network (IDN) in the Pacific Northwest conducts structured welcoming sessions during which patients receive a handbook and instructions on how to use the system.

Office design with fewer walls that co-locates staff improves information including real-time visual access to work flow.

Standardized history form streamlines check-in and rooming.

Daily huddles enable staff to synchronize work and information flow for the day.

Standardizing types and lengths of appointments requires less information to schedule patients. Confusion about different types of appointments, reworking them, and waiting times are eliminated.

Improving Information Flow

Dr. Charlie Burger’s practice at Norumbega gives every patient a printout of their visit notes before they leave the office. A prominent sign asks patients, “Did you get a copy of your visit today?”

Some sites actively encourage patients to seek information. Dr. Charlie Burger’s practice at Norumbega in Maine shares its medical record notes with patients at the end of each encounter. A prominent sign asks patients as they leave the office, “Did you get a copy of your visit today?” (See also case study #3.) In one study, patients who listed at least three issues while in the waiting room asked more questions, reported less anxiety, had greater feelings of control, and were more satisfied with the visit and the information received than patients who did not write a list (Thompson, S.C., & Nanni, C., 1990). Ultimately, making sure that patients have the right information at the right time and in the right place is a lot cheaper than costly treatments necessitated by poorly informed patients who use healthcare resources inappropriately. (See Figure 2.7.)

Engaging patients in decision making regarding treatment options and encouraging self-management can impact outcomes. Hibbard found that patients who shared decision making and chronic disease self-care have improved functioning and reduced pain. Costs were also reduced (Hibbard, J.H., 2003, January). The chronic care model developed by Dr. Ed Wagner actively builds patient self-care skills. Leaders from several case study sites included herein describe how important the model has been in their own improvement efforts. In addition, Leveille et al. found that the chronic care model
reduced hospitalizations by 38% for frail older adults and led to significantly higher levels of physical activity and less decline in function (Leveille, S.G., Wagner, E.H., Davis, C., Grothaus, L., Wallace, J., LoGerfo, M., et al., 1998, October).

Each patient carries his own doctor inside him. We are at our best when the doctor who resides within each patient has the chance to go to work. —Albert Schweitzer, M.D.

 Appropriately used, standardized treatment protocols have also been effective. At Park Nicollet Clinic in Minnesota, physicians’ schedules were clogged with minor illnesses like uncomplicated urinary tract infections (UTIs) in women. Instituting phone treatment protocols, the staff at Park Nicollet alleviated the hassle of an office visit for these patients and expanded the nurses’ role. In addition, physician time was freed up and costs per episode dropped from $139 to $33.

Physical space also affects information flow. Removing walls and bringing dispersed staff closer together enables access to real-time visual information about work flow. It’s also consistent with the lean production principle of locating all the steps in linked processes or “value-streams”—from check-in, to rooming, and physician time with patients—closer to one another.

**Itemize Steps to See the Whole Process**

High-volume activities like refilling prescriptions, making referrals, messaging, and scheduling office visits can be mapped out to better “see” the total process. First, identify each step on index cards or small pieces of paper. Then post them in sequence on a large sheet of paper, a wall, or the Healthcare Matrix. Start with the most common steps in a process instead of including all additional steps that might be required. Be sure to include hand-offs and authorizations. Next, indicate where the biggest delays occur. (See also Figure 2.8: Streamlining the Refill Process.)

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The sequence of activities for refilling prescriptions, for example, might include:
1. Patient notices that he/she needs a refill.
2. Patient decides to call office to request a refill.
3. Patient calls office and refill request message is taken.
4. Request is given to nurse.
5. Nurse reviews request (delays of up to 3 hours can occur if nurse needs to clarify request with clerk who took message).
7. Nurse reviews chart.
8. Nurse sends chart with message to MD.
9. MD reviews chart.
10. MD authorizes refill (delays of up to 36 hours).
11. MD sends chart and message back to nurse.
12. Nurse reviews physician documentation and calls in refill (delays up to 12 hours).
13. Nurse calls patient to notify that refill has been called in to pharmacy.

Seeing Where to Improve

After delineating the steps in a process such as refilling prescriptions, look for potential improvements to the process:

1. Realize that the greater the complexity and the number of steps, the greater the possibility for errors and delays. Ask if any steps can be consolidated or even eliminated. Avoid hand-offs to minimize learning curve delays for each new participant in a given process. In _The Perfect Practice_, Sherry Delio describes how adding more resources to a process actually increases the number of steps and reduces productivity:

   *We have noted that when we add too many resources to a process, no more work is accomplished. Too much time is wasted on hand-offs and unnecessary communication. No one seems to know who is doing what.*

Delio goes on to describe the extra work created when too many people interact with patients to complete referrals:

*They never seemed to get completed in a timely manner and were generating a tremendous amount of extra work. Patients were calling in requesting updates on the status of their referral. Of course the only person who knew the answer was the referral person and if she was out, the whole process stopped.*
transitioned this task back to the back office, all the rework was eliminated and the referrals were done on the day of the visit. We reduced the waste by reducing the number of people interacting with the process and the patient (Delio, S., 1999).

2. Standardize information and decision-making activities for high-volume processes: e.g., messaging, history taking, appointments, and some refills. Standardization reduces slowdowns caused by repeated approval loops. In addition, standardizing appointment types and their duration significantly reduces confusion for staff while removing the need for authorization of at least some appointments. Standardizing message content saves time because clinical staff won’t have to fill in information gaps.

3. Nearly 80% of the delays in a process are caused by 20% of the activities involved. Focus on where the longest delays occur. In the refill process, for example, they occurred while awaiting physician authorization. How could such delays be shortened? As the most costly human resource in delivering care, it’s appropriate that physicians are the bottleneck or constraint. Shorten such delays by working around the physician constraint to improve the flow.

4. To smooth the flow from information to decision making, gather information once and make sure it waits for staff rather than staff having to wait for information. So-called loopbacks to retrieve missing information interrupt office visits and

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**Figure 2.8 Streamlining The Refill Process**

![Diagram of refill process]

- **Outcomes:** 1-48 hour cycle time
- 14 steps
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 9
  - 10
  - 11
  - 12
  - 13
  - 14

- Standardize information gathering and decision making activities.
- Can any activities be moved outside your system to reduce cycle time?
- The greater the number of steps, the greater the possibility for errors & delays. Can any steps be consolidated or eliminated?
slow down decision making. When such delays occur in the exam room, the resulting bottlenecks can grind other activities to a halt. Make sure charts have needed information before the office visit.

5. Can any activities be moved outside the system to reduce internal process cycle times, such as requesting that patients call their pharmacy for monthly refills as opposed to the physician’s office?

6. Minimize the movement of people and information. Co-locating people doing related processes helps minimize the distance traveled to complete tasks. An inefficient rooming process that shuffles patients from the waiting room to a procedure room for vital signs and back to the waiting room before being called to an exam room is unlikely to be a hit with patients. Hotels don’t inconvenience guests by requiring them to travel from one place to another for checking in, paying the bill, and obtaining a room key; why do healthcare providers? Efficient, patient-focused practices are bringing activities—from taking vital signs to performing lab work and discussing financial arrangements—to the patient, often right in the exam room. (This frequently includes increasing the average number of exam rooms per provider to three instead of two.)

7. Use the most appropriate resource to complete a given process. Are physicians routinely providing details about informed consent for immunizations? Are physicians’ schedules clogged with appointments for minor illnesses like URIs? One integrated delivery network had physicians, RNs, and medical assistants routinely providing the same structured 10-minute prevention counseling session. At some sites physicians did the counseling while at others, medical assistants were doing the same work. Up to 45 minutes of provider time was freed daily when the activity was turned over to medical assistants who have completed a training program in prevention counseling. Physicians occasionally conduct the sessions, but now medical assistants conduct most of them. The result? Medical assistants and physicians now function at a level more appropriate to their skills.

These strategies reflect the lean-thinking approach of eliminating waste during each step of a process, with the goal of avoiding work stoppages and backflows.

Several sites with whom the author has worked have streamlined the prescription refill process for selected medications. Improvements include reducing the number of steps in the process and simplified decision making; for example, nurses are authorized to complete refills for some medications based on standardized protocols. The improvement has simplified refills for nearly 40% of requests. Four steps were removed from the process as well as significant delays:
Before
1. Patient notices that he/she needs refill
2. Patient decides to call to request a refill
3. Patient calls office and refill request message is taken

After
1. Patient notices that he/she needs refill
2. Patient decides to call to request a refill
3. Patient calls pharmacy and refill request message is taken

Improvements: Step 3 has been moved outside the provider office “system.” This change also reduces the number of times the refill request must be recorded from two (at the office and at the pharmacy) to one (at the pharmacy).

4. Request is given to nurse
5. Nurse reviews request (delays of up to 3 hours if nurse needs to clarify request with clerk who took message)
6. Nurse requests chart
7. Nurse reviews chart
8. Nurse sends chart with message to MD

Improvements: “before” steps 8 through 11 have been eliminated; so are delays related to physician authorization. Standardization of refill process reduces potential for error. Message taking has also been standardized, reducing delays. In addition, the number of handoffs and movement of information back and forth have been reduced.

9. MD reviews chart
10. MD authorizes refill (delays of up to 36 hours)
11. MD returns chart and request to nurse
12. Nurse reviews physician documentation and calls in refill
13. Nurse notifies patient that refill has been called in to pharmacy
14. Nurse documents refill in chart
Improving Office Visit Flow

Patient office visits are a major activity for ambulatory care providers. They require significant resources and are often the major source of revenues for a practice. Key steps, from beginning to end, for an office visit might include:

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<table>
<thead>
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<tbody>
<tr>
<td>1.</td>
<td>Patient notices need to seek care</td>
</tr>
<tr>
<td>2.</td>
<td>Patient decides to call for an appointment</td>
</tr>
<tr>
<td>3.</td>
<td>Patient calls to make an appointment</td>
</tr>
<tr>
<td>4.</td>
<td>Arrival and check-in</td>
</tr>
<tr>
<td>5.</td>
<td>Vital signs</td>
</tr>
<tr>
<td>6.</td>
<td>History</td>
</tr>
<tr>
<td>7.</td>
<td>Physical assessment</td>
</tr>
<tr>
<td>8.</td>
<td>Make diagnosis</td>
</tr>
<tr>
<td>9.</td>
<td>Treatment or procedure</td>
</tr>
<tr>
<td>10.</td>
<td>Documentation</td>
</tr>
<tr>
<td>11.</td>
<td>Check-out</td>
</tr>
<tr>
<td>12.</td>
<td>Lab/X-ray</td>
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<tr>
<td>13.</td>
<td>Pharmacy</td>
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The Access Pathway© provides a visual map of patient flow as well as activities or service points that occur during an office visit. Access pathways can be used to explore alternative ways to access care, including mid-level visits, group visits, and self-care. With access pathways, improvement teams can work on specific flow issues as well as desired outcomes. (See Figure 2.9.)

After mapping out the steps in an office visit, consider where the biggest delays and bottlenecks occur at your site. Following are potential improvements that relate to specific activities or service points during an office visit.

<table>
<thead>
<tr>
<th>Steps</th>
<th>Optimizing Flow</th>
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<tbody>
<tr>
<td>1. Patient notices need to seek care</td>
<td></td>
</tr>
<tr>
<td>2. Patient decides to call for an appointment</td>
<td>a. Are patients savvy about deciding when they need a visit versus self-care, thereby reducing requests for unnecessary visits?</td>
</tr>
<tr>
<td>3. Patient calls to make an appointment</td>
<td>a. Does provider time in the office match predictable ebb and flow of patient demand during the week so available appointments match demand?</td>
</tr>
</tbody>
</table>
b. Are there numerous appointment types and lengths? Can appointment types and lengths be simplified?
c. Are scripts used to simplify the appointment process for staff? (See also the Appendix.) Scripts also ensure that a consistent message is communicated to patients.

4. **Arrival & check-in**
   a. Can some steps (such as pre-registration) be completed on the phone before the visit?
   b. Are front and back office staff co-located or working in proximity to reduce the number of steps during a visit?

5. **Vital signs**
   a. Are blood pressure cuffs and scales available in exam room to reduce bottlenecks during rooming?
   b. Are standardized protocols used to define rooming activities for well-baby exams, diabetic checks, physicals, and so on?

6. **History**
   a. Is needed information, like the patient history, taken once and consistently or multiple times and in a variety of ways?

7. **Physical assessment**
   a. Does appointment time mean when the patient arrives or when the provider walks into the exam room? Synchronize appointment time to mean the same time for everyone.
   b. Do other activities compete with patient visit time, resulting in frequent interruptions? Exam room delays create expensive bottlenecks.

8. **Make diagnosis**
   a. Is the provider able to access enough of the right information to make an appropriate diagnosis in a timely way?

9. **Treatment or procedure**
   a. Is access to current prescription drug information at the point of care automated (e.g., via a PDA)?
   b. Are there alternative venues and staff available for in-depth patient education about asthma, hypertension, and diabetes (e.g., nurse visits)?
   c. Is patient input encouraged regarding treatment options?
   d. Can providers quickly and easily indicate that assistance is needed to support staff?

10. **Documentation**
    a. Does the patient receive a thorough explanation of findings?
11. **Check-out**  
a. Can check-out be done in the exam room?

12. **Lab/X-ray**  
a. Is patient travel to ancillary services minimized?

13. **Pharmacy**

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**Figure 2.9 Office Visit Access Pathway**

Outcomes:  
Operational  
Financial  
Satisfaction

---

1. Notice Problem  
2. Decides to Call  
3. Call For Appointment  
4. Arrive & Check-in  
5. Vital Signs  
6. History  
7. Physical Assessment  
8. Make Diagnosis  
9. Rx, Procedure  
10. Document  
11. Check-Out  
12. Lab  
13. Pharmacy

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Additional issues that impact patient flow include:

1. Whether staff works as a team and cross-functions as needed. Having staff cross-function maintains patient flow and reduces waiting time that occurs when activities, such as taking vital signs and making appointments, are limited to certain individuals within a group.

2. Whether work is pushed into the future as opposed to doing it now. Inevitably, returning to complete charting or making a referral requires a brief review or learning curve as a staff member recalls the “how, what, and why” of a given task. When postponed work is handed off to another person, completion is further delayed by a second learning curve. Handing off also increases the potential for error. From referrals to appointments, doing it now saves rework and delays.

3. Whether the number of exam rooms is sufficient to accommodate demand. Some sites are moving to three instead of two rooms per provider to prevent bottlenecks when more services are brought to the patient in the exam room.

4. Whether office layout enables visual access to both work flow and patient flow. Clinica Campesina has redesigned the physical space at a number of its Denver-area sites to improve patient flow. A notable change has been arranging exam rooms around each team’s, or pod’s, “bullpens” where providers and clinical support staff have their desks. Check-in staff for each team is co-located immediately in front of the bullpens, bringing staff and many steps in the care process close together. This enables real-time visual access to patient flow. (See Figure 2.10.)

Even simple measures can streamline patient flow. After trying walkie-talkies and cell phones to facilitate office visit flow with mixed success, we’ve found that five color-coded, stacked plastic flags work best. The flags are moved to the left, right, or perpendicular to the wall outside an exam room. A flag’s direction indicates that a patient is waiting, a provider is in the room, or a certain type of assistance is needed—from the medical assistant (MA), ancillary, or check-out personnel.

5. Whether staff meets or “huddles” each day to review schedule and plan visits. Formally structured huddles with the entire care team can streamline daily planning and coordination of care. Typically, huddles are held for 5 to 10 minutes at the beginning of the day or after lunch. Staff at some sites stand for huddles and find it helpful to hold them in the mid-afternoon to review the next day’s schedule. A key benefit of huddles is that planning work for the day helps minimize the common, costly delays that occur when needed information lags patient flow during office visits.
Activities for individual staff to ensure effective huddles include:

**Medical Assistants**
1. Consider possible bottlenecks that may arise in the schedule (e.g., two high-needs patients scheduled back-to-back)
2. Cancel scheduled appointments for OB patients who have delivered as well as patients who have been hospitalized
3. Ensure that patients are being scheduled for post-partum and newborn care visits
4. Set up procedures and request outstanding labs and reports
5. Make sure needed forms are in charts (e.g., OB visit forms, immunizations)

**Nurse**
1. Consider phone contacts or rescheduling appointments if providers have too many patients
2. Look for potential patients who could have nurse visits
3. Review provider call situation; check to see if any staff out sick
4. Identify potential slots for double booking if needed

*What Works*                        © Suzanne Houck
1. Alert staff to chronic no-shows, chronic late or disruptive patients
2. Do chart prep: Ensure enough blank progress notes, name of patient on all sheets; have new patient sign request for information if possible
3. If available slots, call patients to come in for appointments

**Front Desk**

1. Review list of scheduled patients. Help nurse and MAs plan flow and anticipate patient needs
2. Request needed lab, procedure, or ED reports
3. Let staff know of any potential for double booking

**Provider**

4. Check for patients that always take a lot of time (patients with lots of co-morbidities, complaints, elderly)
5. Check for opportunities to create capacity-scheduled appointments that could be handled by phone
6. Look for opportunities to trade patients to own provider

**Huddle activities above adapted from those of Clinical Campesina.**

If you asked the physicians, medical assistants, clerical, and nursing staff to identify what “needs fixing” regarding office visit flow at your site, what would they say?

At one site with whom the author has worked, no-show rates were between 15% to 20% and patients were waiting up to two-months for an appointment. Nurses were frustrated with wide variations in daily work flow. Physicians complained about lots of appointment errors. Turnover among appointment staff was high. Information was often missing from charts during office visits, and needed supplies were only sporadically available in exam rooms. Providers also spent an inordinate amount of time tracking down support staff when they needed assistance during an office visit. Many visits were for minor illnesses. In addition, 44% of patients were dissatisfied with their time spent waiting during visits. The average cycle time was 72 minutes.

Given these issues what would you advise if asked for assistance by this site’s leadership? (See Figure 2.11.) Where are the most expensive delays occurring? Where would you start with improvement? Four months later the site is off to a very good start. An improvement team has been formed that meets regularly and reports to the group’s executive director.

Appointment types and lengths have been streamlined. Teams of three FTE providers and support staff have formed. As teamwork has grown, staff has also begun to cross-function, sharing responsibility for patients.
Figure 2.11 Improvement Efforts-Four Months Later

Outcomes:
Operational
Financial
Satisfaction

7. Five-question surveys track patient satisfaction monthly; results posted in staff common areas. Goal set to reduce cycle time to 45 minutes and reduce complaints about wait time by 50% within 6 months.

6. Four-color flag system outside exam rooms indicates need for support staff assistance. Providers report delays significantly reduced.

5. MA reviews charts every morning to update needed information, including test results and reports for next day’s schedule. Standardized stocking of exam room supplies.

4. Daily huddles have helped level work flow and reduced frustration for staff.

3. Reduced 12 pages of appointment types and lengths to less than one. Standardized appointment lengths to 15 and 20 minutes and minimized types. Scheduling staff less frazzled; fewer scheduling problems.

2. Site has formed teams of three providers and support staff. Cross-functioning is helping level capacity and reduce double booking. Waits for appointments are shorter. No-shows are down 10%.

1. Shifting some low-intensity visits from physician to nurse visits.

Lots of low-intensity visits (cough, URIs, diarrhea)

No-show rates of 15-20% vs. national average of 10-12%.

Information

Providers complain of spending lots of time looking for support staff to assist during patient visits.

Information frequently missing from charts. Needed supplies and equipment frequently missing from exam rooms during visits.

Nursing staff frustrated with wide intraday variations in work flow.

4. Daily huddles have helped level work flow and reduced frustration for staff.

3. Reduced 12 pages of appointment types and lengths to less than one. Standardized appointment lengths to 15 and 20 minutes and minimized types. Scheduling staff less frazzled; fewer scheduling problems.

2. Site has formed teams of three providers and support staff. Cross-functioning is helping level capacity and reduce double booking. Waits for appointments are shorter. No-shows are down 10%.

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Providers complain of spending lots of time looking for support staff to assist during patient visits.

Information frequently missing from charts. Needed supplies and equipment frequently missing from exam rooms during visits.

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1. Shifting some low-intensity visits from physician to nurse visits.

Lots of low-intensity visits (cough, URIs, diarrhea)

No-show rates of 15-20% vs. national average of 10-12%.
One physician has decided to shift some low-intensity visits to nurse visits. Simple patient feedback cards solicit answers to five questions every month and the results are posted in the staff dining area. The improvement group has set a goal of reducing the 72 minute cycle time to 45 minutes and cutting complaints about wait times by 50% in 6 months. Perhaps most important of all, leadership and staff have begun asking questions about the group’s core values, including “What is the work of our practice?” “Who is our customer?” and “What are the needs of our patient population?”
Chapter 3

‘Seeing’ Capacity & Demand

What Is Capacity?

Physicians and managers frequently ask, “What do you mean by ‘capacity’?” As discussed earlier, capacity is the sum total of an organization’s resources, processes, and underlying values that collectively respond to the needs of a patient population. (See Figure 3.1.)

A site’s resource capacity includes its staff, physical facilities, and equipment. Process capacity includes key activities from prescription refills to patient flow during an office visit. A group’s values influence how resources are used and how processes flow. For example, a practice that places a high value on efficiency might streamline visit cycle times. Values are also reflected in whether providers and staff function in teams or in a more individual “condominium group practice” model.
Historically, the physician office visit has been the engine of human resource capacity that responds to the demand for care. Indeed, for many it remains the gold standard. But that is changing. Some consumers prefer phone advice and self-care to what they perceive as the inconvenience of an office visit for minor illnesses.

