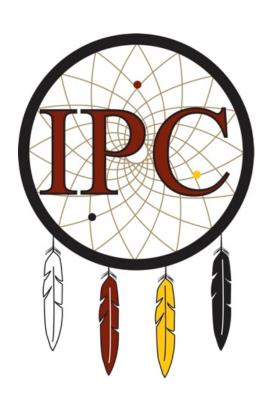


INDIAN HEALTH SERVICE
IMPROVING PATIENT CARE
RESOURCE GUIDE



FEBRUARY 2012





CONTENTS

overview	1
Background	1
The Problem	1
The Aim of IPC	2
Structure	3
Participation	3
Prework	3
Learning Sessions	4
Prepare a Storyboard	4
Action Periods	4
Expectations	4
PREPARING YOUR ORGANIZATION	6
Develop Your Aim Statement	6
Tips for Setting Aims	6
Example of an Aim Statement From an IPC 2 Organization	7
Guidance Example	7
Example of Goals (Within 12 Months; Evaluated Annually Thereafter)	
Define the Micro System	8
Tips for Identifying Your Micro System	9
Create Your Care Team	10
Create Your Improvement Team	10
Tips for Creating Your Improvement Team	10
Senior Leader (Sponsor)	10
Provider Champion	11
Clinical Technical Expert	11
Day-to-Day Leader	11
Other Members of the Improvement Team	11
Complete Diagnostic Assessment	12
Diagnostic Assessment	12
LEADERSHIP FOR IMPROVEMENT	13
Senior Leadership Roles	13
Serve as a Sponsor for the Improvement Team	13

Select a Team	13
Serve as a Champion for Expansion of Positive Changes	13
Make Improvement a Priority	14
Monitor the Progress of the Team	14
Senior Leadership Responsibilities	14
Responsibilities in the Prework Phase	14
Responsibilities During the Collaborative	14
FUNDAMENTAL MODELS	16
Chronic Care Model	16
Figure: Chronic Care Model	16
Six Components of the Chronic Care Model: Change Concepts	16
1. Health Care Organization	16
2. Community Resources and Policies	17
3. Self-Management Support	17
4. Decision Support	17
5. Delivery System Design	17
6. Clinical Information Systems	18
IPC Care Model	18
Figure: IPC Care Model	19
Model for Improvement	20
Figure: Model for Improvement	20
Three Fundamental Questions	20
What Are We Trying to Accomplish?	20
How Will We Know That a Change Is an Improvement?	20
What Change Can We Make That Will Result in Improvement?	20
Plan-Do-Study-Act Cycle	20
IMPROVING PATIENT CARE GLOSSARY	21
Figure: PDSA Cycle	24
REFERENCES	32

OVERVIEW

BACKGROUND

Welcome to the Improving Patient Care (IPC) program. This resource guide is prepared to help orient your health care team to the terminology and details of the IPC program. Your health care team's preparation and readiness to change and improve are essential to your team's success. Your feedback is welcome on how to make this guide even more useful in assisting other teams who wish to improve their own health care delivery systems.

The Indian Health Service (IHS) has identified four priorities: (1) to renew and strengthen our partnership with Tribes; (2) to reform IHS; (3) to improve the quality of, and access to, care; and (4) to make all our work accountable, transparent, fair and inclusive. In a concerted effort to meet these priorities, IHS has expanded its IPC program.

Through the IPC program, partnerships are built among the Indian Health Service (IHS), Tribal, and Urban Indian health programs. As a result, we learn together how to build a well-organized, quality system of care for American Indian and Alaska Native (Al/AN) people. The goal of the program is to engage more than 100 facilities in a collaborative effort to improve the quality of and access to care by 2013 and expand to the entire Indian health system by 2015. The IPC program also strives to promote widespread adoption of best practices and assists in developing a vibrant health care workforce, thus ensuring quality health care for future generations.

The clinical leadership of IHS recognizes that a fundamental change from a provider-oriented to a patient/family/community-oriented system of care is needed. The care and improvement models that you will be learning and implementing are key elements in the IHS strategy to improve the system of care, impact health outcomes, and reduce disparities for Al/AN people. The goals and measures in this program are evidence-based and congruent with national measurement systems in the health industry.

THE PROBLEM

IHS is responsible for the provision of health care to enrolled members of federally recognized Tribes either directly or through partnership with Tribal and Urban Indian health programs.

The Indian health system has a long, successful history of addressing acute infectious diseases and improving health through population-based community approaches to care. The result is a health care system with a strong public health infrastructure and with a reliance on systems of care that are provider centric and are geared to deliver acute episodic care. The system is made up of a network of heterogeneous facilities tasked with delivering comprehensive health care to diverse populations that are often geographically isolated. In response to local needs, the Indian health system also differs widely in governance (IHS, Tribal, and Urban Indian health program), in facility size (from small, intermittently staffed health stations to large, multispecialty hospitals), and in geography (from urban to frontier rural). This diverse, diffuse system must now address a new challenge.

Chronic conditions have had a tremendous impact on Al/AN communities and their health systems over the last 20 years. Al/AN people now have the highest published rates of Type 2 diabetes in the world, and nearly 15 percent of adults over the age of 20 have diagnosed diabetes (IHS, 2004). During the 1990s, diabetes prevalence rates in children and young adults increased by nearly 50 percent (Acton, 2002). Coronary heart disease (CHD) rates in Al/AN people now exceed that of other populations and are more likely to be fatal; diseases of the heart are the leading cause of death for Al/AN people 45 years and older (Howard, 1999 and HHS/IHS, 2004). The adjusted mortality rate from asthma has doubled since 1980, and there is evidence from statewide surveys that asthma morbidity among Al/ANs may be higher than other racial/ethnic groups (HHS/IHS, 2004 and American Lung Association 2005). It is clear that the increasing prevalence of chronic conditions contributes to the persistence of significant disparity in the health status and life expectancy of Al/AN people when compared to the total U.S. population (HHS/IHS 2004).

In response to the diabetes epidemic, the Indian health system became an early adopter of protocol driven care with close attention to outcomes, interdisciplinary team care, and strategies to engage patients and communities. Many of these elements are reflected in Wagner's Care Model, which identifies the essential elements of a health care system that effectively encourages patient self-management and promotes high-quality care of chronic conditions (Wagner, 1998).

With the Chronic Care Model as a framework, the Indian health system can and must continue to fundamentally change the delivery of care to improve health outcomes for each patient and across the entire population. IHS began this work in 2006 with the launch of the IPC program. IHS has worked with the Institute for Healthcare Improvement (IHI) to complete three phases of this program (IPC 1, 2, and 3). The IPC program employs the Model for Improvement (see the Model for Improvement section) and other methods and tools to test and measure change, while activating care teams and customers.

THE AIM OF IPC

The aim of IPC is to transform the Indian health system to a more integrated, well organized, and higher performing system of care. IPC is leading participating sites to improve the health status, and reduce the health disparities, of our people by:

- improving the quality of, and access to, care across all ages and chronic conditions;
- ensuring all preventive care needs are met;
- improving our patients' experience of care; and
- building a sustainable infrastructure for the dissemination of innovative improvement throughout the Indian health system.

STRUCTURE

PARTICIPATION

This collaborative will include groups of improvement-minded IHS, Tribal, and Urban Indian health organizations working together with the IHS IPC team and faculty to explore innovative models and approaches to guide the creation of an Indian health medical home in their communities.

Organizations will participate in a systematic approach to health care quality improvement in which they will test and measure practice innovations, then share their experiences in an effort to accelerate learning and widespread implementation of successful change concepts and ideas.

Although each participant focuses on his or her own organization, he or she remains in continual contact with other participants and faculty, through conference calls, WebEx technology, the Internet, and e-mail, as he or she designs and tests changes to his or her practice. E-mail and the Internet are important means of communication among participants. Internet access is required for any organization participating in the IPC program.

Each organization is required to submit monthly narrative and data reports on its innovation work to share results and lessons with other participating teams and with the organization's internal senior leadership. Participation in IPC activities should not be limited to meeting attendees. In fact, we strongly encourage participating organizations to involve staff beyond the core care team members in LISTSERV discussions, conference calls, and site visits.

PREWORK

Prework is the period between receipt of this guide or the beginning of prework conference calls and Learning Session 1. During this time, your team has several important tasks to accomplish, including participation in a series of prework calls. A schedule of those calls and their content will be distributed to all participating organizations. Each call will last 90 minutes, and all care team and improvement team members are expected to attend each call. The material covered on these calls will be vital to the early success of your organization.

During the prework, teams will learn the terminology of the collaborative, learn the models and methodologies, and begin to relate it to everyday life in your organization. One way to accomplish this task is for all team members to attend all prework calls. This will establish a foundation for the improvement team. Once the groundwork has been laid, teams will find their own methods of covering conference calls and accomplishing the work to meet their aims.

Including other organizational staff is an effective mechanism to build the will for change, to develop improvement capability in your organization, and to lay the foundation for expansion. The call in number, WebEx information, and content of the calls will be announced and distributed prior to the calls.

LEARNING SESSIONS

Learning Sessions are the major events. There may be up to five learning sessions, two of which will be face-to-face; the remaining sessions will be conducted virtually. Consistent interdisciplinary teams from each organization attend highly interactive Learning Sessions where they learn the elements of effective planned care for patients and a method for testing and implementing changes. Through plenary sessions, small group discussions, webcasts, and team meetings, attendees have the opportunity to:

- learn from faculty and colleagues;
- receive individual coaching from faculty members and colleagues;
- gather new knowledge on the subject matter and process improvement;
- share experiences and collaborate on improvement plans; and
- remove improvement barriers.

PREPARE A STORYBOARD

Each Learning Session is designed to create an environment conducive to shared learning. Accordingly, each team is asked to create a storyboard for the first face-to-face learning session. You will receive additional information about the structure and process for this effort on the prework calls.

ACTION PERIODS

The time between each Learning Session is called an Action Period. During Action Periods, team members work within their organizations to test and implement changes that will transform the system of care for their patients. Teams try out multiple changes in their organizations and collect data to measure the impact of the changes. Although participants focus on their own organizations, they remain in continual contact with other participating teams, IPC staff and faculty. This communication takes the form of conference calls, e-mail, a LISTSERV, and a site visit to a high-performing health care organization. In addition, organizations share the results of their improvement efforts in monthly reports.

EXPECTATIONS

IHS National Staff and the faculty will:

- facilitate shared learning and disseminate information on innovative testing of subject matter and its application both during and between meetings;
- offer coaching to organizations as they test innovative approaches in their practices;
- provide communication strategies to keep organizations connected to the faculty and colleagues during the collaborative; and

 assess progress and learning on a monthly basis and provide feedback to all organizations on the lessons learned in the overall collaborative.

A participating organization is expected to:

- connect the overarching goals of IPC to the strategic goals in its own organization;
- understand and use the Model for Improvement or a similar improvement methodology to build ongoing improvement capacity throughout its organization;
- provide an executive leader to sponsor and actively support the team by attending meetings
 as suggested by the IPC leadership team and to champion the testing and spread of
 improvements within its own facility;
- provide the resources to support its team, including staff time to invest in this effort
 (approximately one full-time employee for the duration of the collaborative) and funding
 associated with attending the meetings beyond funding provided by the IPC program;
- provide expert staff from key support units in the organization (quality management, information system, finance, etc.) to support the team as needed and engage in the improvement processes taking place;
- perform tests of change with the goal of improving processes and changing systems within the organization;
- share information with IPC collaborative participants, including details of changes made and data to support these changes, both during and between meetings; and
- attend all learning sessions and action period calls and other trainings.

NOTE: An essential rule of any collaborative is that we share information openly in the interest of full transparency. This requires a commitment to confidentiality. Information shared within the collaborative community must not be shared outside of the collaborative without permission.

PREPARING YOUR ORGANIZATION

This section is designed to help organizations accomplish the groundwork required before the initial Learning Session 1.

Checklist of Activities

- Develop Your Aim Statement.
- Define Your Clinical Micro System.
- Create Your Care Team and Improvement Team.
- Complete Diagnostic Assessments.

DEVELOP YOUR AIM STATEMENT

Improvement requires setting aims. An organization will not improve without a clear and firm intention to do so. The aim should be time specific and measurable. It should also define the specific population of patients that will be affected. Agreeing on the aim is crucial, as is allocating the people and resources necessary to accomplish the aim.