Providers seeking to optimize capacity are starting to think and act outside what Dr. Don Berwick of the Institute for Healthcare Improvement (IHI) refers to as “the tyranny of the office visit.” A number of practices are expanding capacity without increasing costs, sometimes even reducing costs. A group in Denver is using protocols and standing orders to treat symptoms for 22 minor conditions, from pediculosis to impetigo and conjunctivitis. Patient waits have decreased and nurses enjoy the added professional challenge. Dr. Kilo’s GreenField Health System has reduced return visits by up to 50% with e-mail care.

A group in Portland has implemented phone visits for some of its geriatric patients to the delight of physicians and participating patients. Other groups encourage diabetic patients to use a self-care book for information on foot care and blood glucose monitoring.

Developing options for patients to access care beyond the traditional physician office visit can also help the bottom line; shifting lower-intensity visits to less costly alternatives enables physicians to attend to more complex visits. A simple model comparing physician office visits with a blend of a physician, group, and nurse practitioner visits as well as self-care follows. It compares provider costs with reimbursement for each option. The model assumes that other overhead costs remain constant.

Assume that Frank Sweet, a patient with diabetes, averages four annual office visits to his primary care physician, Dr. Young. The average reimbursement is $94 per visit (Moore, P., 2004). Assume also that the level of intensity for Frank’s four visits varies, so Dr. Young receives less than $94 for some visits, and more for others. For example, Dr.

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**What Works** © *Suzanne Houck*
Young receives as little as 80% of the $94 average reimbursement for a lower-intensity visit with Frank and up to 130% for a high-intensity visit during the year. However, the average for all four visits is $94.

Dr. Young’s total annual compensation, including salary, benefits, vacation, and time off for education is $200,000. In a year, he works 220 days and averages 18 visits per day for a total of 3,960 yearly visits. The average cost of Dr. Young’s compensation per visit is $50.51 ($200,000/3,960). After subtracting physician costs, the reimbursement revenue to Dr. Young’s practice for each of the visits is as follows:

<table>
<thead>
<tr>
<th>Four MD Office Visits &amp; Revenue Generated</th>
<th>Percent of Average Reimbursement</th>
<th>Reimbursement</th>
<th>Provider Cost</th>
<th>Revenue After Provider Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit 1</td>
<td>80%</td>
<td>$75.20</td>
<td>$50.51</td>
<td>$24.69</td>
</tr>
<tr>
<td>Visit 2</td>
<td>90%</td>
<td>$84.60</td>
<td>$50.51</td>
<td>$34.09</td>
</tr>
<tr>
<td>Visit 3</td>
<td>100%</td>
<td>$94.00</td>
<td>$50.51</td>
<td>$43.49</td>
</tr>
<tr>
<td>Visit 4</td>
<td>130%</td>
<td>$122.20</td>
<td>$50.51</td>
<td>$71.69</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$376.00</td>
<td></td>
<td>$173.96</td>
</tr>
</tbody>
</table>

The reimbursement revenue for all four visits after subtracting provider cost is $173.96.

Dr. Young loves practicing medicine. He has excellent rapport with his patients, who are delighted to have him as their primary care physician. However, Dr. Young is not quite satisfied. He spends much of his day repeating the same advice to many of his patients, particularly those with chronic diseases like hypertension, diabetes, and asthma.

Demand to see him far exceeds the supply of available appointments, pretty much on a daily basis. Dr. Young is frequently double booked and feels overworked. In addition, he feels that he’s not working at his full professional capacity, and wonders if there is an alternative to some of the less complex patient visits. He thinks deeply regarding these issues, confers with like-minded colleagues, and even attends several conferences that focus on medical practice improvement.

A year later, Dr. Young has made some significant changes. A nurse practitioner joined his practice early in the year. Her total annual compensation is $75,000, and she averages 14 visits per day over 230 days for a total of 3,220 visits per year. A number of his patients with chronic illnesses, including Frank Sweet, have started coming in for group
visits. Dr. Young also encourages active patient participation in care and recommends a self-care book to all new patients. In addition, the website for his practice provides links to patient education sites.

Like a number of Dr. Young’s patients, Frank Sweet has become more capable at self-care management. In fact, instead of an office visit for a minor problem that would have brought Frank in the year before, he performed self-care, reducing his number of visits this year to three from the previous year’s four visits. As a result Dr. Young was able to see a new patient during the appointment time slot that Frank didn’t need. In addition, Dr. Young received 100% of the average $94 reimbursement for the visit. Frank also saw the nurse practitioner for one of his visits. (See Figure 3.2.) The financial implications of these changes to Dr. Young’s practice follows.

Figure 3.2 Varying Access: 4 Physician Office Visits Versus Physician Office Visit, Group Visit, Mid-level Visit & Self Care

For group visits, assume that Dr. Young sees a modest 12 patients in 3 hours for an average of 4 patient visits per hour. In addition, assume that reimbursement is at 60% of the $94 average, or $56.40 for each patient seen in the group. Because Dr. Young is able to see 4 patients per hour during a group visit instead of the usual 2.57 patients per hour, the per visit cost of his care drops to $32.45.

<table>
<thead>
<tr>
<th>Blend of Visits &amp; Revenue Generated</th>
<th>Percent of Average Reimbursement for Visit</th>
<th>Reimbursement Provider Cost</th>
<th>Revenue After Provider Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-care</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Open appointment created by self-care is filled</td>
<td>100%</td>
<td>$94.00</td>
<td>$50.51</td>
</tr>
<tr>
<td>Group visit</td>
<td>60%</td>
<td>$56.40</td>
<td>$32.45</td>
</tr>
</tbody>
</table>

What Works © Suzanne Houck
NP visit 85%  $79.90  $23.29  $56.61
MD visit 130%  $122.20  $50.51  $71.69
Total
Revenue difference after provider cost vs. Year 1 $21.78
Difference in percent 13%

Assumptions:

<table>
<thead>
<tr>
<th></th>
<th>MD</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total compensation</td>
<td>$200,000</td>
<td>$75,000</td>
</tr>
<tr>
<td>Workdays per year</td>
<td>220</td>
<td>230</td>
</tr>
<tr>
<td>Average visits per day</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Visits per year</td>
<td>3,960</td>
<td>3,220</td>
</tr>
<tr>
<td>Cost per visit</td>
<td>$50.51</td>
<td>$23.29</td>
</tr>
<tr>
<td>Hours in the office per day</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Average reimbursement</td>
<td>$94</td>
<td>85% of MD</td>
</tr>
</tbody>
</table>

Dr. Young is delighted to hand off Frank’s less complicated visits to the nurse practitioner and enjoys the variety that group visits bring to his work. He also finds that discussing chronic illness issues with patients in groups is much more satisfying than repeating the advice again and again during one-on-one visits. The change has resulted in a 13% increase of $21.78 in net reimbursement after provider costs. While this dollar amount is small, multiplied over hundreds of patient encounters, it can become substantial. In addition, varying how patients access care is helping build teamwork as others, including Frank himself, participate more actively in the care process. Finally, Dr. Young’s renewed enthusiasm for his work has piqued the interest of several colleagues seeking more variety in their own daily practice routines.

It is difficult to construct simple models comparing costs for the various ways to access care. None of the models are perfect. However, because physician costs commonly average about two thirds of expenses for office-based practices, this model provides one practical point of reference when considering alternatives.

In Search of the ‘Ideal’ Staffing Mix

Groups embarking on improvement frequently ask, “What is the ideal staffing mix?” A paucity of data exists regarding staffing for groups engaged in improvement. Through observation, we gathered data about the staffing mix at efficient groups providing care to underserved patient populations. Table 3.1 presents data from those observations as well as data from the Medical Group Management Association (MGMA), whose members reflect traditional office settings. These data should be used only as one point of reference. The needs of a group’s patient population should determine staffing.
Remember, benchmarks aren’t the same as best practices. National averages don’t reflect the unique cultural and social needs of individual patient populations.

### Table 3.1 Sample Staffing Models: Safety Net Providers and MGMA

<table>
<thead>
<tr>
<th>FTE Staff</th>
<th>MGMA*</th>
<th>Better Performing Safety Net Providers**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider***</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RN</td>
<td>.51</td>
<td>3</td>
</tr>
<tr>
<td>Licensed Vocational Nurse (LVN)</td>
<td>.63</td>
<td>0</td>
</tr>
<tr>
<td>MA</td>
<td>.53</td>
<td>1</td>
</tr>
<tr>
<td>Case Manager</td>
<td>0</td>
<td>.3</td>
</tr>
<tr>
<td>Clinical Support Staff: FTE Provider</td>
<td>1.67</td>
<td>1.6</td>
</tr>
<tr>
<td>Medical Receptionist</td>
<td>.85</td>
<td>1</td>
</tr>
<tr>
<td>Medical Record staff</td>
<td>.4</td>
<td>.3</td>
</tr>
<tr>
<td>General Administration</td>
<td>.25</td>
<td>.17</td>
</tr>
</tbody>
</table>

*Medical Group Management Association Cost Survey 2000.
**Data regarding safety net providers is based on the observations of Houck & Associates Inc., not on empirical data.
***MGMA data uses physicians only in defining these ratios; safety net provider ratios commonly include advanced practice nurses or physician assistants as providers.

Staffing often evolves as provider organizations learn from improvement. For example, Alaska Native Medical Center added case managers to its staffing mix to better serve the total health needs of its Native American patients. Clinica Campesina in Colorado also utilizes an internally trained case manager for every three full-time providers. (See also the staffing models described in the response to question 19 in the case studies.)

The average panel size of a practice can be estimated by dividing the number of so-called unique patients seen in the last 18 months by the number of FTE provider staff. A site with 10,000 unique patients and 6 FTE providers would therefore have an average panel size of 1,666 patients per provider. To reflect a lower volume of annual visits, some sites reduce the number of FTE mid-level providers compared to FTE physician providers. For example, a nurse practitioner with 75% of the visits of a FTE physician might be considered a .75 FTE provider.

The average number of office visits reported per year are 2,998 for Internal Medicine, 2,067 for Pediatrics, and 4,382 for Family Practice without OB (Managed Care Digest Series, 2000).
Managing Populations

Patient registries are clinical databases that track care for individuals and populations of patients. Registries can include as few as 30 patients, electronically tracking key clinical information and providing decision support tools. Individual care plans and reminders are also included. Electronic medical records (EMRs) make registries easier to start and use. For sites without EMRs, registries require double entry of clinically important information. Registries enable a population view as well as better clinical monitoring and management for a group of patients. The use of registries also enables feedback to a care team regarding outcomes.

As discussed in the case studies herein, Primary Care Partners in Grand Junction, Colorado, tracks patients with diabetes, dyslipidemia, congestive heart failure, hypertension, and smoking with a registry that’s distributed to physicians and nurses. Clinica Campesina uses registries for diabetes, depression, asthma, chronic pain and prenatal care. To succeed, registries need a clinical champion who sees their value as well as support from IT staff and a group’s leadership.

What Is Demand?

When asked what the work of their practice is, physicians frequently respond, “What do you mean by that question? I come in, check my schedule, and see patients every day. Isn’t that the work?” For most practices, demand—or “the work”—is defined by physician schedules and a never-ending cascade of paperwork and phone calls that together are assumed to be the way it has always been, and the way it will always be. But stepping back to take a more in-depth look at demand may tell a different story.

The work of a practice can be defined as demand for care from all sources. It includes the number of patients cared for and the most common diagnoses of a group of patients. (See Figure 3.3.) Requests for care may vary by day of the week, time of day, and season of the year. Demand may also vary among patients with the same diagnoses, depending on physician practice patterns and patient thresholds for seeking care. The top 10 Family Practice diagnoses are indicated in Table 3.2.
Assume that you recently acquired a busy family medicine practice with 2,000 patients from which all the clinical staff had departed. Only administrative staff remain. You’ve been asked to put together a care team. Would it help to know how many diabetic patients are in the practice? Would it be useful to know the age distribution and psychosocial needs of the patients?

If you wanted to provide the highest quality care to these patients at the lowest possible cost and succeed financially, what mix of MAs, nursing staff, and physicians would you use? Assume that you decide on a mix of 1 FTE physician, 1 FTE medical assistant, and .59 FTE RNs for a total of 2.59 FTEs. (Exclude nonclinical administrative support staff.) In measuring the amount of time that each clinical staff member would bring to the total available clinical “capacity,” for each patient receiving care on a given day, physician time would equal 39% of the total (1/2.59), MA time would also total 39%, and RN time would equal 22% of the total. (See also Figure 3.4.)
Table 3.2 Top 10 Family Practice Diagnoses

<table>
<thead>
<tr>
<th>ICD-9-CM Category</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>401</td>
<td>Essential hypertension</td>
</tr>
<tr>
<td>250</td>
<td>Diabetes mellitus</td>
</tr>
<tr>
<td>272</td>
<td>Disorders of lipid metabolism</td>
</tr>
<tr>
<td>465</td>
<td>Acute upper respiratory infections of multiple or unspecified sites</td>
</tr>
<tr>
<td>V70</td>
<td>General medical exam</td>
</tr>
<tr>
<td>780</td>
<td>General symptoms</td>
</tr>
<tr>
<td>473</td>
<td>Chronic sinusitis</td>
</tr>
<tr>
<td>724</td>
<td>Other and unspecified disorders of the back</td>
</tr>
<tr>
<td>462</td>
<td>Acute pharyngitis</td>
</tr>
<tr>
<td>477</td>
<td>Allergic rhinitis</td>
</tr>
</tbody>
</table>


Assume that the practice has 66 patients with diabetes, 113 with asthma, 160 with heart disease, 228 with hypertension, and 248 with arthritis. (Incidence for these conditions is based on National Center for Health Statistics data.) Assume also that 360 patients are over age 65, 130 patients are clinically depressed, and 60 had more than 10 office visits last year. How well does the assembled clinical “capacity” match “demand” in this practice?

**Figure 3.4 Demand Meets Capacity**

- **Demand**
  - 360 patients are over age 65
  - 60 patients had more than 10 office visits last year
  - 130 patients are clinically depressed
  - 228 patients have hypertension

- **Capacity**
  - 66 patients have diabetes
  - 113 patients have asthma
  - 248 patients have arthritis
  - 160 patients have heart disease

Clinical Staffing of 2.59 FTEs
- 39% of clinical capacity is physician time
- 39% of clinical capacity is MA time
- 22% of clinical capacity is RN time
Does the additional information about the patients in this practice affect how you would assemble your care team? What would the needs of this population be on a daily basis? What kinds of requests would be coming into the office? If 39% of available clinical resource time during office hours is medical assistant capacity, how well does that match what these patients are likely to need? Will more or less than 39% of the patient requests for care require physician skills? The purpose of this example is not to be prescriptive regarding the “right” ratio of physicians versus support staff but to invite dialogue regarding the best use of clinical staff resources given the needs of a patient population.

Do Existing Habits Impact Demand?

It’s Monday morning. The office phones are ringing off the hook with patients requesting appointments and refills as well as advice, not to mention all the forms that need to be filled out. But step back for a moment and consider: How much impact do established office processes and provider practice patterns have on the demand that’s pouring in? Demand can be significantly affected by individual practice patterns and staff work habits such as return visits and prescription refill intervals, cumbersome scheduling rules, and even end-of-visit instructions. One site found that 20% of patients were calling back after office visits to clarify instructions. Sites with which the author has worked report wide variations in standard refill procedures and return visit intervals among physicians.

Table 3.3 is an actual physician’s schedule. What does it suggest about the provider’s habits regarding return visits? How available do you think this provider is to take new patient appointments?

<table>
<thead>
<tr>
<th>Time</th>
<th>Visit Category</th>
<th>Time</th>
<th>Visit Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45</td>
<td>Recheck</td>
<td>1:00</td>
<td>Recheck</td>
</tr>
<tr>
<td>9:00</td>
<td>Recheck</td>
<td>1:15</td>
<td>Recheck</td>
</tr>
<tr>
<td>9:15</td>
<td>Recheck</td>
<td>1:30</td>
<td>Recheck</td>
</tr>
<tr>
<td>9:30</td>
<td>Recheck</td>
<td>1:45</td>
<td>Recheck</td>
</tr>
<tr>
<td>9:45</td>
<td>Periodic health screening</td>
<td>2:00</td>
<td>Recheck</td>
</tr>
<tr>
<td>10:00</td>
<td>Recheck</td>
<td>2:15</td>
<td>Recheck</td>
</tr>
<tr>
<td>10:15</td>
<td>Recheck</td>
<td>2:30</td>
<td>Follow-up OB</td>
</tr>
<tr>
<td>10:30</td>
<td>Recheck</td>
<td>2:45</td>
<td>Recheck</td>
</tr>
<tr>
<td>10:45</td>
<td>Recheck</td>
<td>3:00</td>
<td>Recheck</td>
</tr>
<tr>
<td>11:00</td>
<td>Recheck</td>
<td>3:15</td>
<td>Periodic health screening</td>
</tr>
<tr>
<td>11:15</td>
<td>Recheck</td>
<td>3:30</td>
<td>Recheck</td>
</tr>
<tr>
<td>11:30</td>
<td>Periodic health screening</td>
<td>3:45</td>
<td>Recheck</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:00</td>
<td>Recheck</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:15</td>
<td>Recheck</td>
</tr>
<tr>
<td></td>
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<td>4:30</td>
<td>Recheck</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:45</td>
<td>Recheck</td>
</tr>
</tbody>
</table>
Is the number of annual visits per patient for this provider likely to be higher or lower than the average at other practices? A high volume of recheck visits for minor problems usually results in lower revenues for a practice. Predictably, this provider’s so-called coding bell curve was distorted by a spike on the left side of the curve due to the high volume of lower-level visits. Contrast this with typical physician practice coding patterns that reflect a bell-shaped curve.
Chapter 4

Before You Start—What Matters Most?

Values could be described as what matters most to an organization. In healthcare organizations, they impact what and how things are done and how resources are used in delivering care. In fact, an organization’s values “show up” for patients via its resources and processes. (See Figure 4.1.)

How do values show up? They impact which priorities receive resource commitments. For example, a group that values technology is more likely to commit financial resources to a robust information technology system. A group that places a high value on the care of patients with chronic diseases might commit to using patient registries. Values also show up in the mix of services that a provider organization offers. (See also Figure 4.2.)
Processes reflect values via operational activities. A patient-centered group might bring checkout and lab services to patients in the exam room. Values also show up in the stories told about key leaders and important events in the life of an organization. The selection and dissemination of metrics that are tracked within an organization also reflect values.

As discussed in case study #1, values at Clinica Campesina are communicated in a variety of ways:

Newly hired staff receives an orientation that includes a review of core values. Clinica is a culture of collaboration so there are many meetings in which important leaders are a part of the group where values are communicated. Values are also communicated in how we go about our business as well as how we take care of patients and staff.
Overall agreement among staff and physicians about values or what matters most in a practice establishes a foundation, a touchstone that enables productive discussions as well as important decisions and ways to implement those decisions.

The book, *Good to Great* describes values as part of an extra dimension that is:

> ... a guiding philosophy or a “core ideology,” which consists of core values and a core purpose (reason for being beyond just making money). These resemble the principles in the Declaration of Independence (“We hold these truths to be self-evident”)—never perfectly followed, but always present as an inspiring standard and an answer to the question of why it is important that we exist (Collins, J., 2001).

Values are present in an organization whether they’re developed intentionally or not. If developed unintentionally, they often default to the individual values of a group’s leaders (Silversin, J., & Kornacki, M., 2000). Such values may include “do the right thing,” “work hard,” “first do no harm,” or “work as a team.” In academic settings, teaching and research are highly valued activities in addition to delivering care. Accountability to shareholders is likely to require for-profit healthcare organizations to place a higher value on income than many nonprofit organizations.

An organization’s leaders may have different beliefs regarding key values. For example, the author recently posed the question, “Who is your primary customer?” while leading a workshop with CEOs from five member hospitals of an integrated delivery network in the northeast. An active debate ensued. After 30 minutes, no agreement was reached. Some attendees contended that patients were their primary customers, while others believed that physicians and even insurers were their primary customers.

Problems arise when values among a group’s leaders conflict. For example, strong disagreement might emerge between a medical director seeking to form care teams and an informal leader who deeply values physician autonomy. When strong disagreement persists among leaders over time, subgroups or silos may emerge where a variety of values coexist. However, fundamental disparities over values make implementing a consistent mission, vision, or strategy difficult.

Set aside structured time for dialogue about key values. Include discussions about stated and unstated agreements, particularly with physicians. In the book, *Leading Physicians Through Change: How to Achieve and Sustain Results*, Jack Silversin and Mary Kornacki contend that the difficulty of medical groups to adjust to changes in the healthcare environment is caused by expectations that have become outdated:

*What Works* © Suzanne Houck
Physicians’ understanding of what they “give” can vary from group to group but typically has included delivering quality care as each individual physician defines it and being productive based in part on group norms and in part on individual preference.

The “get” part of the physician compact in most medical groups is based on three foundational pillars: autonomy, protection, and entitlement. These represent what physicians see as the core promise made by the group when they joined (Silversin, J., & Kornacki, M., 2000).

The author has found that frank dialogue with physicians regarding these issues is particularly important when a group is attempting cultural change. Beyond discussion at retreats, resolving values issues requires long-term action from a group’s leadership, particularly its physicians.

Which three to five values matter most to your staff, physicians and management? Do those values reflect how you want to treat patients as well as each other? What does your group stand for? Do your values encompass your uniqueness as a group or are they generic? Avoid bland statements that could just as well describe a bank or an accounting firm. Generalities like “we care” are clichés.