TIPS FOR SETTING AIMS

- 1. Involve senior leaders; they must align the aim with the strategic goals of the organization.
- 2. Involve community representatives and programs; they are important partners in affecting the health of your communities.
- 3. Base the aim on data and organizational needs and the needs of your community. Examine data within the organization to help guide the establishment of an appropriate aim. Focus on issues that matter to the organization and the community and on issues that might have been identified as needing improvement in assessment tools used by the organization.
- 4. State the aim clearly. Achieving agreement on the aim of a project is critical for maintaining progress. Teams make better progress when they are very specific about their aims. Make sure that the aim describes the system to be improved and the patient population. In addition, ensure that the aim gives guidance on the approaches to improvement.
- 5. Include numerical goals that require fundamental change to the system. Teams are more successful when they have unambiguous, focused aims. Setting numerical goals clarifies the aim, helps to create tension for change, directs measurement, and focuses initial changes. For example, the aim "Reduce office visit cycle time" is not as effective as "Reduce office visit cycle time by 50 percent within 12 months" or "Reduce office visit cycle time to 45 minutes within 12 months." Including numerical goals not only clarify the aim, but also helps team members begin to think about what their measures of improvement should be, what initial changes they might

- make, and what level of support they will need. Effective leaders make it clear that the goal cannot be met by tweaking the existing system. Once this is clear, people begin to look for ways to overcome barriers and achieve the stretch goals.
- 6. Avoid aim drift. Once the aim has been set, the team needs to be careful not to back away from it deliberately or "drift" away from it unconsciously. The initial stretch goal "Reduce cycle time by 50 percent within 12 months" can slip almost imperceptibly to "Reduce cycle time by 40 percent" or "by 20 percent." To avoid drifting away from the aim, repeat the aim continually. Start each team meeting with an explicit statement of aim—such as, "Remember, we're here to reduce cycle time by 50 percent within 12 months"—and then review quantitative and qualitative progress over time.
- 7. Be prepared to refocus the aim. Every team needs to recognize when to refocus its aim. If the team's overall aim is at a system level (for example, "Reduce third next available appointment to 3 days or fewer within 12 months"), team members may find that focusing for a time on a smaller part of the system (for example, "Reduce third next available appointment for patients on the green pod to 3 days or fewer within 12 months") will help them achieve the desired system-level goal. Note: don't confuse aim drift or backing away from a stretch goal (which usually isn't a good tactic) with consciously deciding to work on a smaller part of the system (which often is a good tactic).
- 8. Include an optional guidance paragraph on approaches and methods to further explain your approach. (See example below).

EXAMPLE OF AN AIM STATEMENT FROM AN IPC 2 ORGANIZATION

The XX Service Unit will provide a medical home for our Native American community that meets the needs and exceeds the expectations of the people we serve by redesigning and orchestrating the delivery care to promote empowerment, accessibility, continuity, and quality. Care will be holistic, family centered, compassionate, and culturally sensitive.

GUIDANCE EXAMPLE

- We will actively partner with the community as we design patient-centered care processes that empower patients and family members to be actively engaged in their health.
- The Service Unit Leadership will outline employee expectations that align with the improvement process, will verbalize and demonstrate unyielding support for IPC principles, and will practice transparency at all times.
- The improvement journey will focus on patients' and family members' experiences of their health care and prove effective across multiple chronic conditions.
- Once tested, the changes that prove successful will be expanded throughout the Service Unit within the next two years. Sustainability of the changes will be a key focus during the process.

- The initial micro system that will focus on improvement is located in the health clinic. As of March 1, 2009, the initial care team, "Blue Team," consists of a family nurse practitioner, a registered nurse, and approximately 750 patients from the western half of the Reservation, consisting of all ages and conditions.
- The Blue Team will be expanded to include a nurse's aid when hired (March 19, 2009) and a doctor when hired. The care team will be expanded to include a community health representative (by May 1, 2009). We hope to eventually include other disciplines, possibly public health nursing, pharmacy, lab, medical records, and mental health.

The goals established by the organization are measurable and well defined, as follows:

EXAMPLE OF GOALS (WITHIN 12 MONTHS; EVALUATED ANNUALLY THEREAFTER)

- Develop by April 30, 2009, a monthly meeting involving key community stakeholders.
- Invite by May 15, 2009, at least one local elder per month to share ideas on becoming more culturally sensitive in our delivery of health care.
- Increase cervical cancer screening rate to 80 percent by April 1, 2010.
- Increase colon cancer screening rate to 75 percent by April 1, 2010.
- Increase breast cancer screening rate to 90 percent by April 1, 2010.
- Increase blood pressure in control from 26 percent to 50 percent by April 1, 2010, and to 70 percent by February 1, 2011.
- Decrease average cycle time for Jessica's patients to 55 minutes by June 1, 2009, and to 45 minutes by July 15, 2009.
- Increase patient satisfaction as evidenced by decreased patient complaints and achieve We
 Care Survey scores of 4.5 or better by October 1, 2009.
- Increase staff satisfaction by 50 percent as measured by staff satisfaction surveys by October 1, 2009.
- Reduce time until third next available appointment to 14 days by August 1, 2009, and to 3 days by December 1, 2009, and to 0 days by March 1, 2010.
- Patient empowerment for self-management will improve by the development of at least one patient self-care handout per month for the next 12 months.

DEFINE THE MICRO SYSTEM

Dynamic, adapting frontline systems called micro systems are one essential feature of the collaborative. Micro systems are small, interdependent groups of people who work together regularly to provide care for specific groups or panels of patients. This small group of people who provide care

to the micro system is called the care team. Most organizations in the IPC Collaborative provide care to many hundreds, or even thousands, of patients with chronic diseases or who need preventive services. Similarly, many organizations have multiple sites and providers. It is not reasonable to expect that during the initial period of the Collaborative you will be able to redesign your organization's entire system to improve care for all patients. Therefore, your clinic's team should pick a subgroup (or subpopulation) of your patients. This subpopulation will be the initial focus of the change in practice during the Collaborative; plans will be established to expand the changes throughout your entire organization.

TIPS FOR IDENTIFYING YOUR MICRO SYSTEM

All patients of at least one provider (physician, nurse practitioner, or physician assistant) will be included in the micro system.

The selection of the micro system should not be based on risk levels or conditions (i.e., patients with an A1c over 10 or all diabetic patients), but by provider or site.

It is not acceptable to take only portions of one provider's panel. For example, if you have only some of Dr. X's patients in the population that you are addressing, you add complexity in providing care, and you need to constantly distinguish between those patients who should pass through the new system of care and those who will continue to receive the "ordinary" system of care delivered by Dr. X and her provider team.

The expectation is that the defined micro system is likely to be anywhere between 900–2,000 patients. It is important that you have enough patients to cause your team to redesign the system of care. Too small of a population may mean that your team can use short-term fixes that are not system changes to accommodate a handful of patients. Also, you want to have a sufficient number of patients in your micro system to make a convincing case to other providers and senior leadership when it comes time to expand the changes.

Pick the micro system wisely. Pick the providers and clinics where the changes are most likely to be embraced and where the change concepts relating to primary care will be most applicable.

Once the micro system is selected, the care team will concentrate its improvement efforts on that group of patients. This does not mean that changes found to be effective with the initial micro system cannot be expanded to other sites or providers. It only means that the initial effort and measurement will be directed toward this group. Later in the collaborative, we will focus on expansion and inclusion of other providers and sites.

It is important to understand that the micro system is not a static number. As new patients come in or existing patients leave the clinic, the number of patients in the micro system will fluctuate. In particular, as the provider (or providers) see new patients, these patients should be added to the micro system.