Mission and vision statements flow more easily when values are clearly defined and consistent. While mission statements reflect what an organization would like to be, culture reflects the current reality, via behaviors and norms. An effective values statement can be used as a standard for selecting improvement initiatives, helping ensure that they don’t sidetrack what’s really important.

Values statements also enable commitment to measurable performance goals.

For example, a values statement declaring that an organization will “delight patients, provide a place where staff loves to work, achieve world-class clinical outcomes, and be profitable” might commit to the following performance goals:

1. A rating by 95% of patients that they would refer a friend or family member
2. A rating by 95% of the staff that the site is a great place to work
3. Revenues that exceed expenses by 5%
4. Clinical outcomes that meet or exceed HEDIS indicators regarding immunization, mammography, and diabetic indicators
In the article “Managing by Commitments,” Sull describes the link between organizational commitments and personal values:

A commitment is not an impersonal proclamation issued by a faceless bureaucrat. It is a highly visible action, promise, statement, or decision made by an individual and closely associated with that person. To succeed, it must be consistent with the manager’s ethos—her personal values and past action (Sull, D., 2003).

While simple values and commitment statements can spread quickly throughout an organization with minimum confusion, complicated statements can easily get distorted beyond recognition. Wondering if a value or goal is easy to remember? Consider whether it passes the so-called elevator test.

Imagine that someone from your organization encounters a friend whom they haven’t seen in a while on an elevator. Imagine also that the friend asks why he or she likes working for your group. Are your organization’s goals and values simple enough for the employee to recall? More important, do your organization’s values have genuine meaning for that employee?

Avoid developing a values statement out of obligation or without serious dialogue. If stated values don’t resonate deeply with staff, they’ll quickly be forgotten. In developing GreenField Health System, a redesigned clinical office practice model, Dr. Chuck Kilo spent weeks with his staff to intentionally identify the values of: innovation, humility, trust, fun, and generativeness. (See Table 4.1.)

How many physician practices embrace fun and humility as core values? These five words say worlds about the uniqueness of GreenField and are easier to recall than long values statements. Innovations like patient e-mail and the absence of a waiting room flow naturally from GreenField’s intentional values.

**Table 4.1 GreenField Health System Core Values**

- Innovation
- Humility
- Trust
- Fun
- Generativeness
The following exercise helps identify the relevance of values, their relationship to finances, and the impact of values on resources and processes. The exercise can be done separately by individuals or in smaller groups that then share results within the larger group.

If you were given $10,000,000 (or whatever dollar amount it might take) to turn your organization into the number one choice for patients, physicians, staff, and payers within two years, what would you do? Which actions would you take? Be as specific as possible. Don’t hold back. Map out the activities on the values exercise that follows. (See Figure 4.3.) With circles on the matrix, indicate the activities based on their cost and importance. Once you’ve detailed the activities, answer the questions below. This exercise generates useful dialogue regarding how values relate to costs, resources, and processes.

1. Which actions relate more to values than resources and processes?
2. Do the actions related to values tend to be more important or less important?
3. Do the actions related to values tend to be more costly or less costly?
Chapter 5

Getting Started

Where to start with improvement? First, consider what operational, satisfaction, and financial results matter to you as a group. What matters to your patients? What specific, measurable goals would you like to achieve this month and this year? (See Figure 5.1.)

Do a casual walk-through at your site. Notice where work can be seen piling up. Is some staff frequently idle while others scramble to keep up with work flow? Does work come in batches or one item at a time? Are there numerous appointment types and lengths? Are reports and papers stacked in piles to be filed into medical charts? Do providers frequently have to leave the exam room during a visit to find information that’s missing from the chart? Do patient waits drag on during office visits? Are patients waiting for long periods in phone queues? Are there long waits for prescription refills? These are potential places to start.

List the steps involved to complete key processes in your practice (e.g., office visits, refills, and test results). In most practices, five to seven processes account for 80% of the work flow. Where do bottlenecks impact other processes and resource utilization? Where can decision making be simplified?
Getting Started

As mentioned earlier, many groups begin with ensuring timely information flow through simple process improvements. These include initiating morning huddles, standardizing rooming criteria, or making sure that needed information is in the chart at the start of each session. Initial steps like these don’t require major resource commitments. But taking these steps builds momentum and a sense of possibility. Table 5.1 can be used to solicit staff input when deciding where to begin.

Sites vary with their sequence for improvement even within the same network. As noted in the case study herein, Cory Sevin, VP of Operations at Clinical Campesina reports:

The improvement sequence varied among sites. At one site we initiated alternate visits; at another, office efficiency; and at a third, open access. At one site, we worked on redesigning the physical structure first and at another, staff attitudes. It took about three years to get all three sites redesigned, from attitudes to infrastructure to physical structure.

Active Support from Leaders

Active support from formal and informal leaders is essential to the success of sustainable improvement. In the author’s experience, at least two thirds of an organization’s key leaders must support improvement efforts and be willing to take action to ensure success. This includes senior management and medical staff leaders. Without such support, improvement efforts have a much lower likelihood of success.
Leaders can enable improvement by:

1. Emphasizing the importance of the improvement team’s work to all staff
2. Dropping in to communicate support at team meetings and the work areas where improvement is occurring
3. Enabling success early to establish momentum. Leaders may have to ensure access to data, and be available to the team
4. Visibly celebrate gains throughout the organization via events and public forums
5. Give permission for the improvement team to “break-up” old processes, thinking, and ways to use clinic resources
6. Be willing to act to remove barriers to change

Relentless shepherding of improvement is the fundamental work of management according to Dr. Doug Eby, vice president of Medical Services, who helped lead successful operational redesign at the Alaska Native Medical Center (ANMC):

> The steady drumbeat, reminding staff of what was decided and putting structures and systems in place that make it easy to “do the right thing” is central to the work that management must do for success to be sustained. There will be many competing demands on time and money. There will be many logical, persuasive arguments made for adopting programs that are not part of the same system being put in place. Management must

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Table 5.1 Selecting & Prioritizing Improvement Activities

We’d like to know your opinions about what needs improvement. Please prioritize the following items on a scale of 1-5, 1= a significant problem, 3= moderate problem, and 5= not a problem. In addition, please feel free to include your comments as well as additional items that need improvement. Thank you.

<table>
<thead>
<tr>
<th>Item</th>
<th>Priority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Visit cycle time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Specific delays during visit (e.g., patient wait in exam room)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Wait for appointments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Seeing my own patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Rx refill volume and delays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Advice/triage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Messaging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Referrals</td>
<td></td>
<td></td>
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<tr>
<td>9. Billing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Reporting test results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Responding to patient complaints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Information missing in charts during office visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Appointment no-shows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Coding</td>
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always keep referring back to the priorities set and systems agreed upon and keep everyone on task until the new way becomes completely ingrained and integrated into everyone’s thinking and day to day operations (Eby, D., 2002).

The “steady drumbeat” of Dr. Eby and his colleagues has transformed ANMC. The percentage of patients who can see their provider of choice has increased from 15% to 75%, patient and staff support for redesign has been overwhelming, and improvements have been dramatic in quality indicators such as Pap smears, mammograms, and immunization rates. In addition, appointment no-show rates have dropped from 23% to the single digits.

Ann Lewis, executive director of CareSouth Carolina, Inc., describes how leadership involvement in improvement developed over time:

Leadership has been crucial. In the beginning leadership paid an obligatory role until the “light went off” and improvement was seen as a key strategy of the organization as a whole, not just by condition or by site. (See also Case Study #5)

Leaders at sites that have achieved success describe the breakthrough moment when a culture of improvement has reached critical mass. It is that moment when staff, from physicians to clerks, truly believe in and can describe the system to new employees and colleagues.

A Sense of Urgency

There are groups with good cultures, leadership, and staff who are unable to initiate or sustain improvement. The missing ingredient? A sense of urgency. Without a genuine sense of “we’ve got to do something,” improvement activities have trouble even getting launched. The status quo should be made less attractive than the unknown. Beyond data and analysis, facts that generate strong feelings and motivation are needed to sustain change. In the book *The Heart of Change*, John Kotter describes a sequence of “seeing” and “feeling” to create a sense of urgency for change:

1. See: compelling, eye-catching, dramatic situations are created to help others visualize problems. This could be a video of an angry but important customer.

2. Feel: The visualizations awaken feelings that facilitate useful change or ease feelings that are getting in the way. Good
Getting Started

analysis rarely motivates people in a big way. It changes thought, but how often does it send people running out the door to act in new ways? Motivation is not a thinking word; it’s a feeling word (Kotter, J.P., 2002).

The Improvement Team

Your improvement team is the vehicle that actively shapes change and makes it visible. The team should include staff from all disciplines involved in the process that requires change. For example, a medical assistant, physician, clerk, and RN might be involved in the goal of reducing delays in rooming patients. The team’s membership may change over time, depending on the goals you set out to achieve.

Your team needs the authority to initiate change, to test change rapidly, and time for regular meetings. Access to existing data is also essential.

The team should include at least one individual who has practical, ongoing knowledge about the issue or process that needs improvement. Preferably, this should be someone who “lives” with the process day in and day out as opposed to just “living in the neighborhood.” In addition, this individual should be motivated to act daily to move the improvement project forward.

The improvement team should also include someone who is authorized to initiate change. Without this individual, team members will become frustrated easily and the process may lose momentum. Finally, the improvement team needs a participant who understands the overall processes of work flow and care delivery.

Key functions of team members may overlap. For example, one individual may not only have the authority to initiate change but also work daily in the process that needs improvement.

One final point regarding language about change. Providers and staff can sometimes get overwhelmed with the tasks of “re-engineering” and “redesign.” The author has found that the term sustainable improvement has met with more acceptance, creating a greater sense of possibility.

Identify Measurable Goals & Consistent Structure

To generate momentum and support for improvement, start with a simple, measurable goal that improves parts of your overall operations, including a timeline to achieve it. After choosing a goal, consider the processes that occur in your clinic that relate to the goal.
Identify what you would like the results of a specific improvement process to
demonstrate. Then select specific measures to quantify your gains. Use sampling over a
short period of time rather than waiting for comprehensive data.

Use a structured improvement process like PDSA (Plan, Do, Study, Act) cycles to rapidly
test changes. PDSA enables an ongoing cycle of improvement and learning. Developed
by quality leader, W. Edwards Deming, its strength is that it can be learned and quickly
applied to long- or short-term goals. The “plan” phase involves identifying goals,
selecting how success will be measured, and planning activities. During the “do” phase,
participants take action and apply knowledge to pursue stated goals. In the “study” phase,
results are evaluated for improvement. Problems and lessons learned are also reviewed.
During the “act” phase, lessons learned are woven into daily work. Evaluation regarding
how to improve the cycle is also done (Scholtes, P., 1998).

In e-mail correspondence to the Institute for Healthcare Improvement (IHI) listserv (Oct
14, 2003), founder Dr. Berwick suggested the following to design and test small
improvements:

\[ \begin{align*}
\text{a. Find out if anyone else has done this successfully, to which the} \\
\text{answer is almost certainly, “Yes,” and seek more information on} \\
\text{their processes—start from existing knowledge.}
\end{align*} \]

\[ \begin{align*}
\text{b. Set up a small scale trial of 5 patients, and see how it goes,} \\
\text{observing lessons for future improvement of the new process.}
\end{align*} \]

\[ \begin{align*}
\text{c. Stratify the question....Instead of asking, “Will it work well?”} \\
\text{ask, “For whom might it work well?” and focus a PDSA cycle} \\
\text{there. Work from optimism, and find the possibilities. Can we} \\
\text{learn our way to an effective innovation?}
\end{align*} \]

Remember that long improvement cycles can dissipate energy and enthusiasm. If there’s
disagreement within the team regarding which changes to make first, select several that
can be tested and learned from rapidly to see what works. Make sure that short tests move
you toward your goal. Finally, communicate with senior leadership regarding initial
goal(s) to get feedback and support.

**Start a ‘Stop Doing’ List**

Wondering where the time will come from to work on improvement? It’s likely that most
of you have ever-expanding “to do” lists. Consider starting a “stop doing” list. Are there
meetings that you regularly attend that could go on without you? Functions that could be
discontinued or done just as well by someone else? In studying great companies, Jim
Collins found that managers who built great organizations made as much use of “stop
doing” lists as “to do” lists, exhibiting discipline to unplug unnecessary activities
(Collins, J., 2001).

**Consensus Versus Agreement**

For some improvement teams, especially early on, decision making is an issue. Is
consensus or agreement required to initiate action? While an organization’s leaders need
to agree on core values, frontline management and staff working to reduce waiting room
delays don’t need a unanimous vote about how to initiate change. Consensus versus
agreement can enable action and momentum toward sustainable improvement.

Consensus means that everyone in a group is heard. It does not require a unanimous vote.
Consensus means that differences are viewed as helpful, not that everyone must agree
before action can be taken. Consensus requires that team members who disagree about an
activity should propose another option—not stop the process. Finally, consensus means
all members support as well as share responsibility for implementing the action selected.
Table 5.2 contrasts what consensus does and doesn’t mean.

**Table 5.2 Defining Consensus**

<table>
<thead>
<tr>
<th>Consensus Means</th>
<th>Consensus Does Not Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>• All group members contribute</td>
<td>• A unanimous vote</td>
</tr>
<tr>
<td>• Everyone’s opinions are heard</td>
<td>• The results are necessarily everyone’s first choice</td>
</tr>
<tr>
<td>• Differences are viewed as helpful</td>
<td>• Everyone agrees</td>
</tr>
<tr>
<td>• Everyone can reshape an issue</td>
<td>• Conflict or resistance will stop the process</td>
</tr>
<tr>
<td>• If a member disagrees, he or she must propose an option</td>
<td></td>
</tr>
<tr>
<td>• All members share and take responsibility for implementing the final decision</td>
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</table>
Chapter 6

Are We There Yet?

Practical Metrics Track Results

Tracking and sharing metrics help identify progress as well as new opportunities for improvement. Sharing improvements also helps sustain momentum and boost morale. Metrics indicate current operational, financial, and satisfaction outcomes as well as progress toward stated goals. (See Figures 6.1 and 6.2.) Make sure there’s a balance among the types of metrics that you decide to track; don’t just focus on financial or clinical measures, be sure to also include satisfaction metrics.

Operational metrics include appointment no-show rates, average RVUs which measure the complexity of a visit based on coding data, and cycle time, a measure of total time in the office from walk-in to walk-out. Other operational metrics include percentage of appointments open, how often a patient sees his or her own provider, and wait time for an appointment. Measuring the waiting time for third available appointments helps ensure accuracy in the event that an opening may have been created by a recent cancellation.
Clinical metrics include immunization and mammography rates as well as the percentage of patients with diabetes who receive foot checks, HbA1c averages, percentage of patients with congestive heart failure (CHF) on ACE inhibitors, and HDL and LDL cholesterol levels.

Financial metrics include expense and revenue trends as well as net income. Relative Value Units (RVUs) are increasingly being used to measure productivity. Some metrics overlap. For example, visit cycle time is a satisfaction as well as an operational efficiency metric.

Satisfaction metrics can include the percentage of patients who would recommend the site to a family member or friend or the percentage of staff who would rate the practice as a great place to work. (See also Chapter 10: Managing the Patient Service Experience.)

In addition to specific patient satisfaction metrics, consider the patient as customer also when selecting operational and financial metrics. For example, advice and triage measures might track the percentage of patients whose issues were addressed in a single call as well as the length of calls and the number of calls per RN. Financial metrics might track the number of patient complaints to billing as well as net income.

One note of caution: Sometimes when folks start measuring it’s hard to stop, particularly when robust IT systems and support are available. Occasionally, sites get buried in too much information. The result? Staff who are tracking metrics become overwhelmed and lose enthusiasm; then momentum for change gets bogged down. Limit metrics to so-
called news you can use to ensure momentum. Limit the number of metrics to four to six key indicators at least initially. Increase the number of metrics as improvement efforts become more robust.

**Figure 6.2 Metrics Track Progress & Results**

<table>
<thead>
<tr>
<th>Resources</th>
<th>Processes</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>Financial</td>
<td>Satisfaction</td>
</tr>
</tbody>
</table>

Use small sample sizes to identify baselines as well as improvement gains. For example, tracking the number of patients who would recommend the site to family or friends from a sample of 50 responses won’t yield research for a new textbook. However, it will provide practical information that’s “good enough” as a current overall measure of patient satisfaction. Track current state, baseline data, planned action, and results in a simple table and post it in a staff common area.

One site with whom we worked found that inaccurate demographic information was a chronic source of frustration. Providers, pharmacists, and support staff were making numerous calls just to identify correct patient phone numbers. In addition, patient bills were being returned because of inaccurate addresses. The improvement team defined a standard set of demographic data to keep current. They then conducted a baseline survey and found that 30% of charts contained outdated demographic information. A consistent process was identified for verifying the information and a goal was set to achieve 95% accuracy in two months. The improvement identified and removed an unnecessary step in registration and the team achieved 97% accuracy within three months. Providers and billing personnel were delighted and support staff appreciated the elimination of an unnecessary step. In the future, chart samples will be conducted quarterly to track sustainability of the improvement.

A number of the sites in the case studies following Chapter 10 use hard copy and “electronic data walls” to share metrics. Clinica Campesina reports:

We track measures monthly and have them posted on data walls at each site. In addition, we are working on publishing measures monthly that will relate to an incentive plan for all staff. We
select metrics based on evidence (when there is some), importance of the measure to what we are trying to accomplish and the ability to set up a system to gather and report the measure. We are measuring time to third available appointments, productivity per pod and per provider and a variety of outcome measures for diabetes, asthma, depression, immunizations and prenatal care.

Physicians and staff at several sites with which we’ve worked were pleasantly surprised to discover that no-show rates had dropped by 50% and visit volume was up 11% after moving to transitional open access scheduling. The sites had not been tracking this data and the news gave a big boost to improvement efforts.
Chapter 7

Balancing Capacity & Demand

Too much demand in relation to capacity creates chaos in a practice as staff and physicians scramble to keep up with the work. In fact, providers commonly report that they are understaffed in the face of unpredictable and insatiable demand for care. However, groups that dig deeper are often surprised to find that much of demand is predictable. In addition, many groups find ways to leverage existing capacity. In matching demand with capacity, several key issues need to be addressed:

- Make sure demand doesn’t exceed capacity
- Leverage teams to ensure timely access
- Match resources with predictable variations in demand
- Remove internally generated variation in demand
- Standardize appointment lengths and types
Make Sure Demand Doesn’t Exceed Capacity

Mary Smith, a patient with diabetes, receives care at a very busy group practice. Appointments are at a premium and her physician, Dr. Julia Goodwill, works part-time. Unfortunately, Dr. Goodwill’s panel size exceeds her capacity; she has more patients than she has time to care for them. As a result, every day someone is unhappy. It may be a staff person who is overworked or a patient like Mary Smith who frequently waits eight weeks for a routine appointment. And Dr. Goodwill herself is chronically unhappy because there’s just too much work. This situation will continue until Dr. Goodwill’s panel is “leveled” to match her capacity. Ways to level capacity include closing the practice, adding an advanced practice nurse to her team, or transferring some patients to other physicians. So-called hidden capacity can also help to balance capacity with demand. Sources of hidden capacity include shifting some physician visits to nurses, handling some visits by phone, lengthening intervals for future visits, and enabling patient self-care.

Open access pioneers, Dr. Mark Murray and Catherine Tantau, RN, found that an average of between 0.006 and 0.008 patients in a primary care provider panel will call requesting care on a given day. Table 7.1 is a helpful tool for measuring requests for care from all sources.

Murray and Tantau also found that despite long waits for appointments, if the waits are consistent over time (e.g., three weeks over the past six months), then supply and demand are probably in equilibrium. If they are in equilibrium, then removing inefficiencies and reducing the so-called backlog of appointments can open up a provider’s schedule and enable same-day access to care.

Measuring Demand

To determine demand, measure all requests for care for one week. (See also Table 7.1.) It’s a good idea to repeat measurements quarterly to monitor changes in demand. In addition, demand usually increases during the winter months and drops in the spring. Once demand data are collected, they can be compared with those of provider capacity to assess whether demand exceeds capacity or capacity is sufficient to meet demand.
When an appointment is requested by patients who call or walk into a site, staff measure demand by marking in the correct box in the Demand Measurement Tool. Each staff member who actually schedules appointments for patients should use this tool. In addition, each person who makes appointments should use a separate form for each doctor or nurse practitioner for the whole week. If the front desk staff and triage nurse are both making appointments, they should each have their own copies of this tool at their desks. The person who actually schedules the appointment for a patient should check the appropriate box on the form. For example, if a patient with an upper respiratory infection calls the front desk for an appointment and is transferred to the nurse who actually schedules the appointment, the nurse, not the person at the front desk, checks the appropriate box.

To accurately measure when a patient would *like* an appointment as opposed to when he or she can *get* an appointment, staff members must sometimes change what they say to patients. To measure the request for an appointment versus the scheduling of an appointment, it’s important first to ask the patient, “When would you like to come in?” Then document each patient’s response on the measurement tool. Why? Clogged schedules frequently force appointments into the future, while a patient may prefer to be seen today.

To document demand, staff making appointments need to:

1. First find the day of the week box indicating when the patient calls. Day of the week boxes run along the left side of the tool and are labeled, *Contacted You On Monday* etc. for each day of the week.