Example of a micro system: "During the collaborative, we will focus on all of the patients of one provider (Smith) at the Best Clinic site. This includes approximately 1,250 patients who have been identified as primary care patients of Dr. Smith."

The example above provides a clear definition of the micro system selected, with identification of the provider, the clinical site, and the number of patients seen at that site by the selected provider. This approach requires the identification of a "panel" of patients (impanelment).

CREATE YOUR CARE TEAM

The care team is a small group of primary care providers and nurses, medical assistants, and other ancillary staff that provide care to patients in the micro system. The care team is a part of the improvement team.

CREATE YOUR IMPROVEMENT TEAM

Including the right people on the improvement team is critical to a successful improvement effort. Teams vary in size and composition. Each organization builds teams to suit its own needs.

TIPS FOR CREATING YOUR IMPROVEMENT TEAM

- 1. Review your organization's aim.
- 2. Consider the system that relates to that aim. How will the organization's culture, infrastructure, and processes be affected by the improvement efforts?
- 3. Be sure that the team has members familiar with all the different parts of the organization, including managers and administrators. Also include physicians, physician assistants, pharmacists, nurses, advanced practice nurses, frontline workers, patient representatives, and community health providers, such as community health representatives and public health nurses.

Effective teams include members representing three different kinds of expertise within the organization: system leadership, technical expertise, and day-to-day leadership. There may be one or more individuals on the team with each kind of expertise. Or, one individual may have expertise in more than one area. In the end, all three areas should be represented to drive improvement successfully.

SENIOR LEADER (SPONSOR)

Teams need someone with enough authority in the organization to institute a change that has been suggested and to overcome barriers that arise. The team's system leader understands both the immediate implications of the proposed change for various parts of the system and the more remote consequences such a change might trigger. It is important that this person have authority in all of the areas that are affected by the change. This person must have the authority to allocate the time and resources the team needs to achieve its aim.

The work of the improvement team must be connected to the strategies of the organization. The sponsor is the leader who is responsible and accountable to his or her organization for the performance and results of the improvement team. This person is often not a formal member of the improvement team, but is responsible for securing the resources for the team to accomplish its aim and communicating its progress to other leaders in the organization. Most often in the Improving Patient Care team, the sponsor has been the CEO or COO of the organization. It *must* be someone who can bridge the gap between the clinical and operational chasm that often exists in health care organizations. Other members of the C-suite—the chief nurse officer, the clinical director, and the chief financial officer—also need to be involved in this work.

The sponsor must have a basic knowledge of improvement, the authority to muster resources and remove barriers in the organization, and a direct connection to senior leadership. The sponsor understands that his or her responsibilities include the success of the improvement team.

PROVIDER CHAMPION

It is critical to have at least one provider champion (physician, nurse practitioner, or physician assistant) on the team. This champion should be interested in driving change in the system and have a good working relationship with colleagues and the day-to-day leaders described below. Look for providers who are positive opinion leaders in the organization (individuals sought out for advice who are not afraid to test change).

CLINICAL TECHNICAL EXPERT

A technical expert is someone who knows the subject intimately and who understands the processes of care. An expert on improvement methods can provide additional technical support by helping the team determine what to measure, by assisting in the design of simple, effective measurement tools, and by providing guidance on collection, interpretation, and display of data. This individual may be a provider, nurse, lab technician, pharmacist, quality improvement manager, front-office staff member, medical records staff member, information systems specialist, etc.

DAY-TO-DAY LEADER

The day-to-day leader will be the critical driving component of the team, ensuring that tests of change are implemented and overseeing data collection. It is important that this person understand not only the details of the system, but also the various effects of making changes in the system. This individual also needs to be able to work effectively with the provider champion, sponsor, and other staff members in the organization. The day-to-day leader will be the key contact at your organization. This individual is responsible for coordinating communications between the team, system leadership, and staff. This individual may be a provider, nurse manager, or clinic manager.

OTHER MEMBERS OF THE IMPROVEMENT TEAM

Improving care for all patients will require changes that cut across traditional department boundaries. To develop an overall system of changes within your organization, team members

should be system thinkers with the ability to work across departments to test and effect change. The specific makeup of teams will vary, but some key roles to consider include:

- primary care providers—physicians, nurse practitioners, or physician assistants;
- nurses, public health nurses, and community health representatives;
- health technicians, medical assistants, and other direct care providers;
- ancillary care providers, such as pharmacists, behavioral health providers, dietitians, therapists, and others;
- quality improvement staff;
- · information system staff;
- administrative and office staff; and
- finance staff.

COMPLETE DIAGNOSTIC ASSESSMENT

DIAGNOSTIC ASSESSMENT

Each participating organization will complete a diagnostic assessment for its organization during the prework phase. Teams will be asked to complete the following sections of the Assessing, Diagnosing, and Treating Your Outpatient Primary Care Practice (also known as the Green Book, which is accessible at http://www.clinicalmicrosystem.org) at a minimum: Know Your Patients on page six, Know Your Professionals on page 6, and "Walk Through" on page nine.

Collecting this information and discussing results with your team and colleagues will allow you to identify key areas where new designs are needed. It will also allow you to build a strategy for instituting effective, efficient planned care tailored to your organization's strengths and existing capacity. The materials you need for the diagnostic assessments will be distributed and discussed on a prework call. We may offer additional diagnostic tools and activities based on the needs and issues you bring to the discussion.

LEADERSHIP FOR IMPROVEMENT

Improvement requires change. Sometimes the changes are simple, such as taking a few steps that everyone involved agrees will add value to a process or removing some non-value-added steps that will improve the process. However, improvement usually requires people to change from old habits and behaviors to better ones or even to change from one set of core values, beliefs, and rituals to a whole new culture.

Because improvement requires people to change, improvement requires leadership, which is often defined as "influencing people to make the changes needed to achieve results."

-Dr. James L. Reinertsen

Leadership that drives improvement across all conditions, departments, and offices in a health care system requires a profound transformation of the system. The task of the leader is to create a vision that tells people where the team is going and how it will get there, to convey the big picture, and to create excitement about working together to achieve an objective.

Senior leaders are the ones who best understand that picture of the organization. Their primary responsibility is to lead the organization toward high-performance goals. With senior leadership support, a well-chosen improvement team can significantly improve the quality, and reduce the cost, of care that an organization delivers. The senior leader of an improvement team must embrace the roles and responsibilities that will help the team achieve success.

SENIOR LEADERSHIP ROLES

SERVE AS A SPONSOR FOR THE IMPROVEMENT TEAM

The word sponsorship is synonymous with the words backing, support, resources, and protection. Just as any professional ball team requires these skills from senior management, your team will require these from you. When they meet obstacles that impede their progress, they will need your guidance to assist them.

SELECT A TEAM

Using the team selection information in this prework manual, you should be able to select a high-performing team.

SERVE AS A CHAMPION FOR EXPANSION OF POSITIVE CHANGES

Your team will generate positive results on a defined population of patients. A major role of senior leadership is to guide the expansion of these changes throughout the whole organization. This effort includes engaging the health board or governing body to gain support in planning for expansion and in removing obstacles to change in the organization.

MAKE IMPROVEMENT A PRIORITY

Set the tone for the team and the organization that improvement is important. Tie improvement to the strategic plan of the organization. Provide the team with time to meet. Convey the message that improvement is part of its regular job—not an "add on."

MONITOR THE PROGRESS OF THE TEAM

Teams often have a hard time coming together, and they sometimes get off track. They can also lose perspective in terms of being sensitive to time and progress. A key role of leadership is to monitor team progress, check in with the team leader regularly, and, where possible, attend one team meeting per month. The improvement team should provide a senior leader report with graphs that will be submitted to the IPC Knowledge Management and Data Portal and IPC leadership. IPC work should be integrated into the organization's quality improvement program and must be shared with the board as part of the quality improvement program.

Executive reviews of projects can be a powerful method for channeling leadership attention to quality initiatives. The following link will take you to a primer (Executive Review of Improvement Projects) that helps organizational leaders do effective project reviews focusing on results, diagnosing problems with projects, helping projects to succeed, and facilitating the expansion of good ideas across the organization:

http://www.ihi.org/knowledge/Pages/Tools/ExecutiveReviewofProjectsIHI.aspx.

SENIOR LEADERSHIP RESPONSIBILITIES

RESPONSIBILITIES IN THE PREWORK PHASE

- Communicate to staff and the health board or governing body how the IPC Collaborative reinforces the organizational strategic goals.
- Identify the care team and improvement team.
- Select or facilitate the selection of the team leader.
- Determine and acquire needed resources.
- Provide feedback to the team during the prework phase to prepare its aim statement (which
 must align with the organizational strategic plan) and to identify the micro system.
- Invite community partners such as tribally operated health programs to be part of the improvement team.

RESPONSIBILITIES DURING THE COLLABORATIVE

- Meet regularly with the care and improvement teams.
- Read monthly reports and provide feedback to the team.

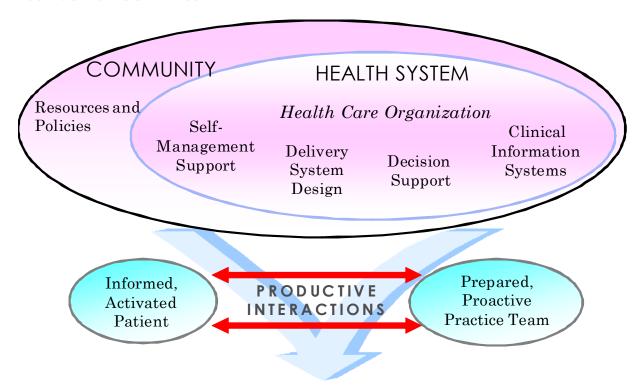
- Develop and improve systems that allow team members to bring about change. Open communication lines between the team and the rest of the organization. A helpful tool that presents some important leverage points for leaders who want to achieve dramatic, system-level performance improvement can be found at http://www.ihi.org/knowledge/Pages/IHIWhitePapers/SevenLeadershipLeveragePointsWhitePaper.aspx
- Run interference for the care and improvement teams, representing their interests to the rest of the organization.
- Help eliminate the gap that exists between clinical and financial leadership.
- Ensure that changes made by the team are followed up and sustained.
- Assist the team in addressing barriers to improvement as they are identified.

FUNDAMENTAL MODELS

CHRONIC CARE MODEL

The Chronic Care Model (Wagner, 1998) identifies the essential elements of a health care system that encourage high-quality chronic disease care. The evidence-based change concepts under each component foster productive interactions between informed patients who take an active part in their care and providers with resources and expertise. The model can be applied to a variety of chronic illnesses, preventive services, health care settings, and target populations. The bottom line is healthier patients, more satisfied providers, and cost savings.

FIGURE: CHRONIC CARE MODEL



FUNCTIONAL AND CLINICAL OUTCOMES

SIX COMPONENTS OF THE CHRONIC CARE MODEL: CHANGE CONCEPTS

The following information is courtesy of Improving Chronic Illness Care (ICIC), a national program supported by the Robert Wood Johnson Foundation, with direction and technical assistance provided by the Group Health Cooperative's MacColl Institute for Health Care Innovation.

1. HEALTH CARE ORGANIZATION

Create a culture, organization, and mechanisms that promote safe, high-quality care.

- Visibly support improvement at all levels of the organization, beginning with the senior leader.
- Promote effective improvement strategies aimed at comprehensive system change.
- Encourage open, systematic handling of errors and quality problems to improve care.
- Provide incentives based on quality of care.
- Develop agreements that facilitate care coordination within, and across, organizations.

2. COMMUNITY RESOURCES AND POLICIES

- Mobilize community resources to meet needs of patients.
 - Encourage patients to participate in effective community programs.
 - Form partnerships with community organizations to support and develop interventions that fill gaps in needed services.
 - Advocate for policies to improve patient care.

3. SELF-MANAGEMENT SUPPORT

- Empower and prepare patients to manage their health and health care.
 - Emphasize the patient's central role in managing his or her health.
 - Use effective self-management support strategies that include assessment, goal setting, action planning, problem solving, and follow-up.
 - Organize internal and community resources to provide ongoing self-management support to patients.

4. DECISION SUPPORT

- Promote clinical care that is consistent with scientific evidence and patient preferences.
 - Embed evidence-based guidelines into daily clinical practice.
 - Share evidence-based guidelines and information with patients to encourage their participation.
 - Use proven provider education methods.
 - Integrate specialist expertise and primary care.

5. DELIVERY SYSTEM DESIGN

Assure the delivery of effective, efficient clinical care and self-management support.

- Define roles and distribute tasks among team members.
- Use planned interactions to support evidence-based care.
- Provide clinical case management services for complex patients.
- Ensure regular follow-up by the care team.
- Give care that patients understand and that fits with their cultural background.