2. Next, ask when the patient *requests* an appointment. Make a check mark in the box for the day that a patient requests an appointment and whether the appointment is requested for the morning (AM) or afternoon (PM).
   a. Check *Requests Appointment for Today* in the PM box if that is the patient’s preference.
   b. Check *Requests Appointment for Tomorrow* in the AM box if that is the patient’s preference.
   c. Check *Requests Appointment for After Tomorrow* in the AM box if that is the patient’s preference. The appointment may be for anytime in the future that’s after tomorrow.
Don’t count patients who called and were seen today and then request a return visit appointment (e.g., if the provider has told a patient after the visit to return in a week or a month). Why? You want to count a patient only one time each day. If you count the patient twice, it looks like he or she wanted to come in twice on the same day.

Check face-to-face or phone request: If the patient calls, it’s a phone request. If he or she walks into the clinic (walk-ins), it’s a face-to-face request. Check Sent to UC or ED if a patient is sent to urgent care or the emergency department.
Don’t count people calling in to cancel or reschedule. Remember, what you are trying to measure is all requests for care from patients who walk in or call.

Before you begin using the demand measurement tool, practice with it first by answering the following questions and checking the correct box on the form. It is a good idea for the group to take some time to compare answers.

1. A patient calls your office on Tuesday and asks for an appointment that afternoon. You schedule an appointment for Friday afternoon. Which box would you mark?

2. A patient with symptoms called and was seen today. Before leaving, he stops by the front desk to make a follow-up appointment. Should that appointment be counted? Why or why not?

3. A patient walks in on Monday and requests an appointment for Wednesday morning. Which box would you check?

4. If two people at the front desk and a triage nurse all are making appointments for patients, how many of them should be using the tool?

5. If two physicians and one nurse practitioner are working on Wednesday, how many demand measurement forms should each front desk staff member who’s making appointments have?

Answers:
1. Check mark goes into Tuesday’s Requests Appointment for Today, in the PM box. It helps to look first for the box across from the day you were contacted.

2. The patient’s follow-up appointment should not be counted. Counting the follow-up appointment as well as the same day appointment would indicate a demand for two appointments on the same day.

3. Check mark goes into Monday’s Requests Appointment for After Tomorrow, in the AM box.

4. All three people should be using the tool.

5. Each front desk staff member should have one demand measurement form for each of the three providers.
Leverage Teams to Ensure Timely Access

Successfully improving access to care requires that provider capacity be available when patients request care. For example, if Dr. Harry Nevus is in the clinic only on Mondays and Tuesdays, continuity is disrupted when his patient, Frank Smith calls with gastroenteritis and wants to be seen on Wednesday. The solution? Dr. Nevus is part of a team that shares responsibility for Frank’s care.

Formalized teams of up to three FTE providers and support staff enable small systems within a group to develop shared knowledge of patient needs and preferences. When teams have more than three FTE providers, communication among members and shared knowledge of patients becomes difficult. The continuity provided by teams builds relationships between patients, providers, and staff. Team members also report that understanding each other’s work habits improves work flow.

Effective teams are even more important when sites seek to implement open access or transitional open access. After initial implementation, patients are happier as unclogged schedules cause no-show and cancellation rates to drop. However, providers and staff who have scrambled daily to ensure same-day access without first forming teams often complain that “it feels like we’re working in an urgent care clinic.” It is strongly recommended that sites choosing to implement open access or transitional open access first form teams. Why? An important function of teams is shared responsibility for all patients even though a patient may have a relationship with an individual provider within the team. Formalized teams help smooth out the work flow. They enable load leveling among team members when swings in demand occur. In the author’s experience, developing teams before initiating open access makes implementation go far smoother.

How to select teams? As discussed earlier, first consider the needs of your patient population. Are there a high number of geriatric patients who may need case management and could benefit from group visits? A high number of patients sharing a particular ethnic background who would benefit from bilingual team members? If your patient population has a large number of patients with chronic diseases, would an advanced practice nurse be a good choice to help with care for those patients? What would the right team look like given the needs of your patient population?

Next consider daily coverage during office hours to ensure patient access. Remember that demand for care usually varies by the day of the week. How does demand for care vary at your site? Then determine compatibility among providers. Some groups survey providers and staff informally to identify personal preferences regarding the composition of teams.

Criteria for selecting physician and other staff members for each team include the ability to provide coverage five days a week. While some sites have formed same-sex provider teams to accommodate patient preferences, doing this is not an absolute requirement for a successful team.
Grumbach and Bodenheimer found that team cohesiveness positively affected outcomes:

Teams with greater cohesiveness are associated with better clinical outcome measures and higher patient satisfaction. In addition, medical settings in which physicians and nonphysician professionals work together as teams can demonstrate improved patient outcomes (Grumbach, K., Bodenheimer, T., 2004).

Recent British research found that better teamwork is associated with better processes of care for patients with diabetes. The study also found that teams improve continuity of care, access, and patient satisfaction (Campbell, S., Hann, M., Burns, C., Oliver, D., Thapar, A., Mead, N., Safran, D., Roland, M., 2001).

**Match Resources with Predictable Variations in Demand**

Matching provider and staff schedules with predictable variations in demand facilitates access. It also helps prevent potential mismatches between available staffing and demand for care on a given day of the week. In the author’s experience, about 30% of requests for care occur on Monday in primary care, more than any other day of the week. Although teen clinics often have higher demand on Fridays, some groups experience the lowest demand for care on Fridays. In addition, seasonal spikes in demand for primary care usually occur during flu season and before school starts in the fall.

While total capacity at a site may be sufficient to match demand, daily variations in demand versus capacity can still occur. Figure 7.1 compares daily variation in capacity and demand averaged over several weeks at one site. The graph indicates that the greatest number of requests for care occurs on Monday, followed by Wednesday, with the lowest number of requests occurring on Friday.

When total demand was measured at this site, it was not found to exceed capacity. However, inter-day variation in capacity and demand during the week can make total demand and capacity results misleading. In fact, there is a significant mismatch between capacity and demand on Monday, Thursday, and Friday. At this site, Monday, the day of lowest provider capacity for the week, also has the highest demand for care. In contrast, physician capacity on Thursday and Friday exceeds demand. Until fundamental capacity resource issues like this are addressed, efforts to improve access are not likely to succeed.
Remove Internally Generated Variation in Demand

Removing internally generated variation in demand improves work flow and can also impact patient satisfaction. A review of chemotherapy infusion volume at an oncology practice found low volumes on Mondays. (See Table 7.2) This caused a significant drop in the volume of work for staff on Mondays and a lopsided increase on other weekdays. In addition, patients who were employed and requested infusions on Mondays often could not be accommodated. The problem was due to the absence of an onsite laboratory. Lab tests usually had to be drawn the day before chemo infusions and, because lab staff did not work on weekends, only stat lab results were available on Mondays. The apparent drop in demand on Monday was actually provider generated (i.e., due to no onsite lab). The addition of basic lab equipment and staffing to conduct CBCs and chemistry profiles enabled a smoother work flow as capacity leveled between Mondays and other weekdays.

Table 7.2 Daily Chemo Infusion Volumes

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>23</td>
<td>30</td>
<td>32</td>
<td>38</td>
<td>130</td>
</tr>
</tbody>
</table>

Standardize Appointment Lengths & Types

Another important step in balancing capacity with demand is to standardize appointment lengths and types. Why? Numerous types and lengths result in long queues of patients.
waiting to be seen in some appointment categories (e.g., physicals, rechecks, new patients). In addition, complicated appointment rules create serious frustration for scheduling staff, often resulting in high employee turnover. At one small group practice, the duration of visits included 10, 15, 20, 30, 45, 50, 55, and 60 minutes. Instructions included “ask physician,” “1:15 or 5:30—1 per day,” “no Mondays,” and “will not see on days when on call, after vacation, or after a holiday.” Before streamlining appointment types and lengths, another group had 61 pages of appointment rules.

Standardizing appointment lengths to 20 minutes (except for procedures, which can be scheduled for 40 minutes), or 15 and 30 minutes, also simplifies the appointment process. While 20 minutes may seem insufficient for complex patients, most providers are able to catch up by those appointments requiring less than 20 minutes.

Using scripts to standardize the appointment process also helps reduce access delays for patients and confusion for staff. Scripts are made easier for staff when consistent policies exist among providers about scheduling same-day appointments, allowing double booking, appointing a provider when another is absent, as well as dealing with patients who repeatedly are no-shows. See the Appendix for sample appointment scripts.
Chapter 8

Improving Access

Office visits provide the most common in-person contact between providers and patients. Delays in access, particularly for non-urgent visits, are a common patient complaint. In addition, long waits for appointments increase no-show rates, which are costly and result in significant amounts of rework. Table 8.1 compares work steps when patients do or do not show up for appointments.

Open access scheduling, also referred to as “advanced access” scheduling, promises same-day visit access. Simply put, the open access concept assumes that if the demand for care does not exceed capacity, then simplifying the appointment process, removing inefficiencies, and improving how office resources are used, will allow most patients to be seen on the day they call to request an appointment. Initiated first at Kaiser Permanente in Roseville, California, by Dr. Mark Murray and Catherine Tantau, RN, open access and various forms of the concept have been implemented nationwide.

Open access has been both hailed as a panacea and criticized as a failure. Why the disparities? In our experience, the most common cause is that groups underestimate the time and effort required to sustain open access. Beyond a simple change in the scheduling process, open access creates a strong incentive to do today’s work today as opposed to pushing it into the future. Instead of patients’ conforming to provider schedules, provider schedules conform to patient requests for care. Open access requires a group to rapidly deal with the demand for care as it happens today; a tall order for groups beset by long-standing waits that have come to be considered simply normal operations. Commenting about the challenges of implementing open access, one medical director stated, “Open access is the marathon of improvement projects. It pushed the envelope on everything. We should have fixed other things first.”
Wondering if your practice has lots of waits and delays? Spend some time during your workweek listening and observing the flow of work. If a patient calls at 1 p.m. and wants to be seen today, does the triage nurse refer the patient to urgent care or make a same-day appointment with his or her own physician? Do patients who request physicals routinely wait more than a month for an appointment? Waits are indicators of work being pushed into the future.

**Table 8.1 Work Steps for Patients Who Show Up For Appointments Versus No-Shows**

<table>
<thead>
<tr>
<th>Steps When Patients Are No-Shows</th>
<th>Steps When Patients Show Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make appointment</td>
<td>1. Make appointment</td>
</tr>
<tr>
<td>2. Pull chart</td>
<td>2. Pull chart</td>
</tr>
<tr>
<td>3. Complete “out chart” and visit encounter forms</td>
<td>3. Complete “out chart” and visit encounter forms</td>
</tr>
<tr>
<td>4. Deliver chart to clinical area</td>
<td>4. Deliver chart to clinical area</td>
</tr>
<tr>
<td>5. Collect no-show charts</td>
<td></td>
</tr>
<tr>
<td>6. Attach routing slip</td>
<td></td>
</tr>
<tr>
<td>7. Route chart to provider</td>
<td></td>
</tr>
<tr>
<td>8. Provider reviews chart to decide disposition</td>
<td></td>
</tr>
<tr>
<td>9. Chart collected</td>
<td></td>
</tr>
<tr>
<td>10. Chart redistributed to nurse or clerk, depending on disposition</td>
<td></td>
</tr>
<tr>
<td>11. Call patient, write, or do nothing</td>
<td></td>
</tr>
<tr>
<td>12. Document disposition in chart</td>
<td></td>
</tr>
<tr>
<td>13. Return chart to medical records</td>
<td></td>
</tr>
<tr>
<td>14. File chart</td>
<td></td>
</tr>
</tbody>
</table>

**The Case for Transitional Open Access**

Access improvement is easier to sustain when it’s done in steps or phases. Think of access improvement as a continuum, beginning with easier steps and progressing to more challenging ones. (See also Table 8.2.) First balance capacity and demand, then proceed to transitional open access, followed by advanced access.
The leap to advanced access puts significant demands on clinical resources and operational processes. It may challenge cherished values about work habits. In fact, a comprehensive article on the topic declares that, “open access is a radical departure from how most physicians are used to practicing medicine.” (Murray, M., Tantau, C., 2000) Radical departures take time, even for groups with a history of innovation. Without a structure to prevent backsliding, such departures can easily revert back to old ways.

### Table 8.2 Sequence of Access Improvement

<table>
<thead>
<tr>
<th>Steps</th>
<th>Balance Capacity &amp; Demand</th>
<th>Transitional Open Access</th>
<th>Advanced Access or Open Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make sure demand doesn’t exceed capacity</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Form teams</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Match resources with predictable variations in demand</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Remove internally generated variation in demand</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Standardize appointment lengths and types</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Stop creating appointment backlog</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Make at least 60% of appointments available for the same day</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Offer same-day service guarantee</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Limits on future scheduling</td>
<td>2 Weeks</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Ensure continuity with own provider</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Impact on current operational processes, resource use, and values about work habits</td>
<td>Moderate</td>
<td>Moderate to high</td>
<td>High</td>
</tr>
<tr>
<td>Suggested time to implement</td>
<td>1-4 Months</td>
<td>4-24 Months</td>
<td>After first two phases solidly in place</td>
</tr>
</tbody>
</table>

In the author’s experience, transitional open access provides an effective interim step between the current state and advanced access. We recommend this step for 4-24 months before moving to advanced access. While it has many of the characteristics of advanced access, including a service guarantee, it also creates a structure for preventing relapses into inefficiency while pushing the envelope to do today’s work today. Because advanced access is discussed extensively in numerous articles elsewhere, the remainder of this chapter will focus on transitional open access. (See also Additional Resources for articles on open access)

In the author’s experience, open access failures often start when return visit appointments again begin to clog schedules far into the future. With open access, so-called good backlog appointments are return visits that a provider deems to be clinically appropriate. However, for providers and staff who become frustrated with the challenges of open access, pushing work “back to the future” via a backlog of return appointments provides
easy relief. Without a formal structure to prevent future appointments from filling the schedule again, backsliding can occur as long waits creep back into the schedule. By limiting appointments to no more than two weeks in the future, transitional open access protects the schedule from accumulating a backlog. Unlike so-called carve-out models, transitional open access guarantees same day access. Patients requesting appointments today are seen today. While not a substitute for open access, transitional open access provides a viable interim structure and time so that needed process, resource and values changes can occur over a 4 to 24 month period.

The two week scheduling horizon is particularly effective for practices with high no-show rates because no-shows increase significantly for appointments made more than two weeks in the future. A 30-50% reduction in no-shows is common at these sites which can result in a significant increase in revenues. Baltimore Medical Systems saw an 18% increase in revenues at the site implementing transitional open versus an increase of 1.5% at non-participating sites. In addition, over 78% of patients surveyed were satisfied or very satisfied with transitional open access and 71.9% reported that they were able to see their own provider.

What does transitional open access scheduling do for providers and staff? One key benefit is more predictable work flow and less rework as costly no-shows and patient cancellations are reduced. Patients are more satisfied because they can be seen on the day that they call. Resistance is common among staff when open access is initiated. But once the model is in place, providers and staff frequently comment that “we’d never go back to the old way” and “our greatest fears were never realized.” Being open and responsive to daily variations in requests for care requires flexibility. As a result, open access works best with a team approach as opposed to the so-called condominium group practice, where physicians in a group operate independently.

Transitional open access implementation works best when led by a formal multidisciplinary team with active support and direct access to an organization’s top leaders. In fact, ongoing communication and feedback between the two groups enable the fine-tuning of process changes required to ensure success.

**Steps to Implement Transitional Open Access**

1. Make sure supply and demand are in balance

Chapter 7 describes the essential groundwork of balancing capacity with demand. The process begins with measuring demand. (See also the Demand Measurement Tool in Chapter 7.) If demand exceeds capacity, promising same-day access to patients will result in chaotic work flow. Don’t initiate transitional open access if demand for care exceeds capacity. First, balance capacity and demand by adjusting overloaded provider panels, leveraging hidden capacity, and hiring additional staff, if necessary. Allow 1-4 months for this step.
2. Limit appointments to two types

Doing this dramatically simplifies scheduling for staff and reduces long lines of patients waiting for numerous appointment types (e.g., physicals, rechecks, new patients). We recommend two appointment types, today’s visits or TVs and future visits or FVs. Up to 40% of visits are made up to two weeks in advance. At least 60% of appointments are saved for the same day. As noted in chapter 7, be sure to also limit appointment lengths to 15 or 20 minutes for most appointments. (See Table 8.3 for a sample schedule.)

At the end of a visit, the patient receives an appointment card regarding when and how to schedule a return visit. A provider or support staff member marks the check boxes on the card indicating when the patient should call back for a same-day or future visit. (See Figure 8.1.)

3. Limit appointments to two weeks in the future

As noted earlier, this step helps to prevent work from being pushed into the future. It requires patients requesting an appointment more than two weeks in the future to call back. Some providers take exception with this requirement. While sites must weigh the pros and cons of this issue, in the author’s experience, the significant improvements in patient access and practice efficiency far outweigh the inconvenience.

---

**Figure 8.1 Sample Appointment Card**

**Your Next Appointment**

- ☐ For a future visit appointment
  - Call on:
  - To schedule an appointment on:__________________________
  - For an appointment with:______________________________
  - Reason for your visit:________________________________

- ☐ For a same day appointment
  - Please call before 10 am on the day that you want to be seen to schedule an appointment. Provider suggested date:_____________
  - Reason for your visit:________________________________

When you call, write your appointment information on the back of this card and keep it as a reminder. Thank you.

Date of your visit:_________________
Day of your visit:_________________
Time of your visit:_________am/pm

Your Health Center
000-000-0000

---
4. Select a “go-live” date when most appointments are open

You’ll want a clean slate of mostly open appointments when you go-live with transitional open access, so that patients can be offered an appointment on the day that they call. Pick a start date in the future when provider schedules are mostly open. This is usually a date 8-10 weeks in the future. See Table 8.4 for a sample schedule sequence for transitional open access.

<table>
<thead>
<tr>
<th>Table 8.3 Sample Schedule for Transitional Open Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Randall</td>
</tr>
<tr>
<td>1. 8:30 FV</td>
</tr>
<tr>
<td>2. 8:50 FV</td>
</tr>
<tr>
<td>3. 9:10 FV</td>
</tr>
<tr>
<td>4. 9:30 FV</td>
</tr>
<tr>
<td>5. 9:50 FV</td>
</tr>
<tr>
<td>6. 10:10 FV</td>
</tr>
<tr>
<td>7. 10:30 FV</td>
</tr>
<tr>
<td>8. 10:50 FV</td>
</tr>
<tr>
<td>9. 11:10 FV</td>
</tr>
<tr>
<td>10. 11:30 FV</td>
</tr>
<tr>
<td>11. 11:50 TV</td>
</tr>
<tr>
<td>12. 12:10 TV</td>
</tr>
<tr>
<td>Lunch</td>
</tr>
<tr>
<td>13. 1:10 TV</td>
</tr>
<tr>
<td>14. 1:30 TV</td>
</tr>
<tr>
<td>15. 1:50 TV</td>
</tr>
<tr>
<td>16. 2:10 TV</td>
</tr>
<tr>
<td>17. 2:30 TV</td>
</tr>
<tr>
<td>18. 2:50 TV</td>
</tr>
<tr>
<td>19. 3:10 TV</td>
</tr>
<tr>
<td>20. 3:30 TV</td>
</tr>
<tr>
<td>21. 3:50 TV</td>
</tr>
<tr>
<td>22. 4:10 TV</td>
</tr>
<tr>
<td>23. 4:30 TV</td>
</tr>
</tbody>
</table>

5. Keep at least 60% of appointments available for same–day access

We’ve found that the easiest way to do this is to make all p.m. appointments as well as the last two a.m. appointments be today’s visits or TVs. Most morning appointments are future visits or FVs which are return visits that have been made in the last two weeks.
6. Stop generating a backlog of appointments

To ensure a clean slate of open appointments in the future, stop booking new appointments beyond the date that’s been selected to go live with transitional open access. However, patients requesting care between today and the start date still need to be accommodated as well as the patients who are already booked. As a result, this is a very busy, challenging time.

The work volume during this period can seem daunting. To accommodate daily incoming requests for care as well as appointments that have already been made, review provider schedules; can some visits be done via phone? Other measures include extending return visit intervals, adding appointment slots, increasing office hours or using locum tenens providers.

7. Schedule patients with their own provider or team

Obviously, patients prefer seeing a provider whom they know. But there are other reasons why continuity is good. Allina Medical Clinic found that average net charges per patient visit increased between $8.45 and $11.80 when patients were matched with their own versus another primary care physician under open access. (O’Hare, C., Corlett, J., 2004) In addition, unpublished research at Kaiser Permanente found that 48% of patients who
see a provider who is a “stranger” or not known to them return for another visit within two weeks. Visits with an unfamiliar provider resulted in additional visits as patients returned within a short time to check back with their own provider. (Lippman, H., 2000)

8. Select a date to start informing patients about the change

Sites vary about how many patients are told regarding transitional open access. Some simply begin offering same-day access for patients calling to request appointments, without notice regarding the change. The author recommends communicating frequently once the decision to implement transitional open access is made and a “go-live” date has been selected. Formally declaring the service guarantee to patients reinforces a group’s commitment to improving access and helps prevent relapsing back into clogged schedules. A sample script explaining open access to patients requesting an appointment either in person or on the phone follows:

To make it easier for patients to be seen on a timely basis, we’re changing the way we make appointments. Most of our appointments are available for patients to come in on the day that they call. If you call before (10 a.m.) on the day you want to be seen and can be here by (4 p.m.), we’ll see you the same day.

In addition, you can still schedule a follow-up appointment.

Sites usually promise that patients will be able to see their own provider or a member of his or her team. Below is a sample on-site notice informing patients about transitional open access scheduling.

In order to serve you better, we are implementing a new appointment process so that your doctor can see you today.