6. CLINICAL INFORMATION SYSTEMS

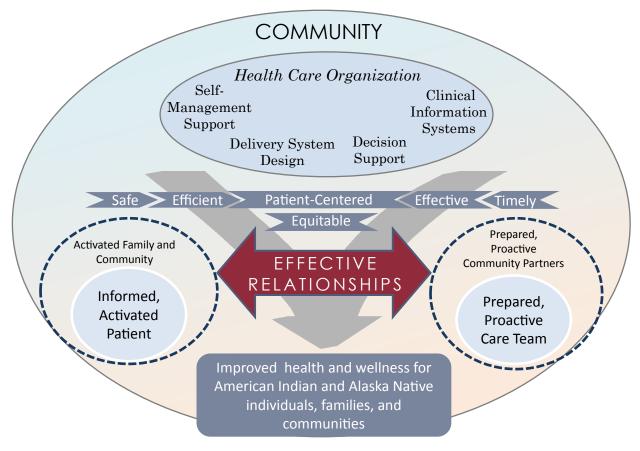
- Organize patient and population data to facilitate efficient, effective care.
 - Provide timely reminders for providers and patients.
 - Identify relevant subpopulations for proactive care.
 - Facilitate individual patient care planning.
 - Share information with patients and providers to coordinate care.
 - Monitor performance of practice team and care system.

IPC CARE MODEL

The original Chronic Care Model has been updated to reflect advances in the field of chronic and preventive care both from the research literature and from the scores of health care systems that implemented the Chronic Care Model in their improvement efforts. The IPC Care Model reflects those changes as well as the features of high-quality care outlined in the Quality Chasm report. The IPC Care Model differs from the Chronic Care Model in two important ways: (1) the inclusion of the six aims from the Quality Chasm report as criteria for high-quality services and (2) the addition of change concepts addressing staff development, cultural competence, care coordination, and patient safety.

The Indian health system has developed an expanded version of the Chronic Care Model, the Care IPC Model (shown below), designed in particular to be relevant to the populations served by IHS, Tribal, and Urban Indian health programs. It broadens and reframes the Chronic Care Model by placing a greater emphasis and importance on the "Community" component of the Model and focuses on the development of "Effective Relationships" rather than "productive interactions" between the care team and the patient/family/community. The Institute of Medicine Aims are clearly delineated in the IPC Care Model, and the primary outcome of interest is "Improved Health and Wellness for American Indian and Alaska Native individuals, families, and communities."

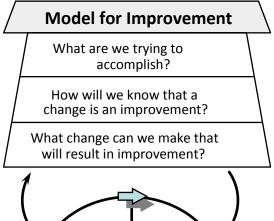
FIGURE: IPC CARE MODEL

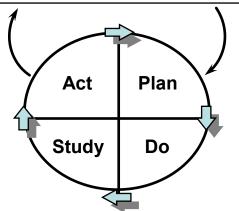


MODEL FOR IMPROVEMENT

The Model for Improvement, developed by Associates in Process Improvement (Langley, 2009), is a simple, yet powerful tool, for accelerating improvement. The model is not meant to replace change models that organizations may already be using, but, rather, to accelerate improvement. This model has been used very successfully by hundreds of organizations in many countries to improve health care processes and outcomes.

FIGURE: MODEL FOR IMPROVEMENT





The Model has two parts. The top half of the diagram asks three questions, and the bottom half portrays a cycle of actions.

THREE FUNDAMENTAL QUESTIONS

The Model asks three fundamental questions that can be addressed in any order.

WHAT ARE WE TRYING TO ACCOMPLISH?

Improvement requires setting aims. The aim should be time specific and measurable. It should also define the specific population of patients that will be affected.

HOW WILL WE KNOW THAT A CHANGE IS AN IMPROVEMENT?

Teams use quantitative measures to determine if a specific change actually leads to an improvement.

WHAT CHANGE CAN WE MAKE THAT WILL RESULT IN IMPROVEMENT?

All improvement requires making changes, but not all changes result in improvement. Organizations, therefore, must identify the changes that are most likely to result in improvement

PLAN-DO-STUDY-ACT CYCLE

The Plan-Do-Study-Act (PDSA) cycle (Deming, 2000) tests and implements changes in real work settings. The PDSA cycle is shorthand for testing a change in the real work setting—by planning it, trying it, observing the results, and acting on what is learned. This is the scientific method used for action-oriented learning. The PDSA cycle guides the test of a change to determine if the change is an improvement.

After testing a change on a small scale, learning from each test, and refining the change through several PDSA cycles, the team can implement the change on a broader scale, for example, for an entire pilot population or for an entire unit.

IMPROVING PATIENT CARE GLOSSARY

This glossary is current as of January 2012.

Action Period: The period of time between learning sessions when teams work on improvement in their home organizations is the action period. Collaborative leaders and faculty provide support during action periods, and members of Collaborative teams are connected to each other.

Action Period Calls or All-Team Calls: These are regularly scheduled conference calls during the action period that connect all participating teams with each other, faculty, and collaborative leaders. Content is provided, teams share stories, ideas and tools, and results are discussed.

Action Plans: These are work plans prepared by participating organizations, to develop and guide tests for change, implementation, and spread. Action plans subsequently define the timeline for the actions.

Advanced Access: This is a model to reduce delays and wait times in the clinical setting. The core principle of advanced access is that patients calling to schedule a clinic visit are offered an appointment the same day. The goal of advanced access is to build a system in which patients have the opportunity to see their own providers when they choose. For additional information about advanced access, see

http://www.ihi.org/offerings/VirtualPrograms/Webinars/Web_Action/ImprovingAccess/Pages/default.aspx.

Aim or Aim statement: This is a written, measurable, and time-sensitive statement of the expected results of an improvement process. An aim answers the first question in the Model for Improvement, "What are we trying to accomplish?" Improvement requires setting aims. The aim for IPC II can be found on the IPC Knowledge Portal. Tips for setting aims can be found at http://www.ihi.org/knowledge/Pages/HowtoImprove/ScienceofImprovementTipsforSettingAims.aspx

Annotated Run Chart or Time Series: A line chart showing results of improvement efforts plotted over time is an annotated run chart or time series. The changes made are also noted on the line chart at the time they occur, allowing the viewer to connect changes made with specific results.

Backlog: Backlog consists of appointments on the future schedule that have been scheduled in the future due to lack of openings on the current schedule. Working down the backlog recalibrates the system to improve access. For additional information, go to

http://www.ihi.org/knowledge/Pages/Changes/RecalibratetheSystembyWorkingDowntheBacklog.as px. For a backlog reduction worksheet, see

http://www.ihi.org/knowledge/Pages/Tools/BacklogReductionWorksheet.aspx.

Best Practices: A best practice is the belief that there is a technique, method, process, activity, incentive, or reward that is more effective at delivering a particular outcome than any other

technique, method, process, etc. The idea is that, with proper processes, checks, and testing, a desired outcome can be delivered with fewer problems and unforeseen complications. Best practices can also be defined as the most efficient (least amount of effort) and effective (best results) way of accomplishing a task, based on repeatable procedures that have proven themselves over time for large numbers of people.

IPC Care Model: The IPC Care Model is a refinement of the Chronic Care Model. IHS staff created the IPC Care Model to reflect advances in the fields of chronic and preventive care both from the research literature and from the scores of health care systems that implemented the Chronic Care Model in their improvement efforts. The IPC Care Model reflects those changes, as well as the features of high-quality care outlines in the Quality Chasm report. The IPC Care Model differs from the Chronic Care Model in two important ways: (1) the inclusion of the six aims from the Quality Chasm report as criteria for high-quality services and (2) the addition of change concepts addressing staff development, cultural competence, care coordination, and patient safety. See the figure above.

Champion: This is an individual in the organization who believes strongly in quality improvement and is willing to work with others to test, implement, and spread changes. Teams need at least one clinical champion. Champions in other disciplines who work on the process are important as well. Champions should have good working relationships with colleagues and with day-to-day leaders, and they should be interested in driving change in the system.

Change Concept: A general idea for changing a process is a change concept. Change concepts are usually at a high level of abstraction, but they evoke multiple ideas for specific processes. "Simplify," "reduce handoffs," and "consider all parties as part of the same system," are all examples of change concepts.

Change Idea: An actionable, specific idea for changing a process is a change idea. Change ideas can be tested to determine whether they result in improvements in the local environment. An example of a change idea is, "Simplify process for data entry by having front desk staff enter visit information directly into an electronic registry."

Change Package: A collection of change concepts, key changes, and specific examples of change ideas that serves as a resource for organizations embarking on change within their organization is a change package. It includes the key content for the Collaborative, a listing of the essential changes needed to get results, and ideas based on evidence in the literature or from credible expert opinion.

Charter: A document to describe and to launch a collaborative is a charter. The charter establishes a common vision for the work. It includes:

- a problem statement, a gap, a mission statement, and a business case for the improvement;
- specific, measureable goals (such as "improve outcomes" and "reduce costs"); and
- expectations for participants, faculty, support structures, etc.

Chronic Care Model: This model represents the ideal system of health care for people with chronic disease and an approach to redesigning health care to mirror that ideal system. Developed by Improving Chronic Illness Care, the model has six components: community resources and policies, health care organization, self-management support, decision support, delivery system design, and clinical information systems. For additional information, see http://www.improvingchroniccare.org.

Clinical Information System (CIS): This is a comprehensive, integrated information system that is "patient centered." A CIS includes patient registries, a practice management system, a billing system, an electronic health record, and personal health records. It is one of the components of the Chronic Care Model.

Collaborative: This is a systematic approach to health care quality improvement in which organizations and providers test and measure practice innovations, then share their experiences in an effort to accelerate learning and widespread implementation of best practices. Everyone teaches, everyone learns.

Collaborative Leadership and Faculty: This is a group of experts on the topic who assist the organization in developing the Collaborative and in teaching and coaching participating teams.

Collaborative Team: All individuals from the participating organizations that drive and participate in the improvement process are part of the collaborative team, which is a multidisciplinary team that participates in the improvement process in the organization.

Community Health Representative (CHR): A CHR is a well-trained, community-based, indigenous health care paraprofessional who provides culturally respectful health care, outreach, and health promotion and disease prevention services in Tribal or urban communities. For more information, visit http://www.ihs.gov/NonMedicalPrograms/chr/.

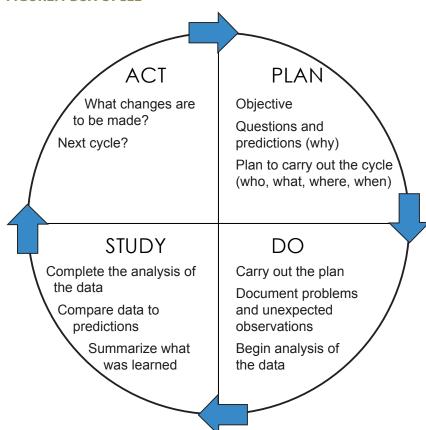
Core Team Members: These are individuals who attend the learning sessions and are accountable to their organizational senior leadership for the work of the collaborative.

Cycle or PDSA cycle: This cycle is a structured trial of a process change. Drawn from the Shewhart cycle, this effort includes:

- plan—a specific planning phase;
- **do**—a time to try the change and observe what happens;
- study—an analysis of the results of the trial; and
- act—devising next steps based on the analysis.

This PDSA cycle will naturally lead to the Plan step of a subsequent cycle. For additional information, see the Model for Improvement section above.

FIGURE: PDSA CYCLE



Cycle Time or Office Visit Cycle Time: The amount of time in minutes that a patient spends at an office or clinic visit is the cycle time. For additional content, tools, and related changes, see http://www.ihi.org/knowledge/Pages/Measures/OfficeVisit CycleTime.aspx.

Data Collection Plan: This is a specific description of the data to be collected, the interval of data collection, and the subjects from whom the data will be collected. The IPC Data Collection Plan can be located on the IPC Knowledge Portal.

Day-to-Day Leader: This

person manages the team and arranges meetings; he or she ensures tests are completed and data is collected. The day-to-day leader will be the critical, driving component of the team. This individual must understand the details of the system and the potential effects of making changes in the system. This person must be able to work effectively with the improvement champions and will often be the key contact at the organization. See the definition below for key contact.

Decision Support (DS): Methods to enable patients and providers to make informed choices about optimal care is decision support. DS includes the use of evidence from the medical and health services literature, the education of providers, and the interactions between specialists and primary care providers.

Delivery System Design (DSD): DSD is how care is provided to patients, including the types and roles of the health care team and the types of appointments and follow-up techniques used by the practice to ensure high-quality care.

Early Adopter: In the improvement process, the opinion leader within the organization who brings in new ideas from the outside, tries them, and uses positive results to persuade others in the organization to adopt the successful changes is the early adopter.

Early Majority/Late Majority: The individuals in the organization who will adopt a change only after it is tested by an early adopter are an early majority, while those who adopt it after the majority of the organization is already using the change are a late majority.

Electronic Health Record (EHR): The Resource and Patient Management System EHR is intended to help providers manage all aspects of patient care electronically, by providing a full range of functions for data retrieval and capture to support patient review upon encounter and for follow-up. By moving most (and eventually all) data retrieval and documentation activities to the electronic environment, patient care activities and access to the record are able to occur simultaneously at multiple locations without dependence on availability of a paper chart. Moreover, point-of-service data entry ensures that the record is always up to date for all users. For more information, visit http://www.ihs.gov/cio/ehr/index.cfm?module=clinicaloverview.

Expert Meeting: A panel of 12 to 15 multidisciplinary experts from a variety of organization types with the responsibility to develop the core content for a Collaborative is an expert meeting. At the expert meeting, the panel will begin to identify faculty to teach and coach participating organizations. It is at this meeting that there is a start to the development of the collaborative goals, change package, and measurement system.