We are bringing this approach to our office to make it easier for you to get an appointment. Our goal is that you, as our patient, will be able to schedule appointments with your provider on a same-day basis when you need them.

Beginning on June 1, 2___, you can call us starting at 8:30 a.m. to schedule a same-day appointment for any regular or sick visit. When you call us for an appointment by 10 a.m. and can arrive before 4 p.m., you will be offered an appointment the same day. When you come in for care and a follow-up appointment is needed, you will be given a call back card with a return date. On this date, simply call our office and receive a convenient appointment time, usually for the same day.

Please feel free to ask any questions you may have of our staff members and physicians.
Please let us know how we’re doing with your comments and suggestions on the Patient Satisfaction Survey form.

Thank you,
Your Medical Center Staff
000-000-0000

The notice can be posted in the exam rooms or in waiting areas. Some sites have given the notices to patients when they arrive or when medications are dispensed at the pharmacy.

9. Define your service guarantee
This promises a same-day appointment if patients call and can arrive before a certain hour. “We will see you on the same day if you call before [10 a.m.] and can be here before [4 p.m.]” A service guarantee is essential to transitional open access because it creates an ongoing imperative to do today’s work today for staff. It also declares to patients that their needs are important. Unlike an open access carve-out model that pushes patient requests into the future once today’s visits are full, the service guarantee ensures same day access.

10. Ensure sufficient staffing to answer phones during high-call volume between 8 a.m. and 10 a.m.
For booking same-day appointments, make sure there’s one person per provider who can make same-day appointments. For example, if three physicians work on a given afternoon, usually three staff members are needed to answer the phones that morning between 8 a.m. and 10 a.m. These staff members (usually MAs, clerks, or medical records staff) are often multi-tasking and performing their usual work activities when not answering phones.

11. Minimize exceptions
From the service guarantee to appointment types, exceptions create confusion for both patients and staff. From the author’s perspective, exceptions to the steps herein can be the start of backsliding into inefficiency and should be avoided. Minimizing exceptions is essential to the success of transitional open access.

12. Establish a simple system to track high-risk patients
A small percentage of patients need to be tracked to ensure continuity and quality of care. These include patients with life-threatening illnesses, and patients with lots of co-morbidities. A tracking system regarding call back times and key diagnoses can be maintained with index cards, spreadsheets, or a computer database.
13. Track and share results

Metrics may track no-show rates for both morning and afternoon appointments as well as patient and staff satisfaction with open access. Some sites include a question regarding satisfaction with the waiting time to get an appointment on a patient feedback card. (See Figure 10.4 in Chapter 10.)

**Additional Decisions to Make**

Before finalizing what you will tell patients, be sure that physicians and staff have decided the following:

1. **What to do when a patient’s own provider is not available on the day an appointment is requested**

Most sites offer an appointment with another provider, preferably one who has teamed up with the absent provider. Patients preferring to wait for their own provider are usually asked to call back the day that they want to be seen to make an appointment. (“Please call Thursday morning to make an appointment to see Dr. Nicely.”)

Make sure that patients who decide to wait for their own provider will in fact be able to see that provider when he or she returns. When they are not in the clinic, those part-time providers frequently team up with another provider to ensure access and continuity for their patients.

2. **What to do when a provider’s schedule is already booked for the day by 11 a.m.**

Here again, teams enable providers to level the load in responding to variations in demand. If Dr. Nevus is part of a team that shares knowledge and care for a panel of patients, rapid adjustments are possible; another team member can easily step in to see one of those patients. In the absence of teams, a patient can be double booked, see another provider, or wait for his or her own provider to return.

3. **What to do when a 4 p.m. appointment has been scheduled for a new patient**

This is a common issue during open access implementation. Physicians and staff frequently want to make an exception to the service guarantee by excluding new patients from the 4 p.m. slot. Dr. Carolyn Shephard, medical director at Denver’s Clinica Campesina, found that rather than making exceptions that confuse staff and dilute the service guarantee, it’s preferable to “drill down when issues like this come up to see what’s really wrong.” Often providers are overwhelmed with the complexity of dealing with new patients late in the day. A possible solution? Deal with the current problem, take a thorough history, and have patients return later to handle other issues.
Preserve Patient Choice Without Unnecessary Visits

In the rush to respond better to patients, practices implementing transitional open access sometimes make appointments for patient requests that don’t necessarily require an office visit. Such appointments might include minor upper respiratory infections, rechecks for normal x-rays, and checking medications. To address this issue, ask patients who call with symptoms, “Do you think you need an appointment today or are you not sure?” Patients who want an appointment are simply given one. Patients who are unsure are referred to an advice nurse. This provides patients with a choice and still keeps them in the driver’s seat regarding access. It also avoids front desk staff being in the inappropriate role of triaging patients.

Transitional open access also forces a site to look at how it manages time and resources. Some practices provide tools such as self-care books for advice regarding colds, flu, bronchitis, and other common illnesses. Other sites generate their own advice sheets or hand out brochures from organizations such as the American Heart Association. (Handouts are more likely to be read and used when a patient’s own provider offers them or reinforces their importance.) It is also helpful to direct patients to educational websites such as the American Academy of Family Practice (http://familydoctor.org) or MedlinePlus Health Information (http://www.nlm.nih.gov/medlineplus), for example.

Lessons Learned

From assisting dozens of practices to implement transitional open access, the author has learned the following lessons:

1. Triage calls drop significantly, freeing up nurse time for other things like nurse visits for less acute problems. Baltimore Medical Systems found that triage calls dropped from 600 to 200 per month with transitional open access.
2. The number of visits canceled on short notice declines because most appointments are open at the beginning of each day and are not booked more than two weeks in advance.
3. A rapid 15% to 50% decrease in appointment no-show rates is common.
4. Expect some “clumping” of appointments for physical exams, especially initially, as patients no longer must “go to the end of the line” for such appointments.
5. Provider productivity increases of 12-20% are common.

Be aware, too, of the caveats when implementing transitional open access:

1. Don’t initiate for an entire site if two thirds of the leadership don’t actively support the concept.
2. Don’t initiate if the leadership is not comfortable changing existing policies about access. For example, the service guarantee may require changing a current policy that all patients will be seen regardless of how late they arrive for an appointment.
Chapter 9

Group Visits 101

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Increasingly, physicians are considering innovative alternatives to traditional one-on-one visits. Group visits offer one solution to the “treadmill” of office practice and the isolation of individual visits for patients with chronic disease and their physicians. Group visits also help reduce backlogs in schedules that are crowded with low-acuity, recheck appointments. The model also works well with uncooperative patients.

While most group visit models are ongoing, some meet for a limited period of time. Group Health Cooperative of Puget Sound has successfully launched a group visit series to improve obesity patient self-management. They’ve also been utilized in Orthopedics pre-operatively for total hip replacement patients.

The two most common types of group visits are Co-operative Health Care Clinics (CHCCs) and Drop In Group Medical Appointments (DIGMAs). First initiated by John
Noffsinger, PhD, DIGMAs are 90-minute appointments co-led by a physician and behavioral health professional, typically held at a designated time every week.

The CHCC is the more common group visit model, which is the primary focus of this discussion. Initiated by Dr. John Scott at Kaiser Permanente, Denver, in the early 1990s, the concept has spread to a number of practices nationwide. Participating patients are very enthusiastic. Common comments heard from patients after the visits include, “I’m not so dumb,” and “It’s nice to know I’m not the only one dealing with these kinds of health problems.” One of the most effective results of group visits is their ability to validate and expand patient self-care. In fact, because patients deliver the vast majority of all “healthcare,” why not enlist and develop them as resources in the care process? At several sites, including Kaiser Permanente in Boulder, Colorado, patients can be seen perusing their own medical records during a group visit—definitely a departure from business as usual!

Primary care practices commonly use group visits for patients with chronic diseases as well as for older patients and overutilizers. The concept has also been successful in specialty practices, including neurology, cardiology, and oncology. Between one third and one half of all invited patients usually participate in group visits. Family members or caregivers are commonly invited and attend about 50% of visits.

Initial preparation can be significant to launch group visits. Typical activities include:

- Deciding on an appropriate group of patients, high-utilizers such as patients with hypertension, obese or older patients with numerous co-morbidities, patients who’ve had six or more visits within the past year
- Determining visit frequency and whether it will be ongoing or for a limited period of time
- Enlisting strong nursing and administrative staff support as well as resources during the visits
- Identifying potential patients, based on ICD-9 codes, registries, or available prescription data
- Developing a “message” to enlist patients. This can be delivered by physicians during an office visit, via mailers, or with structured calls by nursing support staff. (See also Sample Handout.) Be sure callers let patients know that “your physician asked me to invite you” to attend a visit with other patients. Follow-up initial discussion with a letter that reinforces the personal invitation and benefits of attending.

A two-year randomized clinical trial of 400 older patients with chronic illnesses enrolled in Kaiser Permanente in Colorado found that compared to a control group, group visit patient hospitalizations dropped from 39% to 27%. In addition, there were fewer calls to physicians, an increase in the number of calls to nurses, and a drop in annual per patient ED visit rates from 53% to 35%. Kaiser also found a reduction in same-day visits to

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primary care. Urgent care visits fell from 0.3 to 0.24 per patient per year (Beck, A., Scott, J., & Williams, P., 1997).

Another group found a 32% reduction in total cholesterol/HDL ratios, a 30% drop in Hb A1c levels and a 7% reduction in healthcare expenses in a group of patients with poorly controlled type II diabetes (Masley, S., Sokolof, J., & Hawes C., 2000, June).

**Visit Format**

The common format for a group visit begins with an initial check-in and greeting period. (See Table 9.1.) This is typically followed by self-care discussion and education regarding overall management of a disease such as diabetes or a specific topic such as insomnia. Next, the group takes a break, when refreshments are frequently served while the physician and a nurse or medical assistant complete vital signs and confer with each patient in the group individually about specific health problems. This is followed by a question-and-answer period and finally one-on-one visits as needed or with two to three patients.

**Table 9.1 Sample Group Visit Schedule**

<table>
<thead>
<tr>
<th>15 Minutes</th>
<th>30 Minutes</th>
<th>30-40 Minutes</th>
<th>15 Minutes</th>
<th>30-45 Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductions and welcome</td>
<td>Self-care education regarding common problems encountered by attendees: diabetes foot care, insomnia in seniors, pre- and post-op care planning</td>
<td>Break for interactive nurse and physician time (e.g., vital signs, refills, individual advice)</td>
<td>Question-and-answer time as well as planning next group visit</td>
<td>Individual 1:1 visit time with MD after group visit. Patients may self-select or physician may determine need for 1:1 visit time.</td>
</tr>
</tbody>
</table>

Patients are seated in a circle or semicircle to promote interaction. Name tags also help promote interaction in new groups and for new members. Patients are encouraged but not required to use first names. A common pitfall of group visits that we’ve observed is the tendency for physicians to assume a didactic role when clinical questions arise. In more successful groups, physicians will frequently refer clinical questions to the group for discussion and feedback. This builds self-care confidence and helps patients shift from a dependent to a more independent role in their own care. Acknowledging the value of patients who share their experience also opens up group visit “space” for attendee participation. In short, physicians participate but don’t dominate the discussion.

Nursing staff typically spend about two hours of preparation time before a group visit, reviewing and documenting medical records as well as completing forms for diagnostic tests and lab work.
Based on observations at several sites, providers report greater satisfaction with group visits when charting is completed at the end of each visit. Templates can be used to quickly and thoroughly document visit findings.

In identifying individual group visit topics, providers are encouraged to select content based on instructions that they find themselves repeating to patients during a typical day. Brenda Stidham, RN, Department of Veterans Affairs Hospital in Lake City, Florida, reports that her group selects topics from the patients’ problem list. She also selects topics from patients’ responses to questions regarding their greatest problems in living with different illnesses.

**Sample Handout**

Use the following handout as a sample to reinforce initial physician discussions to enlist patients for group visits. The handout is designed to reinforce the concept of group visits and also serves as a tangible reference for patients and family members. It can be slightly modified for use as a mailer to prospective participants after nursing staff calls them to assess their interest.

> You are invited to join Dr. Jones for a group physician visit. It’s an idea that other doctors around the country have found helps patients and physicians to spend time together in more ways than just the usual office visit. When Dr. Jones researched this idea, he was amazed at how much patients also enjoyed group visits.

> This is how it works. Doctor Jones and his nurse will visit with you in a group along with 15-20 of his other patients for about one and one half hours in a conference room here at the office. During the visit there will be time for talking with other patients as well as education about specific health problems. Then Dr. Jones will go around the group and spend time talking with patients individually about their health problems and concerns. If you have additional health concerns that you need to talk about and don’t want to discuss in the group, there will also be time to meet alone with Dr. Jones after the group visit. This idea got started because Dr. Jones feels that the usual 15-20 minute scheduled office visit times just aren’t enough to give the kind of care that he wants to provide to you. Of course, the visits are completely voluntary.
The program was set up to provide an additional opportunity for patients to meet with their doctor on a regular basis and to learn how to deal with common health problems. Patients at other group visits say that they’ve learned a lot from other patients who are dealing with similar health problems.

You don’t need to make an appointment for this time together. The group doctor visits also help patients to get their health needs met and their questions answered. From time to time, other health professionals like pharmacists or health educators may join your doctor and nurse at the visits.

When you come in for your group visit, just check in as usual for the visit and pay your usual co-pay. You’ll be instructed by the receptionist at the desk regarding where to go.

Patients who attend group visits are also invited to participate in selecting the kinds of health issues that are discussed. If you decide to attend, please feel free to bring a family member with you to the group visit. If you think that you would be interested in the program, simply let your physician or his nurse know and we will contact you regarding the next visit time.

We welcome your possible interest in this new opportunity for you and Dr. Jones to participate in your healthcare. Of course, if you decide not to participate, Dr. Jones will continue to see you at the office as he has in the past.

Next visit date and time: ____________________________
Our phone number: ____________________________

**Space for Group Visits**

Group visits require space for checking in as well as for seating patients, family members, and caregivers who may attend. While some sites carve out office visit time for use of the waiting room, this can be problematic. When remodeling one of its sites near Denver, staff at Clinica Campesina located the lunch room next to a conference room with a sliding door partition that can be opened for group visits. (See Figure 9.1.)
Coding for Group Visits

Because there are no specific CPT codes for group visits, E/M visit codes have been used to document and bill for the encounters. Todd Welter of Denver’s RT Welter Associates, advises that individual group visits should be coded according to the E/M criteria that are met. The most common E/M code that we have seen used for group visits is 99212. The activities required to be completed and documented for each patient include:

1. A problem-focused history
2. A problem-focused exam
3. Straightforward medical decision making

Remember E/M coding may be used only if the physician is present during the entire group visit and either documents the care or reviews and signs off on the documentation.

One-on-one patient encounters after the group visit should be coded according to the CPT guidelines for that visit only because a department can assign only one E/M code for a patient on the day of the group visit. The ICD-9 diagnostic code that reflects the primary reason for the visit should be used.
Chapter 10

Managing the Patient Service Experience

From drug dosages to treatment regimes, every day physicians and staff make sure that clinical processes conform to established standards of care delivery. Measurable outcomes are considered evidence of quality. But little effort has been made to define and intentionally manage the patient service experience.

It could be argued that busy staff members often “see” their work as a series of tasks focused on fixing chief complaints instead of building relationships with individual patients. In a Wall Street Journal article, Dr. Terry Stein, internist at Kaiser Permanente, noted that many doctors come into a patient encounter with a list of tasks in mind “and proceed in a controlling way. It’s a conversation about an ailment. Often the patient gets left out” (Chase, M., 1998, April 13).

Because it is not defined or intentionally managed, the service experience easily goes unattended or defaults to individual provider and staff assumptions about what is good
service. In effect, a positive service experience ends up being defined differently by everyone. To Mary at the front desk, it may mean smiling and greeting patients by name; to Dr. Jones, it may be doing a thorough workup; and to Connie, the rooming nurse, it may mean staying on time. The outcome? An inconsistent, mediocre service experience. In fact, in millions of encounters each day, the patient lives but the customer dies. However, service is an important driver of patient loyalty (Herzlinger, R., 1997). Patients can’t judge clinical quality, but they can and do judge service quality. Research by Press Gainey, a leading firm that tracks satisfaction found that a so-called intimidation factor or acquiescence bias inflates satisfaction scores.

Poor service quality also has financial consequences. Dr. Richard Roberts, JD, and past president of the American Academy of Family Physicians, reports that “when you look at studies of why a patient goes into a lawyer’s office to contemplate a lawsuit, about two-thirds of the time it has to do with the communication and emotional content of their experience more than it does the actual outcome. You hear (plaintiffs say) things like ‘He didn’t seem to respect me’ or ‘She wasn’t interested in listening to me.’” On the other hand, depending on the industry, a 5% increase in customer satisfaction has been shown to increase profits by 25% to 85% (Reichheld, F.F., & Sasser, W.E., 1990).

**Patient Versus Provider Perceptions**

The mismatch between patient and provider points of view can result in very different experiences. While serious illness can be an intense, upsetting personal event, the healthcare culture values a logical, objective approach that typically frowns on too much personal involvement with patients.

Dr. Robert Bone, a head-and-neck surgeon at Scripps Clinic, was puzzled by a patient who became increasingly hostile despite a successful recovery from jaw cancer. “When I finally sat down with him and asked why, it turned out he was out of money, in discomfort, couldn’t work, and his disfigured face made it hard for his family to be around him. I should have been more in touch with that.” An enlightened Dr. Bone suggests that the secret for doctors is “to bite your lip for two minutes” so the patient can tell his or her story (Chase, M., 1998, April 13).

During an office visit with my son, the cavernous gap between staff and patient experiences became very personal. After a 40-minute wait to be seen for a minor problem, we were ushered into an exam room slightly larger than a postage stamp. Soon after we sat down, a medical assistant entered and crisply exclaimed, “You’re in my seat!” to my son, who then had to stand. When Eric and I differed slightly regarding the history of his illness, the physician, visibly annoyed, rolled his eyes and asked, “Do you two even live together?” En route to the lab, a staff person bumped into us with an empty wheelchair. When we got to the lab, we had to wait while five staff members reached agreement on accurate directions to the local craft supply store. When I handed a staff
person the lab slip, it had erroneously been marked for a urinalysis instead of a throat culture. Sadly, even in consumer-savvy Boulder, Colorado, outpatient care can be totally devoid of service quality.

For many patients, is it any wonder that the healthcare experience has become a sequence of less-than-pleasant transactions, seemingly devoid of genuine relationships? AHA/Picker Institute researchers found patients experiencing a trend toward care that is cold and impersonal (Gerteis, M., Edgman-Levitan, S., Daley, J., & Delbanco, T., Eds., 1993). Up to one fourth of American households changed physicians in a recent two-year period (Voluntary Hospitals of America, 1999). Patients report problems with access and getting basic information (Medical Quality Management Sourcebook, 1999). Health & Hospital Networks magazine noted that the public sees healthcare as “a confusing jumble of seemingly disassociated, impersonal medical professionals and institutions” (Grayson, M., 1997, February 20). Service is lost in the shadow of seemingly more important clinical and administrative priorities. The fact that consumers don’t pay directly for most of their care removes the threat of nonpayment by dissatisfied customers. Finally, physicians judge themselves and their peers on technical not interpersonal skills. Heroic service doesn’t have a CPT code.

Dr. Herbert Benson describes the unfortunate state of affairs in today’s physician-patient relationship in his book *Timeless Healing*. “Too often today, the sacred trust that should be developed between doctor and patient has been replaced by a set of rushed interactions.” Research at Massachusetts General Hospital demonstrates the importance of the doctor-patient bond. The research compared two groups of patients undergoing similar operations. The anesthesiologist visited both groups of patients but interacted with them differently. He made only cursory remarks to patients in one group but treated the other group warmly with sympathetic attention, sitting on the patients’ beds, while detailing the surgical procedure and post-operative pain they might encounter (Benson, H., 1997).

The results? Patients in the group who experienced the more caring relationships got better faster and were discharged from the hospital an average of 2.7 days sooner than those in the other group. The patients treated with genuine caring also experienced less pain, asking for half as much analgesic medication. Placing patient relationships front and center impacts operational and clinical outcomes. Increasingly, progressive leaders like Dr. Berwick of the Institute for Healthcare Improvement who contends that “relationship is the care” are seeing things differently.

**Managing Experiences**

Pine and Gilmore identify the elements of an emerging “experience economy” in which businesses of the future will live or die based on how well they design and manage memorable experiences for customers. They describe cues as key in forming impressions:
It’s the cues that make the impressions that create the experience in the customer’s mind…. Unplanned or inconsistent visual and aural cues can leave a customer confused or lost…. Just as important as positive cues is being vigilant to remove negative cues that can conflict with and contaminate a positive experience (Pine, B., & Gilmore, J., 1998).

Responsive physical environments that reinforce a familiar sense of meaning and context are important, particularly to seniors. The Center for Health Design contends that “all therapeutic settings should include the positive characteristics that remind people of home” (1997, Summer).

Many office visit cues leave lots of room for improvement. While sick patients appreciate pleasant, comfortable surroundings, they’re often greeted with dull, uninspired waiting areas filled with dog-eared magazines, blaring TVs, and staff busily ensconced behind sliding glass windows. In one waiting room, the author recently counted five different styles of mismatched chairs. Disrobing into drafty paper gowns in tiny exam rooms for chilly waits erodes tactile comfort. The overall result is institutional, look-alike places, built around provider priorities that leave patients cold.

Figure 10.1 illustrates contrasting visual cues in two medical office hallways. Office B is utilitarian, with fluorescent lighting and a tiled floor cluttered with equipment including a laundry cart. The visual cues indicate a focus on work tasks that seem to overflow into the hallway. In contrast, Office A’s incandescent lighting, carpeted, uncluttered floor, and artwork provide warm visual cues.

Figure 10.2 compares two office waiting areas. Site A’s open, low counter enables easy access at check-in for patients; curved soffits and check-in counter panels create an informal instead of an institutional feel. Site B’s check-in requires patients to travel to another area of the building. While not visible in the photos, Site A’s lively colors and patterns contrast with Site B’s browns and grays. Site A’s well-defined orange and purple check-in areas are also consistent with each team’s color coding. Site A’s waiting area is also bathed in natural light, while Site B’s area has little natural light.

**Learning from Service Leaders**

Disney (1996) and other breakthrough customer service organizations ascribe to the importance of intentionally defining and managing the service experience. By excelling at dimensions of service quality such as courtesy and control, service leaders create predictable, consistently positive experiences that build loyal relationships.
Intentionally defining the service experience enables providers to achieve a standard reference point as well as accountability regarding the patient experience. A service definition for ambulatory care can be developed by matching the dimensions or characteristics of service quality with a provider’s values, resources, and processes.

Service leaders build experiences that bring in consumers to be part of their system rather than external to it. Greenfield and others have found that including patients as partners in the care process improves clinical outcomes and satisfaction (Greenfield, S., Kaplan, S., & Ware, J.E., 1985). In a project with several pediatric practices, the Cincinnati Pediatric Research group offered so-called safety net prescriptions in acute otitis media (Siegel, R.M., Kiely, M., Bien, J.P., Joseph, E.C., Davis, J.B., Mendel, S.G., et al., 2003). Parents were given a simple pain control medication (acetaminophen, ibuprofen, or topical anesthetic drops) and an antibiotic prescription. They were advised to fill the antibiotic prescription only if their child’s symptoms had not improved within 48 hours. Only 31% of the participants in the study had antibiotic prescriptions filled. About 78% of the parents said that the pain medication alone was enough, and 63% said that they would be willing to follow the same procedure for future episodes of acute otitis media. This approach reduces the cost and dangerous overuse of antibiotics while partnering with patients in care delivery.
In the book *Winning the Service Game*, Schneider and Bowen describe how consumer involvement in service delivery can increase a sense of control and satisfaction:

> Perhaps the thought of making customers serve themselves or having them do some of the work themselves seems out of step with these times in which businesses are constantly chided to pamper and delight their customers. Yet customers can obtain delight from serving themselves if it provides them with a greater sense of control over the service production process....Control can be a potent source of esteem maintenance and enhancement for customers....Behavior breeds commitment (Schneider, B., & Bowen, D., 1995).

Imagine that a family member was just diagnosed with a serious illness. What would you want his or her office visit to include? What would it exclude? Do your expectations change when viewing a visit from the perspective of a family member as opposed to a staff member? If so, do the different expectations have any implications for how you’d manage the patient experience at your office?
The Perfect State

What would the perfect service experience look like? It would replace a growing transaction mentality with healing relationships. Waits and delays would be replaced with immediate access. An outdated, compliant patient role would be shed in favor of enabling patients to assume more control of their own care. Finally, a more cost-sensitive system would constantly remove wasteful processes. In short, the perfect state would provide immediate access to healing and enabling relationships in an efficient system. Table 10.1 compares the current versus the perfect state regarding the dimensions of caring, convenience, control, and cost.

Table 10.1 Current State Versus Perfect State

<table>
<thead>
<tr>
<th>Dimension of Satisfaction</th>
<th>Current State</th>
<th>Perfect State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction</td>
<td>Caring</td>
<td>Healing relationships</td>
</tr>
<tr>
<td>Waits</td>
<td>Convenience</td>
<td>Immediate access</td>
</tr>
<tr>
<td>Compliant patients</td>
<td>Control</td>
<td>Enabled patients</td>
</tr>
<tr>
<td>Inefficiencies</td>
<td>Cost</td>
<td>Constantly removes waste</td>
</tr>
</tbody>
</table>

Table 10.2, Designing The Service Experience provides a framework to guide service improvement activities related to an organization’s resources, processes, and values. It includes specific strategic and tactical improvements.

Undivided attention and using a patient’s name at least once are process steps that communicate caring during a patient encounter. Rapid service recovery when problems occur is another important process step that’s highly correlated with retaining customers (Schlesinger, L.A., & Heskett, J.L., 1991). A thorough explanation of findings, minimizing patient “gowned time,” as well as reducing waits while in the exam room help return control to patients. Constant removal of waits and delays helps control costs. Ideally, patients would receive immediate access and have enabling relationships in a system that constantly eliminates wasteful processes.
### Table 10.2 Designing The Service Experience

<table>
<thead>
<tr>
<th>Service Characteristics</th>
<th>PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caring</strong></td>
<td></td>
</tr>
<tr>
<td>- Standard greeting</td>
<td></td>
</tr>
<tr>
<td>- When encountering a patient, staff member has first and last utterances and makes sure they’re positive. Staff member also establishes eye contact when patient is within 10 feet and greets patient when patient is within 5 feet. Used by some hotels, this tool is also referred to as “five, ten, first, and last.”</td>
<td></td>
</tr>
<tr>
<td>- Staff member uses patient’s name at least once during check-in and checkout; undivided attention first 60 seconds</td>
<td></td>
</tr>
<tr>
<td>- Post results of patient comment cards in common areas to provide simple ongoing feedback to staff and patients</td>
<td></td>
</tr>
<tr>
<td>- Offer rapid service recovery when problems occur</td>
<td></td>
</tr>
<tr>
<td><strong>Convenience</strong></td>
<td></td>
</tr>
<tr>
<td>- Bring processes to patients to minimize number of steps and service points during visit (e.g., history taking, obtaining vitals, and checkout)</td>
<td></td>
</tr>
<tr>
<td>- Provide same-day access to provider of choice</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
</tr>
<tr>
<td>- Provide anticipatory education about procedures and delays</td>
<td></td>
</tr>
<tr>
<td>- Avoid hand-offs to minimize number of staff involved in episode of service</td>
<td></td>
</tr>
<tr>
<td>- Facilitate transition to next “service point,” informing and guiding patient as needed</td>
<td></td>
</tr>
<tr>
<td>- Make office processes secondary to patient needs</td>
<td></td>
</tr>
<tr>
<td>- Offer thorough explanation of findings</td>
<td></td>
</tr>
<tr>
<td>- Minimize patient “gowned time” and waits in exam room</td>
<td></td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
</tr>
<tr>
<td>- Simply and clearly communicate costs</td>
<td></td>
</tr>
<tr>
<td>- Constantly remove waits and delays</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Characteristics</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caring</strong></td>
<td></td>
</tr>
<tr>
<td>- Encourage staff to seek vs. avoid patient contact; to actively manage service experience</td>
<td></td>
</tr>
<tr>
<td>- Provide signage that anticipates and enables patients to go where they want and know where they are</td>
<td></td>
</tr>
<tr>
<td>- Create hotel/homelike interiors</td>
<td></td>
</tr>
<tr>
<td>- Ensure positive symbolism in artwork and décor</td>
<td></td>
</tr>
<tr>
<td><strong>Convenience</strong></td>
<td></td>
</tr>
<tr>
<td>- Ensure that staffing mix and provider scheduling enable access</td>
<td></td>
</tr>
<tr>
<td>- Provide as many services as possible at each encounter</td>
<td></td>
</tr>
<tr>
<td>- Initiate pathways to access care that extend beyond office visit, including phone and e-mail care, group visits, nurse visits</td>
<td></td>
</tr>
<tr>
<td>- Provide easy, covered access and parking</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
</tr>
<tr>
<td>- Ensure that access and seating accommodate patients with reduced mobility</td>
<td></td>
</tr>
<tr>
<td>- Encourage shared decision making and self-care</td>
<td></td>
</tr>
<tr>
<td>- Provide patient handbook to formally orient patients to practice</td>
<td></td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
</tr>
<tr>
<td>- Ensure that staff functions at full professional and legal limits</td>
<td></td>
</tr>
<tr>
<td>- Encourage that today’s work is done today vs. pushing it into the future</td>
<td></td>
</tr>
<tr>
<td>- Create formal teams to reduce delay between demand and access</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Characteristics</th>
<th>VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caring</strong></td>
<td></td>
</tr>
<tr>
<td>- Hire and retain staff for attitude</td>
<td></td>
</tr>
<tr>
<td>- Ensure that friendly tone imbues all patient communications, from signage to brochures</td>
<td></td>
</tr>
<tr>
<td>- Celebrate service heroes</td>
<td></td>
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<td>- Ensure that service standards are an integral part of orientation, training, performance evaluations, and daily work flow</td>
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Hotel or homelike interiors, positive symbolism in artwork and décor, as well as staff who seek patient contact are excellent steps to ensure that resources build a positive service experience. In addition, a patient handbook provides structured orientation regarding how to access care as well as care management tools.

Hiring and retaining staff for attitude as well as making service standards integral to orientation, performance standards, and daily work flow are values that promote caring. In addition to operational efficiencies, a culture of teamwork expands capacity and speeds up response to patient requests. Building an active rather than a passive patient role reflects the value of putting patients more in control of their care.

As noted earlier, an organization’s values show up in its processes and resources. Some sites begin with simple process improvements to build momentum. But remember, improvements related to a group’s values are essential to sustainability. While process improvements like standardizing the patient greeting may look like great solutions, they’ll fail if they’re inconsistent with a group’s fundamental values and not reinforced by leadership day in and day out.

**Where to Start**

Ensuring a positive patient service experience begins with a number of steps:

1. Assess your current state
2. Select service characteristics
3. Identify practical goals and metrics
4. Get the right people on the bus
5. Walk the talk

**1. Assess Your Current State**

Where does service excellence fall short at your site? Are there recurring sources of patient complaints? Do most problems regard process issues or deeply held values regarding patient relationships? Process issues are easier to fix than those related to
attitudes and values. Frank dialogue among staff and managers regarding the current state of service excellence is a good place to start.

The book *Service America* defines service satisfaction as the collective impact of a so-called moment of truth: “an episode in which a customer comes into contact with any aspect of the service provider, and has an opportunity to form an impression” (Albrecht, K., & Zemke, R., 1985). Each encounter with staff during the care process creates a moment of truth for patients. Use of the office visit Access Pathway can help identify common service points or moments of truth during a patient encounter. Consider enlarging an Access Pathway to look at issues related to office visits, applying “sticky” notes to problem service points. Figure 10.3 identifies common issues during an office visit.

2. Select Service Characteristics

Service quality characteristics can be identified from site-specific and national satisfaction data as well as from recurring patient complaints. For example, frequent patient requests for self-care information and low satisfaction with wait times suggest that control may be an important dimension of service quality for a given population. Low staff satisfaction ratings or complaints regarding genuine concerns for patient needs suggest the need to improve the caring aspects of service quality. Individual sites can use the four C’s of service quality discussed here or identify their own characteristics.

3. Select Practical Goals & Metrics

Goals and metrics provide a structure for tracking service improvement. Patient feedback cards are practical tools that are easy to implement and produce measurable results. (See Figure 10.4.) Frequent sampling using a few questions keeps the process simple. To keep staff engaged in the process, identify specific goals regarding patient responses (e.g., a goal of 95% of patients rating a provider’s listening skills as excellent). A number of sites also post results in staff and even patient common areas. The reason? It communicates in a public way that service quality is taken seriously.

Other metrics to consider are whether patient compliments exceed complaints and whether so-called nonvalue-added wait time for patients exceeds value-added time with the provider or staff. In addition, so-called mystery shoppers can be an inexpensive way to evaluate office visit and patient phone experiences.

How to select which questions to ask on patient feedback cards? Start with current sources of patient complaints as well as the goals of your organization. Include a question about whether a patient would refer your practice to others. Why? Frederick Reichheld, in the *Harvard Business Review*, found that for organizations seeking more customers, one question stood out from the others. Information collected from more than 4,000 customers in a variety of industries found that:
By substituting a single question for the complex black box of the typical customer satisfaction survey, companies can actually put customer survey results to use.... The best predictor, across all industries can usually be captured in a single survey question: Would you recommend this company to a friend? When customers act as references, they do more than indicate they’ve received good value from a company; they put their own reputations on the line. And they will risk their own reputations only if they feel intense loyalty. The findings are based on two years of research that tried a variety of questions (Reichheld, F., 2003).

The first question on the enclosed feedback card measures the patient’s satisfaction with his or her provider’s listening skills. While providers and staff fear they’ll be swamped if they listen until patients complete their list of chief complaints and concerns, research indicates otherwise. In a tertiary referral center study, 335 patients were asked to talk spontaneously about their complaints and indicate when they were finished. Length of spontaneous talking time? An average of 92 seconds and less than two minutes for 78% of patients. Only 2% spoke longer than five minutes. Other studies indicate that doctors jump in and begin asking questions after only 22 seconds (Barclay, L., 2002, September 30).

4. Get the Right People on the Bus

The book First, Break All the Rules describes the Gallup organization’s quest to find out what it took to attract and keep the most talented employees (Buckingham, M., & Coffman, C., 1999). They posed millions of questions, trying to find “those questions where the most engaged employees—those who were loyal and productive—answered positively and everyone else—the average performers answered neutrally or negatively.”

The results? The following six questions emerged as the core of a strong workplace:

1. Do I know what is expected of me at work?
2. Do I have the materials and equipment I need to do my work right?
3. At work, do I have the opportunity to do what I do best every day?
4. In the last seven days, have I received recognition or praise for doing good work?
5. Does my supervisor, or someone at work, seem to care about me as a person?
6. Is there someone at work who encourages my development?

Positive answers to questions one, three, four, and five also had a strong positive correlation with customer satisfaction.
Outcomes:
Operational
Financial
Satisfaction

Do patients have to travel to several locations during a visit?

Is shared decision making encouraged?

Are patients regularly asked to provide feedback about their office visit experience?

Do patients receive a thorough explanation of findings?

Are hand-offs and number of service points minimized?

Do competing processes and inefficiencies regularly interrupt physicians during office visits?

Are patients asked for history once or multiple times?

Is anticipatory information given about procedures and delays? Are patients informed about what to expect at service points?

Are satisfaction results posted with other improvement metrics in common area?

Figure 10.3 Common Office Visit Service Issues
Hiring staff that are indifferent to the patient experience doesn’t work anymore. The undying commitment of Southwest Airlines’ founder Herb Kelleher’s to “hire for attitude” became the cornerstone of a culture known for delighting customers.

Even in the best organizations, the inevitable “addition by subtraction” may be needed to improve the patient service experience; some employees need to depart for improvement to proceed. Collins describes the importance of helping the wrong people “get off the bus” and keeping the right people on the bus:

We expected that good-to-great leaders would begin by setting a new vision and strategy. We found instead that they first got the right people on the bus, the wrong people off the bus, and the right people in the right seats—and then they figured out where to drive it.

The old adage “People are your most important asset” turns out to be wrong. People are not your most important asset. The right people are (Collins, J., 2001).

5. Walk the Talk

Service excellence is the new and emerging priority for most healthcare organizations, albeit relatively fragile when compared with other entrenched priorities. To some, it may seem downright strange—extraneous to more important clinical aspects of work. However, the importance of champions who day in and day out relentlessly shepherd service excellence can’t be overstated.

A fabled story of Nordstrom’s service describes how a preacher was amazed at a saleswoman’s seemingly infinite patience with a bag lady’s requests to try on dozens of evening gowns, carefully responding to each request. When asked why, the sales woman said, “This is what we’re here for, to serve and be kind.” If Nordstrom can be known for staff who consistently care about service excellence, why not healthcare organizations?
Figure 10.4 Patient Feedback Card

We’re seeking feedback from our patients in order to serve them better. Please let us know how you would rate your visit today. Thank you.
Provider you saw today: __________________________________________

1. How would you rate your provider’s ability to listen to your individual needs?
   __ Excellent   __ Very Good   __ Good   __ Fair   __ Poor   __ Not Sure

2. How would you rate your satisfaction with the wait to get today’s appointment?
   __ Excellent   __ Very Good   __ Good   __ Fair   __ Poor   __ Not Sure

3. Would you recommend this office to a family member or friend?
   __ Yes   __ No   __ Not Sure

4. What do we need to know to improve our customer service?
   ___________________________________________________________________
   ___________________________________________________________________

Your name (optional): ________________________________________________
A questionnaire was completed by physicians and leaders at six sites that have been actively pursuing improvement. The groups vary from large to small. They include groups in private practice as well as community health centers and an academic medical center. Some sites are part of integrated delivery networks. The purpose of the case studies was to identify how the improvement process works for each site, from leadership and core values to the composition of care teams. Answers to question #9 include available outcomes data. Each completed questionnaire was followed up with an individual interview. Participants included Anne Lewis, CEO of CareSouth Carolina, Inc, Dr. Gregg Omura at Primary Care Partners, Randi Burnham, NP, Team Leader and Dr. Pete Knox at Bellin Health System, Cory Sevin, V.P. of Operations at Clinica Campesina, Dr. Charlie Burger at Norumbega Medical Specialists, and Dr. Jim Kennedy, Director of Clinical Operations at the University of Colorado Health Sciences Center. The questions below were submitted to the participants. Their responses follow. With the exception of minor spelling and grammar changes, the responses are recorded here as completed by participants.

1. What was the impetus for deciding to initiate improvement at your site?

2. Has leadership been important to your efforts? If so, please describe the role of leadership in improvement.
3. In your opinion, what activities have been especially important to sustaining improvement?

4. How important have core values been to your improvement work?

5. How are core values communicated to staff?

6. Do you have an ongoing team that leads improvement in your organization? If so, please describe who is on it, how often they meet, and the structure for initiating improvements.

7. Have there been specific processes or ways of using resources that you have focused on, such as leadership development, access, teams, or chronic care?

8. Does your site vary the ways that patients can access care, such as group visits, nurse clinics, phone care, and e-mail with patients? If yes, please describe.

9. How do you track and post results or outcomes? (These include operational, clinical, satisfaction, and financial.) How do you select which metrics to use? Have you found it important to limit the number of metrics used? What metrics do you use?

10. Does your site do any structured population management such as tracking patients with chronic disease?

11. Do you regularly measure patient satisfaction? If so, how often is it measured? How are satisfaction results shared with staff? Have you tracked patient response to specific improvement efforts such as cycle time or access?

12. If you were starting your improvement work now, what would you do differently? What would you do the same way?

13. What advice would you give to others embarking on sustainable improvement?

14. Please describe your organization:
   _ solo practice _ primary care group practice _ multi-specialty group practice
   _ academic medical center _ community health center
   _ other:

15. Are you part of an integrated delivery network?

16. Approximately how many patients are cared for at your site/organization?

17. On average, approximately how many patient visits occur at your site weekly, monthly or yearly?
18. How many FTE physicians and mid-levels (nurse practitioners and/or physician assistants) are employed at your site?

19. If you’re using formal care teams, what is the makeup of your team(s) (e.g., 1 FTE MD, 1 mid-level, 2 MAs, 1 clerk, etc.)?

20. Do you use an electronic medical record?

21. What is your average cycle time for a patient visit?

22. How are physicians compensated? _production _RBRVS _production & salary _ other
1. What was the impetus for deciding to initiate improvement at your site?
   We wanted a program to help our diabetic patients.

2. Has leadership been important to your efforts? If so, please describe the role of leadership in improvement.
   Yes, from the very beginning, it was an Executive Team decision to apply for our first IHI Diabetes Collaborative and the Executive Team has been involved since then.

3. In your opinion, what activities have been especially important to sustaining improvement?
   Commitment from the Executive Team; the demonstration of significant impact; the excitement of the improvement process; involvement of middle managers, providers, and front line staff. The improvement sequence varied among sites. At one site we initiated alternate visits; at another, office efficiency; and at a third, open access. At one site, we worked on redesigning the physical structure first and at another, staff attitudes. It took about three years to get all three sites redesigned, from attitudes to infrastructure to physical structure.
4. **How important have core values been to your improvement work?**
   Once the improvement efforts demonstrated benefit to our patients and staff, the improvement itself became a core value. Our other core values were quite important in guiding our efforts in the sense that we knew our efforts had to stay true to our values.

5. **How are core values communicated to staff?**
   Newly hired staff receive an orientation that includes a review of core values. Clinica is a culture of collaboration so there are many meetings in which important leaders are a part of the group where values are communicated. Values are also communicated in how we go about our business as well as how we take care of patients and staff.

6. **Do you have an ongoing team that leads improvement in your organization? If so, please describe who is on it, how often they meet, and the structure for initiating improvements.**
   We had distinct teams do the disease collaboratives. When we started our office redesign in March of 2000, we put together an organization-wide team consisting of the VP of Clinical Affairs, VP of Operations, the Operations and Clinical site managers (from each of 3 sites), an Assistant Medical Director, and IS staff. This team we call ORDC (Organizational Redesign Committee). There was a Redesign Team also established at each site to lead the efforts at the site level. These committees exist today. Along the way, we established the Health Outcomes Committee, chaired by an Assistant Medical Director. The charge of this committee is to lead the efforts on spreading and sustaining Clinica’s improvement efforts using the Chronic Care Model. The ORDC also works with the collaborative issues as they relate to office redesign.

7. **Have there been specific processes or ways of using resources that you have focused on, such as leadership development, access, teams, or chronic care?**
   We have focused on diabetes, depression, asthma, prenatal, and chronic pain patients using the Chronic Care Model. We have also embraced three concepts from the IHI’s Office Redesign material: office efficiency, alternative visits, and open access scheduling. We have used IHI’s Quality Improvement Model for all of our work. There has been lots of leadership development through all levels of the organization as a result of our work.

8. **Does your site vary the ways that patients can access care, such as group visits, nurse clinics, phone care, and e-mail with patients? If yes, please describe.**
   Yes, we have group visits for diabetic patients, OB group visits, initial prenatal group visits, newborn group visits, and we have worked on redesigning the role of the nurse so that the nurse could be a provider of care. We are in the middle of a management transition and organizational restructuring to create care teams managed by nurses.
We also have worked with our scheduling to decrease triage so that nurses can nurse. One provider does a very limited amount of e-mail care.

9. **How do you track and post results or outcomes? (These include operational, clinical, satisfaction, and financial.) How do you select which metrics to use? Have you found it important to limit the number of metrics used? What metrics do you use?**

We track measures monthly and have them posted on data walls at each site. In addition, we are working on publishing measures monthly that will relate to an incentive plan for all staff. We select metrics based on evidence (when there is some), importance of the measure to what we are trying to accomplish, and the ability to set up a system to gather and report the measure. We are measuring time to third available appointment, continuity, panel size, no shows, unbooked appointments, productivity per pod and per provider and a variety of outcome measures for diabetes, asthma, depression, immunizations, and prenatal care.

Since we began improvement efforts, average HbA1c levels for diabetic patients have dropped from 10.5 to 8.2. In the last year, the percentage of diabetic patients with a foot exam has increased from 44% to 65% and our registry that tracks diabetic patient care has increased from 275 to 505 patients.

10. **Does your site do any structured population management such as tracking patients with chronic disease?**

Yes, we have registries for diabetes, depression, asthma, chronic pain, and prenatal care.

11. **Do you regularly measure patient satisfaction? If so, how often is it measured? How are satisfaction results shared with staff? Have you tracked patient response to specific improvement efforts such as cycle time or access?**

We have measured patient satisfaction on a quarterly basis. We ask patients to “give us a grade” on a variety of things. We have enough data for run control charts to be useful. At times, through our QI efforts we have also developed different patient satisfaction tools to measure specific things. The results of the quarterly data are presented to our TQM committee who shares it with all staff.

12. **If you were starting your improvement work now, what would you do differently? What would you do the same way?**

I would institutionalize the things we decided to do right away, making sure we developed the scripts, training materials, changes in job descriptions, skills checklists, etc. I would also go for the whole thing, instead of doing improvement in parts.

13. **What advice would you give to others embarking on sustainable improvement?**

Improve at a rate you can sustain and be sure to do enough to actually make a difference.
14. Please describe your organization:
Community health center

15. Are you part of an integrated delivery network?
No

16. Approximately how many patients are cared for at your site/organization?
20,000 unduplicated users

17. On average, approximately how many patient visits occur at your site weekly, monthly or yearly?
1,800 weekly, 7,200 yearly

18. How many FTE physicians and mid-levels (nurse practitioners and/or physician assistants) are employed at your site?
8 physicians 16 midlevels

19. If you’re using formal care teams, what is the makeup of your team(s) (e.g., 1 FTE MD, 1 mid-level, 2 MAs, 1 clerk, etc.)?
1 MD, 2 mid-level practitioners, 1 nurse, 3 MAs, 1 financial screener, 1 case manager, 4 office techs. We all have 1 LCSW per site and an RD for all 3 sites.

20. Do you use an electronic medical record?
No

21. What is your average cycle time for a patient visit?
45 minutes

22. How are physicians compensated?
Salary. However, a new incentive program adds bonus incentives to all staff when visits exceed an average of 17/day for a month in a given team or pod. When visits exceed the average, everyone receives an additional $1. If all 8 pods exceed average number of visits for a given month, everyone receives an additional eight dollars. We also have four outcome goals: % of patients with persistent asthma on steroid inhalers, % of patients with 2 HbA1c’s drawn per year, % of patients with depression on new meds that get a phone call, % of 2-year-olds who are totally immunized, and a smoking cessation goal for pre-natal patients. While the amounts seem small, staff members can make an additional $2,000 per year. Staff has already responded very positively to the incentive. It has also provided a way for teams to share performance information. Teams also get credit for hospital encounters. The program has taken three months to get rolling, with data collection the greatest challenge.
Case Study #2

Medical Group Organization, Bellin Health System
Green Bay, Wisconsin

1. What was the impetus for deciding to initiate improvement at your site?
   In the late 1990s we acquired 20 sites throughout a broad region of Wisconsin. This was a completely disparate group of clinics that were experiencing significant financial losses. The physicians were frustrated. They thought they had joined a system and what they had expected was not occurring. It was a chaotic group that was losing money. A decision was made as an organization to bail out of the primary care network or to make it work.

2. Has leadership been important to your efforts? If so, please describe the role of leadership in improvement.
   There was no team structure or leadership before. There was little physician involvement. It was an administratively run medical group. We did a two-day planning retreat with 16 physicians and administrators and took a cold, hard look at our current situation and where we wanted to be. Then we decided on our priorities and organized four excellence teams to focus on operational, clinical, service, and business improvement efforts.
In addition, the Bellin Medical Group Governing Committee (BMG) has the following functions:

- Provide oversight for the development and implementation of vision and strategy
- Monitor key operational performance measures and identify priorities for improvement
- Define future direction for the Medical Group including structure, services, and position in the market

3. **In your opinion, what activities have been especially important to sustaining improvement?**

Having a team structure and specific processes to lead the improvement work has been important. Each of the four excellence teams has specific aims/purposes as well as defined roles and responsibilities. For example, if the clinical excellence group agrees on a protocol, they bounce it to the executive governance committee and ask for its approval. If the executive committee adopts the protocol, then the sites are asked to implement the changes. All the providers are on an internal listserv that helps generate feedback. This has helped a lot. We used this process to standardize the use of a follow-up strep culture with patients who have a negative rapid strep test in the office. Several physicians researched infectious disease guidelines before we came up with the guideline.

When we decide on an improvement, we spread it numerous ways. This may include a letter in the mail, letter on the listserv, internal publications, or managers may share information and ask for feedback from staff.

Pushback from folks has not been a major problem. It’s a given here that physicians participate in improvement work. Everyone is expected to work to improve the group. There is a list of provider expectations and some relate to participation. It took 6-8 months to get agreement on the expectations of physicians who want to work in the group. The fact that we’re quality driven and innovative helped us to recruit.

Most sites have a physician leader and an administrative leader. This seems to work well. The physician leader and administrative leader report to the Health System Executive Vice President/CFO.

We’ve found that there are 10 steps to ensure sustainable improvement:

1. Describe who you are today
2. Describe the environmental forces impacting your business
3. Define where and what you want to be in the future
4. Determine how you are performing today
5. Identify what you will focus your time, energy, and resources on
6. Determine how you will organize yourself
7. Utilize a standard process for improvement
8. Remain on track
9. Review progress and adjust if necessary
10. Maintain momentum over time

In addition, setting goals has also helped us to have a specific focus and identify progress.

Our goals are:
- To be the top performer in Clinical Quality
- To develop relationships with patients that create loyalty and trust
- To be the Lead Innovator in Clinic Redesign
- To grow Primary Care 10% per year
- To be profitable as a medical group
- To be recognized as a great place to work

We’ve also found that it’s important to limit the number of improvement initiatives going on to provide focus and increase our chances for success.

4. How important have core values been to your improvement work?
   We’re convinced that great performance can only be achieved through sustained system-level redesign.

5. How are core values communicated to staff?
The executive committee reinforces core values. We make money available for quality results and try to make data transparent. We believe in the power of measurement and create financial report cards regularly—providing unblinded data down to the individual physician level. VIP awards are given to clinics with significant improvement.

6. Do you have an ongoing team that leads improvement in your organization? If so, please describe who is on it, how often they meet, and the structure for initiating improvements.
   As noted earlier, we have four excellence teams that lead improvement in a variety of areas. They report to the governing committee. Our Clinical Excellence team has sanctioned an IHI IMPACT network team who recently took a look at the CHF (congestive heart failure) population across the continuum of care. We’re trying to look at care through the eyes of the patient, trying to improve all the handoffs between hospital, home health, and community resource folks. We found that there is a great deal of variation in patient education handouts that was confusing to patients. We decided that we needed the right team at the table to resolve these issues. For us, this includes several primary care and specialty care physicians, a hospitalist, nurses, patients, nurse practitioners, pharmacists, clinical nurse specialists, as well as home health and case management staff. The power of having the right people at the table to talk about a registry for CHF patients has made a big difference. One of our goals is for staff from any department to be able to view and make entries into the common
CHF registry. We are researching a Quality of Life survey to allow us to demonstrate effectiveness of our improvements.

7. Have there been specific processes or ways of using resources that you have focused on, such as leadership development, access, teams, or chronic care? Our challenge is to improve the work while doing the work. We’re using the IHI-endorsed Chronic Care Model and looked at whether we’re doing enough in the right places to impact care for patients with chronic disease.

We worked hard on achieving Advanced Access in early 2000 and since have worked on care team redesign and other efficiency and flow processes. We have 40-60% of most primary care providers’ appointment schedules open at the beginning of each day. Our appointment lengths and templates have been simplified. Patients can call in to make an appointment 24 hours a day, 7 days a week.

8. Does your site vary the ways that patients can access care, such as group visits, nurse clinics, phone care, and e-mail with patients? If yes, please describe. Some sites use e-mail to communicate with patients. Some physicians send lab reports via e-mail; we also do group visits at some sites.

9. How do you track and post results or outcomes? (These include operational, clinical, satisfaction, and financial.) How do you select which metrics to use? Have you found it important to limit the number of metrics used? What metrics do you use? We use electronic and hard-copy data walls to post and track results over time for a number of items from immunizations and mammograms to chronic disease prevention and treatment. The Business Excellence Team Leader provides a monthly productivity report and shares staffing information, including percentage of overtime. Managers are encouraged to discuss the reports at staff meetings, which are done monthly at most sites.

We’ve had numerous improvement breakthroughs to date at our various sites:

Financial: Reduced days in AR from 120 to 64, 77% of our clinics improved their operating margins between 5% and 50%. Supply costs at one site dropped from 8% to 5.1% of net operating revenue. Visit volume growth of 10-13% per year. Claims accuracy of 98%. Improved coding accuracy from 56% to 76%.

Operational: Open access for physical exams 100% of the time in 3 clinics and 75% of the time in 6 clinics; PDSA as an improvement technology has been implemented at 100% of our clinics; care team redesign work has been accomplished at 86% of clinics.

Clinical: Piloted asthma care quality initiative at one clinic, developed a smoking cessation program, joined the Institute for Healthcare Improvement’s IMPACT
network, implemented electronic disease management registry in 100% of clinics, and achieved benchmark status on effectiveness of care results.

Satisfaction: Patient satisfaction has improved for five straight quarters.

10. Does your site do any structured population management such as tracking patients with chronic disease?
The Touchpoint health plan, which we co-own with Thedacare, was named the #1 health plan in the nation for two years in a row. It has helped to teach us a lot about population management. This includes aligning the financial incentives for providers and tying part of our financial reimbursement to quality measures. In 2000, we had $187,000 returned; in 2001, this increased to $175,000; and in 2002, we got $465,000 back (an amazing 28% increase from 2001 figures). Results that were tracked included HEDIS measures for Hb A1c, cholesterol, immunizations, hypertension control, asthma and depression measures, as well as pediatric and adolescent immunizations.

No health plan in the nation distinguished itself more consistently in terms of performance on the HEDIS measures included in NCQA’s accreditation program than Touchpoint.

11. Do you regularly measure patient satisfaction? If so, how often is it measured? How are satisfaction results shared with staff? Have you tracked patient response to specific improvement efforts such as cycle time or access?
We use Press Gainey to survey approximately 200 patients per quarter per clinic at random. Satisfaction results are shared with staff at meetings and by posting the data at each clinic. They are also available on our internal systemwide website.

12. If you were starting your improvement work now, what would you do differently? What would you do the same way?
We would have the 10-step road map in front of us. Our sequence has been very much like the 10 steps. We would invest more upfront time in teaching skills such as effective, assertive communication and quality improvement methodology.

13. What advice would you give to others embarking on sustainable improvement?
We found that there is a road map and sequence as noted earlier, but use your own road map. Involve as many physicians as possible and send them to IHI conferences. Put lots of resources into training and education.

14. Please describe your organization:
Primary care group

15. Are you part of an integrated delivery network?
Yes

What Works © Suzanne Houck
16. Approximately how many patients are cared for at your site/organization?  
   N/A

17. On average, approximately how many patient visits occur at your site weekly,  
   monthly or yearly?  
   270,000 in the last year

18. How many FTE physicians and mid-levels (nurse practitioners and/or physician  
    assistants) are employed at your site?  
   50 physicians, 20 mid-levels. We have 72 providers working here part-time and full  
   time at 18 sites.

19. If you’re using formal care teams, what is the makeup of your team(s) (e.g., 1 FTE  
    MD, 1 mid-level, 2 MAs, 1 clerk, etc.)?  
   These vary among sites.

20. Do you use an electronic medical record?  
   Will be implementing Meditech within the next year

21. What is your average cycle time for a patient visit?  
   Varies between 11-17 minutes for an acute visit (face-to-face provider time to patient  
   time) and 30 minutes for a long visit

22. How are physicians compensated?  
   Production. Would like to move to production and performance.
Case Study #3
Norumbega Medical Specialists, Ltd.
Bangor, Maine

1. What was the impetus for deciding to initiate improvement at your site?
   My early experiences in healthcare with my mentor Larry Weed, who originated the problem oriented medical record were important. I came to Maine and worked at a practice that was the first to use the problem oriented system which was a big transformational change for the time. We also gave patients copies of the paper record at that time.

2. Has leadership been important to your efforts? If so, please describe the role of leadership in improvement.
   Leadership has been very important. A good system has four pillars: a core philosophy or vision, leadership, appropriate tools (EMRs, Problem Knowledge Couplers and registries) and users or workers who are well trained. Leadership is central. When leadership hands off improvement, it doesn’t work. At W. Edwards Deming first went at the Ford plant he asked “Where is your president?” When told that the president would not be attending the meeting, Deming declared that the meeting was over. It’s also important that physicians buy into a philosophy of improvement. (Problem Knowledge Couplers or PKCs are automated decision support tools that Dr. Burger and his staff use at the point of care.)
3. In your opinion, what activities have been especially important to sustaining improvement?
   Ongoing action by leadership.

4. How important have core values been to your improvement work?
   Tremendously important.

5. How are core values communicated to staff?
   Three years ago the whole organization went through a values development process. We did focus group meetings with people from every type of job throughout the organization. We established values that have stood up over time. An extension of that has been the collective behaviors that established a culture. Culture is the DNA of any organization.

6. Do you have an ongoing team that leads improvement in your organization? If so, please describe who is on it, how often they meet, and the structure for initiating improvements.
   It’s always a challenge in primary care practices to get the time. We have two primary groups that meet and work on improvement. One group is the support staff and patient rep group (patient reps are cross trained to function in the clinical area as well as at the front desk) The support staff/patient rep meetings are held from 8-9 a.m. once a week. It cuts into clinic time but we think if you don’t make the time for these important activities they won’t get done. We also have a clinical meeting once a week from 7:30 to 8:30 in the morning. The second group that deals with clinical issues is currently developing a chronic disease management program based on Ed Wagner’s model. These meetings provide a format for dealing with problems.

   One way we’ve been able to speed up the productivity of these meetings is to send the meeting notes electronically to everyone in attendance. Attendees then review and plan next steps before the following week’s meeting. We have people trained to facilitate meetings so that they can be more efficient. People have also learned how to participate productively so we’re better at getting things done.

   I think that the chronic disease model we’re putting in place will be our life blood when the overall healthcare system moves more to paying for quality. We’ll be way out in front.

   We’ve also shut down the practice several times to do half-day sessions to teach quality improvement tools. So people learn to look at a system, and brainstorm to find solutions.
7. Have there been specific processes or ways of using resources that you have focused on, such as leadership development, access, teams, or chronic care?
We try to follow the Toyota principles of being efficient and lean. Our staff have been taught flow charting to map out processes, enabling a standard way to see things.

We’ve closed early on Fridays three times to teach quality principles. The staff really appreciates this and I think it shows up in lower turnover. Training staff creates a much higher degree of intellectual capital in the practice. You’re probably familiar with the statistic that it costs two times an employee’s annual salary to replace him or her.

We also train in a performance based way. Staff must perform a new skill a certain number of times before their internally “certified” to do the task, such as PAP smears, independently. We train medical assistants to do prevention visits that include thorough history and physical exams, including PAP smears. These visits also include prevention and wellness counseling. We put a high premium on empowering workers and giving them great opportunities to apply their skills.

8. Does your site vary the ways that patients can access care, such as nurse clinics, group visits, nurse clinics, phone care, and e-mail with patients? If yes, please describe.
The practice has a general e-mail bulletin board where patients can post requests for appointments, referrals and refills. We communicate with one third of our patients via e-mail. We send patients test and procedure results via e-mail.

We will soon be going to a secure e-mail system that will enable our communications with patients to be automatically dropped into Logician, our electronic medical record. This will save a lot of time since I now send a copy of such notes to myself and then cut and paste them into the EMR.

9. How do you track and post results or outcomes? (These include operational, clinical, satisfaction, and financial.) How do you select which metrics to use? Have you found it important to limit the number of metrics used? What metrics do you use?
My physician colleague has developed a terrific reporting system that develops reports out of Logician, our EMR. We’re able to track progress and compare it with other practices. We’re talking about posting some of these results in the waiting room. The data is now shared with staff on a data wall in a staff common area.

We track NCQA outcomes for diabetes and coronary artery disease. These include HgA1cs with a goal of being less than 8, ASA, LDL of less than 100, foot exams and We also track preventive care measures including PAP smears, mammograms and hemoccults.
Our results are a source of pride. If you don’t measure you don’t know how well you’re doing. When every new physician looks at the data he or she says, “that can’t be me” regarding poor outcomes and tracking. Then they get on board.

10. *Does your site do any structured population management such as tracking patients with chronic disease?*

Yes, as noted above we track diabetics and patients with coronary artery disease. For example with CAD we look at our list of patients and if they’re not on ASA we call them. Often it just takes a phone call.

11. *Do you regularly measure patient satisfaction? If so, how often is it measured? How are satisfaction results shared with staff? Have you tracked patient response to specific improvement efforts such as cycle time or access?*

One of our huge deficits is poor tracking of patient satisfaction but that will change with the hospital’s new system that will track this on a regular basis and report to us.

We do give every patient a copy of the visit notes generated in the electronic medical record as they leave which has been very well received. The notes are written in the second vs. third person. I believe that this has actually reduced the number of phone calls and follow-up questions from patients. Patients routinely tell us that they share the visit notes with their families and take the time to read over them.

12. *If you were starting your improvement work now, what would you do differently? What would you do the same way?*

I wouldn’t change much. We’ve always had a long term view that it takes five years to become a quality organization. Now that we have the systems in place we just keep working away at it. I think it’s very important to not make the perfect the enemy of the good.

I think that the hardest part is to maintain improvement. Because the healthcare system is still in a production mode in that it doesn’t pay for quality, it’s easy to burrow down into what’s in front of you; to just go to the next patient. It’s almost a relief to just do that.

13. *What advice would you give to others embarking on sustainable improvement?*

You have to put in the investment in systems and people. I think this gets back to the importance of a vision and philosophy. Where there’s no vision the people will perish as they say. Professionals need a vision that has something in it for them. Just defining values doesn’t cut it with physicians. My approach when I was CEO of this organization was to tell physicians that if they didn’t change they’d die. I’d tell them that the 25 patients they’re seeing this year will grow to 35 next year with expenses continuing to grow and revenues continuing to fall.

*What Works* © Suzanne Houck
Because of the teamwork, it’s fun to come to work here. Physicians also enjoy producing good outcomes and results. That motivates physicians because they’re very competitive. When we started putting results out there it got their attention. They went through the four stages of grieving but eventually they got on board about the need to improve.

14. Please describe your organization:
   Primary care group practice

15. Are you part of an integrated delivery network?
   Yes

16. Approximately how many patients are cared for at your site?
   5,000

17. On average, approximately how many patient visits occur at your site?
   300 per week and 1,000 per month

18. How many FTE physicians and mid-levels (nurse practitioners and/or physician assistants) are employed at your site?
   1.2 physicians, 2 nurse practitioners

19. If you’re using formal care teams, what is the makeup of your team(s) (e.g., 1 FTE MD, 1 mid-level, 2 MAs, 1 clerk, etc.)?
   2.7 support staff per provider

20. Do you use an electronic medical record?
   Yes

21. What is your average cycle time for a patient visit?
   We don’t track cycle time.

22. How are physicians compensated?
   Production
Case Study #4

Primary Care Partners
Grand Junction, Colorado

1. *What was the impetus for deciding to initiate improvement at your site?*
   Inherent desire to improve.

2. *Has leadership been important to your efforts? If so, please describe the role of leadership in improvement.*
   Yes. You always need innovators and leaders to bring new ideas to the group. It helps that our office is receptive to change.

3. *In your opinion, what activities have been especially important to sustaining improvement?*
   Regular doctor meetings (weekly). Also our local HMO has been very supportive financially in practice improvement efforts.

4. *How important have core values been to your improvement work?*
   Critical.

5. *How are core values communicated to staff?*
   In a variety of ways.
6. Do you have an ongoing team that leads improvement in your organization? If so, please describe who is on it, how often they meet, and the structure for initiating improvements.
No.

7. Have there been specific processes or ways of using resources that you have focused on, such as leadership development, access, teams, or chronic care?
Access and chronic care.

8. Does your site vary the ways that patients can access care, such as nurse clinics, group visits, nurse clinics, phone care, and e-mail with patients? If yes, please describe.
N/A.

9. How do you track and post results or outcomes? (These include operational, clinical, satisfaction, and financial.) How do you select which metrics to use? Have you found it important to limit the number of metrics used? What metrics do you use?
Results are printed regularly and also e-mailed to participants. Our physician group selected our metrics. We are currently monitoring less than a dozen: patient satisfaction, staff satisfaction, doctor satisfaction, blood pressure, Hb A1c, Aspirin, ACE inhibitor for CHF, HDL cholesterol, LDL cholesterol, tobacco use, and almost every financial item you can think of.

10. Does your site do any structured population management such as tracking patients with chronic disease?
Yes. Diabetes, heart disease, dyslipidemia, CHF, hypertension, and smoking are tracked monthly on a registry and distributed to doctors and nurses.

11. Do you regularly measure patient satisfaction? If so, how often is it measured? How are satisfaction results shared with staff? Have you tracked patient response to specific improvement efforts such as cycle time or access?
Yes, once a year. Is shared with staff. Also patient and staff suggestion and comment boxes in office and waiting rooms. No, have never tracked responses to improvement efforts.

12. If you were starting your improvement work now, what would you do differently? What would you do the same way?
Yes, would reimburse doctors for time spent and attendance at meetings, in a “salary.”

13. What advice would you give to others embarking on sustainable improvement?
Either find reimbursement for effort that is sustainable, or identify ways to make the improvement effort return additional revenue through the fee-for-service system.
14. Please describe your organization:
   Primary care group practice

15. Are you part of an integrated delivery network?
   No

16. Approximately how many patients are cared for at your site?
   10,000

17. On average, approximately how many patient visits occur at your site?
   500 weekly

18. How many FTE physicians and mid-levels (nurse practitioners and/or physician assistants) are employed at your site?
   5 physicians, 1 mid-level

19. If you’re using formal care teams, what is the makeup of your team(s) (e.g., 1 FTE MD, 1 mid-level, 2 MAs, 1 clerk, etc.)?
   My personal team has 1 FTE MD, 1 RN, 2 MA

20. Do you use an electronic medical record?
   Yes

21. What is your average cycle time for a patient visit?
   45 minutes

22. How are physicians compensated?
   Production
Case Study #5
CareSouth Carolina, Inc.
Hartsville, South Carolina

1. What was the impetus for deciding to initiate improvement at your site?
   Improvement was initiated at our organization in early 2000 with an invitation by the Bureau of Primary Health Care to participate in the first Learning Session of the Health Disparities Collaborative Diabetes Management. Diabetes is a leading factor of morbidity and mortality in our area, and this invitation presented us with the opportunity to improve care to patients with diabetes.

2. Has leadership been important to your efforts? If so, please describe the role of leadership in improvement.
   Leadership has been crucial. In the beginning, leadership paid an obligatory role until the “light went off” and improvement was seen as a key strategy of the organization as a whole, not just by condition or by site.

3. In your opinion, what activities have been especially important to sustaining improvement?
   Maintaining continual engagement in a national improvement program; i.e., Institute of Healthcare Improvement IMPACT or the BPHC Health Disparities Collaboratives.
4. How important have core values been to your improvement work?
I read this as how important has our mission been to our improvement work. Answer: it lays the very foundation.

5. How are core values communicated to staff?
Through our mission, vision, and values statements, which are continually readdressed by staff, and by the strategic plan which is annually developed with staff participation.

6. Do you have an ongoing team that leads improvement in your organization? If so, please describe who is on it, how often they meet, and the structure for initiating improvements.
Our improvement team consists of the CEO, CMO, asst. CMO, COO, Director of PI, Director of Administration, and Director of Health. Depending on the improvement project, they may meet weekly or monthly. We use a model of improvement that is a PDSA (Plan, Do, Study, Act) cycle incorporating rapid cycle tests of changes after we ask the following 3 questions: What are we trying to accomplish? How will we know that a change is an improvement? What change can we make that will result in an improvement?

7. Have there been specific processes or ways of using resources that you have focused on, such as leadership development, access, teams, or chronic care?
We have adopted the chronic care model of planned care and the Advanced Access model for access and flow.

8. Does your site vary the ways that patients can access care, such as group visits, nurse clinics, phone care, and e-mail with patients? If yes, please describe.
Planned care visits, group visits, phone follow-up.

9. How do you track and post results or outcomes? (These include operational, clinical, satisfaction, and financial.) How do you select which metrics to use? Have you found it important to limit the number of metrics used? What metrics do you use?
We use a patient registry to track outcomes. We set goals for these outcomes based on national evidence-based guidelines. Diabetes, cardiovascular, asthma, and depression are the conditions currently being tracked.
We use survey tools from the clinical microsystem action guide (clinicalmicrosystem.org) to track patient and staff satisfaction.
We use practice management software (Medical Manager) to track financial information like productivity, panel size, access, revenues, access.

The list of metrics that we are tracking varies depending on improvement project and team. At a minimum, all of the above are tracked throughout the organization.

What Works © Suzanne Houck
At CareSouth 98% of our diabetic patients have had a foot exam within the last year and 92% have had a retinal eye exam within the last year. We’ve reduced HbA1c in patients with diabetes by more than 30%. Our average HbA1c measures 7.5 vs. the national average of 9. Over 73% of our patients diagnosed with depression have experienced a reduction in depression after six months and at least 92% of these patients have remained on treatment after 12 weeks. The national average for continued treatment is less than 50%.

10. Does your site do any structured population management such as tracking patients with chronic disease?
Yes, as above.

11. Do you regularly measure patient satisfaction? If so, how often is it measured?
   How are satisfaction results shared with staff? Have you tracked patient response to specific improvement efforts such as cycle time or access?
   Yes to all.

12. If you were starting your improvement work now, what would you do differently?
   What would you do the same way?
   That’s hard to answer. … Probably keep most everything the same.

13. What advice would you give to others embarking on sustainable improvement?
   Senior leadership is crucial. Improvement must be embedded in the strategic plan of the whole organization.

14. Please describe your organization:
   Community health center

15. Are you part of an integrated delivery network?
   No

16. Approximately how many patients are cared for at your site/organization?
   26,000

17. On average, approximately how many patient visits occur at your site?
   86,000 in the last year

18. How many FTE physicians and mid-levels (nurse practitioners and/or physician assistants) are employed at your site?
   16 physicians and 12 mid-levels
19. If you’re using formal care teams, what is the makeup of your team(s) (e.g., 1 FTE MD, 1 mid-level, 2 MAs, 1 clerk, etc.)?
1.0 provider (either an MD or NP), 1.0 nurse, 1.0 care manager, 1.0 Front Office Asst, 1.0 Health Information Specialist

20. Do you use an electronic medical record?
No

21. What is your average cycle time for a patient visit?
58 minutes

22. How are physicians compensated?
Production & salary
Case Study #6

Department of Family Medicine
University of Colorado
Denver, Colorado

1. What was the impetus for deciding to initiate improvement at your site?
   The current way medicine is practiced in the world is not satisfying to anyone. There is a need to experiment with change and develop new models of practice that make sense and places the patient at the center of care, not to base the care around the provider. We have developed a castle mentality where the provider is the “Queen” and patients must demonstrate their worthiness to gain an audience with the Queen. As an academic Family Medicine program, it is our responsibility to be involved in the creation of new modes of care, new ways to look at what health care truly is and how to translate that into practice.

2. Has leadership been important to your efforts? If so, please describe the role of leadership in improvement.
   Leadership is managing change, which is leadership’s purpose. Leadership involves: 1. Identifying or recognizing the need for change, 2. Creating the imperative for change, 3. Creating the environment to allow change to occur by the people who have the most to gain, and 4. Nurturing and rewarding that change as it occurs.
3. In your opinion, what activities have been especially important to sustaining improvement?
   Breaking the change into doable units and recognizing the small gains that occur. Consistent persistence. Recognition of chaos and complexity and being willing to change your mind in the middle of change. Lastly, sustaining the recognition of the urgency for change.

4. How important have core values been to your improvement work?
   Chaos theory tells us that core values are sometimes a myth that locks us in a box. If you can identify true core values, then any change must recognize these core values and incorporate or change the values. Leaders are fools to ignore core values and must make change that is consistent, but they must be willing to challenge values that may only be thought of as core, but are smoke screens for unwillingness to change.

5. How are core values communicated to staff?
   The best way is to walk the talk. Demonstration of what is important will impart the message better than anything. Rewarding behavior that reflects core values is equally important. “Do not ask for A and reward B.” Sometimes institutions hold the core value of “amazing service” but pay for getting to work on time and not allowing overtime.

6. Do you have an ongoing team that leads improvement in your organization? If so, please describe who is on it, how often they meet, and the structure for initiating improvements.
   Yes. It is open to all clinical personnel. The main attendees are the medical director, and representatives from nursing, business, management, residents, and medical records. We have thought of asking for patient involvement, but have not achieved that yet.

7. Have there been specific processes or ways of using resources that you have focused on, such as leadership development, access, teams, or chronic care?
   Access has been our recent focus with the development of open access models of care. We are also trying to get more people involved in getting people leadership training.

8. Does your site vary the ways that patients can access care, such as group visits, nurse clinics, phone care, and e-mail with patients? If yes, please describe.
   Phone calls, email, and we are working on setting up group visits, and looking to multi-disciplinary care and also moving to do more home visits, school based clinical visits and setting up care in a new community that is intranet wired, with self-appointments, and self-access to medical records via the intranet.
9. How do you track and post results or outcomes? (These include operational, clinical, satisfaction, and financial.) How do you select which metrics to use? Have you found it important to limit the number of metrics used? What metrics do you use?
The only thing we have measured is around the access issue and we chose patient satisfaction and financial indicators. We usually organize our projects around operational issues.

10. Does your site do any structured population management such as tracking patients with chronic disease?
Not currently since we do not have convenient and cost effective tools to work with. We will add an EMR in about a month and expect we will start this soon.

11. Do you regularly measure patient satisfaction? If so, how often is it measured?
How are satisfaction results shared with staff? Have you tracked patient response to specific improvement efforts such as cycle time or access?
Our institution measures satisfaction weekly (? validity) They just developed a web site that has access to the results. The clinic manager also shares the results quarterly as we receive the cumulative data.

12. If you were starting your improvement work now, what would you do differently?
What would you do the same way?
I would spend more time with the staff and committee teaching how change occurs and how to do and measure the outcome, and use some of the total clinical staff meeting to generate interest.

13. What advice would you give to others embarking on sustainable improvement?
Keep it relevant, simple and make the tools as transparent as possible. Get buy in and participation from everyone. Spend time teaching the basics and reward for doing the projects and creating positive change. Don’t be afraid to fail. Post the results early and often.

14. Please describe your organization:
Academic medical center

15. Are you part of an integrated delivery network?
Yes

16. Approximately how many patients are cared for at your site/organization?
4,000

17. On average, approximately how many patient visits occur at your site?
25,000 in the last year
18. How many FTE physicians and mid-levels (nurse practitioners and/or physician assistants) are employed at your site?
5 physicians, 3.2 mid-levels, 12 residents

19. If you’re using formal care teams, what is the makeup of your team(s) (e.g., 1 FTE MD, 1 mid-level, 2 MAs, 1 clerk, etc.)?
Changes all the time. We have teams of 4 residents, 1 midlevel and 1 or 2 part time faculty. One faculty team of several part timers. We also have 2 small micro teams of one provider, MA and front desk person. I think we will be changing this soon, to have less team and more emphasis on personal responsibility.

20. Do you use an electronic medical record?
We are in the process of implementing an electronic medical record.

21. What is your average cycle time for a patient visit?
Unknowable and vastly different due to levels of training

22. How are physicians compensated?
Currently salary only, this is changing to production based on RVU’s for most or all of the clinical work.
Appendix:

Appointment Scripts

Making Appointments

Scheduling is a frequent source of frustration for both patients and staff. The following scripts help staff communicate consistently with patients regarding appointments. The categories are:

1. Same-Day Appointment
2. Same-Day, Double-Book Appointment
3. Same-Day Appointment When Patient’s Regular Provider Is Out of the Office
4. Same-Day, Double-Book Appointment When Patient’s Regular Provider Is Out of the Office
5. Provider-Requested Future Visit
6. Patients Who Call to Cancel
7. Patients Who No-Show & Reschedule for the Same Day
8. Patients with Multiple Same-Day No-Shows
Customizing Scripts

You’ll need to customize your scripts and consider a number of factors specific to your site. These include but may not be limited to:

- If and when you will require patients who frequently no-show for appointments to use a different process for making appointments. (See Script #8, Patients with Multiple Same-Day No-Shows.)

- Whether you will ask patients to call back the next morning if their regular provider is out of the office and they don’t want to be double-booked today. (See Script #4, Same-Day, Double-Book Appointments When Regular Provider Is Out of the Office.)

- When giving patients an appointment time, whether to include the so-called front-end time required to check in. For example, if a patient is scheduled to see his or her provider at 3 p.m. and it takes 10 minutes to register, decide whether to tell the patient, “Your visit will begin at 2:45.”

- More specific instructions regarding where to enter patient birth date or other data into your practice management software (e.g., name of field in all categories).

Whatever you decide, make sure that staff are consistent about what they tell patients. In addition, we recommend that groups avoid making exceptions to the policies that are selected.

1. Same-Day Appointment

Adapted from Alaska Native Medical Center

Appointment staff:
Good morning / afternoon. _________ Health Center. This is ______. How may I help you?

(Patient requests appointment.)

May I ask your name? Thank you, Mr. / Ms. ______. May I get your date of birth (or other data)?

Update registration information.

Dr. / PA / NP ______ is available today at ____. Does that work for you?

If not:
What time/date will work for you?

Schedule the appointment.
May I ask the reason for your visit? *(Enter reason into computer.)*

May I have a phone number where we can reach you today if necessary? *(Enter it into computer.)*

Mr. / Ms. _____, I have scheduled your appointment for _____ (time). Your visit with us will begin at ____. (Add on registration and check-in time required at the front end of actual provider visit time.)

This appointment is being saved just for you. If you can’t keep your appointment, can you do us a favor? Could you please contact us as soon as possible at _____ to cancel your appointment? This will allow another patient who needs to be seen to come in. Does that work for you, Mr. / Ms. ____________?

Is there anything else I can do for you today? Thank you for calling.

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### 2. Same-Day, Double-Book Appointment

**Appointment staff:**
Good morning / afternoon. _________ Health Center. This is ______. How may I help you?

(Patient requests appointment.)

May I ask your name? Thank you, Mr. / Ms. ______. May I get your date of birth (or other identifying data)?

*Update registration information.*

I can schedule you with Dr. / PA / NP (PCP) _________ this afternoon. However, there are already patients scheduled at that time so there may be a wait, or you can call us first thing tomorrow morning. What would you prefer?

*Schedule the appointment.*

Mr. / Ms. _____, I have scheduled your appointment for ____ (time). This appointment is being saved just for you. If you can’t keep your appointment, can you do us a favor? Could you please contact us as soon as possible at _____ to cancel your appointment? This will allow another patient who needs to be seen to come in. Does that work for you, Mr. / Ms. ____________?

Is there anything else I can do for you today? Thank you for calling.

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### 3. Same-Day Appointment When Patient’s Regular Provider Is Out of the Office

**Appointment staff:**
Good morning / afternoon. _________ Health Center. This is ______. How may I help you?

(Patient requests appointment.)

May I ask your name? Thank you, Mr. / Ms. ______. May I get your date of birth (or other data)?
Update registration information.

Mr. / Ms. _____, I see that your provider is Dr. / PA / NP ______. He/she is out of the office until _____. I can offer you an appointment with Dr. / PA / NP ______ on _______; or I can offer you an appointment with one of his team members today. What would you prefer?

Schedule the appointment.

May I ask the reason for your visit? (Enter reason into computer.)

May I have a phone number where we can reach you today if necessary? (Enter it into computer.)

Mr. / Ms. _____, I have scheduled your appointment for ____ (time). Your visit with us will begin at _____.
(Add on registration and check-in time required at the front end of actual provider visit time.)

This appointment is being saved just for you. If you can’t keep your appointment, can you do us a favor? Could you please contact us as soon as possible at ______ to cancel your appointment? This will allow another patient who needs to be seen to come in. Does that work for you, Mr. / Ms. ____________?

Is there anything else I can do for you today? Thank you for calling.

4. Same-Day, Double-Book Appointment When Patient’s Regular Provider Is Out of the Office

Appointment staff:
Good morning / afternoon. ________ Health Center. This is ______. How may I help you?
(Patient requests appointment.)

May I ask your name? Thank you, Mr. / Ms. ______. May I get your date of birth (or other data)?

Update registration information.

Mr. /Ms. _____, I see that your provider is Dr. / PA / NP ______. Dr. / PA / NP ______ is out of the office until _____. I have some options for you to choose from. I can offer you an appointment with Dr. / PA / NP ______ on _______ when he/she is back in the office; or I can offer you an appointment with one of his team members today. We already have patients scheduled so there may be a wait; or you can call us to schedule an appointment first thing in the morning. What would you prefer?

Schedule the appointment.

May I ask the reason for your visit? (Enter reason into the computer.)

May I have a phone number where we can reach you today if necessary? (Enter it into the computer.)

Mr. / Ms. _____, I have scheduled your appointment for ____ (time). Your visit with us will begin at _____.
(Add on registration and check-in time required at the front end of actual provider visit time.)
This appointment is being saved just for you. If you can’t keep your appointment, can you do us a favor? Could you please contact us as soon as possible at _____ to cancel your appointment? This will allow another patient who needs to be seen to come in. Does that work for you, Mr. / Ms. ____________?

Is there anything else I can do for you today? Thank you for calling.

5. Provider-Requested Future Visit

**Provider:** I’d like to see you in about 2 weeks, and I would recommend the morning when we tend to be less busy. Please see a receptionist at the front desk to set that up for you.

**Appointment staff:** (Patient has asked for a follow-up appointment.) I see that Dr. / PA / NP ______ has requested a morning appointment for you in about 2 weeks; will that work for you? How about _______ (day, date, and time)?

Schedule the appointment.

May I ask the reason for your visit? (Enter reason into the computer.)

May I have a phone number where we can reach you if necessary? (Enter it into computer.)

Mr. / Ms. ____________, I have scheduled your appointment for _______ (day, date, and time). Your visit with us will begin at ____. (Add on registration and check-in time required at the front end of actual provider visit time.)

This appointment is being saved just for you. If you can’t keep your appointment, can you do us a favor? Could you please contact us as soon as possible at _____ to cancel your appointment? This will allow another patient who needs to be seen to come in. Does that work for you, Mr. / Ms. ____________?

Is there anything else I can do for you today? Thank you for calling.

6. Patients Who Call to Cancel

Mr. / Ms. __________, thank you for calling us to cancel your appointment. We appreciate your taking the time to make this call. This will allow another patient to come in at that time. Is this a good time for you to reschedule?

7. Patients Who No-Show and Reschedule for the Same Day

**Appointment staff:**
I noticed that you were unable to keep your appointment earlier today. If you are unable to keep the appointment that I’m making for you now, please contact us as soon as possible at _____ to cancel this appointment because it’s being saved just for you. This will allow another patient who needs to be seen to come in. Does that work for you?

Schedule the appointment and indicate no-show.
May I ask why you are coming in? (Enter reason into computer.)

May I have a phone number where we can reach you today if necessary? (Enter it into computer.)

RN, MA:
I noticed that you were unable to keep your appointment earlier today. When you know you will miss an appointment, can you please call us and cancel so that another patient can come in at that time? Does that work for you?

8. Patients with Multiple Same-Day No-Shows

After Two, Three, or Four Appointments Have Been Missed

Appointment staff:
I noticed that you were unable to keep your appointment earlier today. If you are unable to keep the appointment that I’m making for you now, please contact us as soon as possible at _____ to cancel this appointment because it’s being saved just for you. This will allow another patient who needs to be seen to come in. Does that work for you? Schedule the appointment and indicate in the computer. Also note in computer that this is second, third, or fourth no-show.

RN, MA:
I noticed that you were unable to keep your appointment earlier today. We were saving that appointment just for you. When you know you will miss an appointment, could you please call us and cancel so that another patient who needs to be seen can come in? Does that work for you?

Provider:
Patient’s Name, I noticed that you have missed many appointments and then have rescheduled on the same day. This prevents other patients who are waiting from being seen at that time. If this continues, we may require that you contact _____ to schedule appointments. In the future, if you are going to miss an appointment, will you please call to cancel it?

After More Than Four Appointments Have Been Missed

Front Desk:
I noticed that you were unable to keep your appointment earlier today. If you can’t keep the appointment that I’m making for you now, please contact us as soon as possible at _____ to cancel this appointment because this appointment is being saved just for you. This will allow another patient to come in who is waiting to be seen. Does that work for you? Schedule the appointment and indicate same-day no-show in computer. Also indicate in computer more than four appointment no-shows.

RN, MA:
I noticed that you were unable to keep your appointment earlier today. If you can’t keep an appointment, could you please call us and cancel it so that another patient who needs to be seen can come in?

Provider:
Mr. / Ms. ______, you have continued to miss your appointments without contacting us. These are appointments that other patients who need to be seen could have used. In the future, I need you to contact _____ to schedule appointments.
References


Additional Resources

System Redesign


General Office Redesign


**Access**


**Chronic Illness Care**


**Computer-Based Decision Support**


**Demand**


**Group Visits**


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