Gantt Chart: A type of bar chart that illustrates a project schedule is a Gantt chart. Gantt charts illustrate the start and finish dates of the terminal elements and summary elements of a project.

Government Performance and Results Act (GPRA): GPRA holds federal agencies accountable for using resources wisely and achieving program results. GPRA requires agencies to develop plans for what they intend to accomplish, measure how well they are doing, make appropriate decisions based on the information they have gathered, and communicate information about their performance to Congress and the public.

Green Book: Officially known as Assessing, Diagnosing, and Treating Your Outpatient Primary Care Practice and found at http://www.clinicalmicrosystem.org, this workbook provides tools and methods that clinical teams can use to improve the quality and value of patient care. The Green Book can also improve the worklife of all staff who contribute to patient care. These methods can be adapted to a wide variety of clinical settings—large and small, urban and rural, or community-based and academic.

Harvesting Meeting (Knowledge Gathering Session): National leads and subject matter faculty members review results, approaches, challenges, etc., with successful teams to identify the most useful changes and the measures that were most productive. From the information obtained, the charter, change package, and measurement strategy will be reviewed and revised accordingly. These ideas are used to produce written material, create spread materials, and plan the next Collaborative.

iCare: iCare is a population management software tool that helps organizations manage the care of their patients. The ability to create multiple panels of patients with common characteristics (e.g.,

age, diagnosis, and community) allows personalization of the way patient data can be viewed. iCare is a Windows-based, client-server graphical user interface to the IHS RPMS. It retrieves important patient information from various components of the RPMS database and brings it together under a single, user-friendly interface. For more information, visit http://www.ihs.gov/CIO/ca/icare/.

Implementation: Taking a change and making it a permanent part of the system is implementation. A change may be tested first and then implemented throughout the organization.

Improvement Advisor: The improvement advisor is devoted to helping identify, plan, and execute improvement projects throughout the organization, delivering successful results and spreading changes throughout the entire system.

Improvement Support Team (IST): An IST is a 3-6 member interdisciplinary team whose function is to support improvements in care in the field. Variably consisting of Area, Tribal, and field staff, the IST serves as the infrastructure for spread and sustainability of improvement in the Indian health system (IHS, Tribal, and Urban Indian health programs) and is the backbone of the plan for spread.

Institute for Healthcare Improvement (IHI): IHI is an independent, not-for-profit organization helping lead the improvement of health care throughout the world. Founded in 1991 and based in Cambridge, Massachusetts, IHI works to accelerate improvement by building the will for change, cultivating promising concepts for improving patient care, and helping health care systems put those ideas into action. For more information, visit http://www.ihi.org.

- IPC 1: Improving Patient Care 1. Originally called Innovations in Planned Care, this was the first phase of IPC. It included 14 pilot sites (8 IHS, 5 Tribal, and 1 Urban Indian health program) in 2007.
- **IPC 2:** The second phase of IPC began in Fall 2008; 25 new sites joined the original 14 to total 39 participating sites (24 IHS, 12 Tribal, and 3 Urban Indian health program).
- IPC 3: The third phase of IPC began in January 2011 at 68 sites

Kaizen (Japanese for "improvement"): Kaizen is a Japanese philosophy that focuses on continual improvement throughout all aspects of life. When applied to the workplace, kaizen activities continually improve all functions of a business, from manufacturing to management, and from the chief executive officer (CEO) to the assembly line workers. By improving standardized activities and processes, kaizen aims to eliminate waste. Kaizen was first implemented in several Japanese businesses during the country's recovery after World War II and has since spread to businesses throughout the world.

Key Changes: A list of essential process changes that will help lead to breakthrough improvement, key changes for IPC are located in a high-leverage, sequenced, change grid in the change package.

Key Contact: This is the individual on the organization's team who takes responsibility for communication between the team and Collaborative staff, including monthly reports and information dissemination. This person is often the day-to-day leader of the collaborative work at the local site.

Knowledge Management: In IPC, knowledge management is the process of gathering information about the spread process as it unfolds in the organization. Once the spread plan has been put into effect, the spread agent plays an important role in monitoring the process and recommending adjustments as needed to ensure that the spread goals are met. The spread agent can use a number of mechanisms to gather information about the spread process, including: formal surveys or questionnaires; talking and listening to participants in a collaborative or pilot; and websites that enable the participants to share their activities and lessons learned about the process.

Leadership Calls: These are monthly conference calls for the leadership of the participating organizations. The curriculum for these calls is focused on improving leadership capabilities and developing a systems approach for the leadership of improvement. They also focus on: being transparent with data, improvement strategies, and experiences; testing, implementing, and sharing successful improvements; and quality as a business strategy. For more information, visit http://www.ihi.org/knowledge/Pages/Tools/IHIFrameworkforLeadershipforImprovement.aspx.

Learning Community: This is a network of organizations whose members work to achieve rapid, continual improvement. The learning community should be a source of innovative, breakthrough improvement ideas inspired by others. It should provide the opportunity for peer exchange of ideas, and it should be designed to drive and support the hard work of leading improvement and implementing sustainable change at the front line.

Learning Session: A learning session is a meeting during which participating organization teams meet with faculty and peers to collaborate and to learn key changes in a topic area (including how to implement them). A learning session includes approaches for accelerating improvement and methods for overcoming obstacles to change. Teams leave these meetings with new knowledge, skills, and materials that prepare them to make immediate changes.

LISTSERV: A LISTSERV is an automatic mailing list. When e-mail is addressed to a LISTSERV mailing list, it is automatically broadcast to everyone on the list. The result is similar to a newsgroup or forum except that the messages are transmitted as e-mail and are therefore available only to individuals on the list.

Measure: An indicator of change is a measure. Key measures should be focused, clarify the team's aim, and be reportable. A measure is used to track the delivery of proven interventions to patients and to monitor progress over time. A list of all IPC II measures is located on the IPC Knowledge Portal.

Measurement Strategy: This includes the key measures that will be used to track improvement in the Collaborative, definitions of the data elements, and data collection strategies.

Micro System: A small group of people who work together on a regular basis to provide care to discrete subpopulations of patients, a micro system has clinical and business aims, linked processes, a shared information environment, and produces performance outcomes. Micro systems evolve over time and are (often) embedded in larger organizations. As a type of complex adaptive system, they must: do the work, meet staff needs, and maintain themselves as a clinical unit. Many resources and tools can be found at http://www.clinicalmicrosystem.org.

Model for Improvement: An approach to process improvement developed by Associates in Process Improvement, the Model for Improvement helps teams accelerate the adoption of proven, effective changes. See figure in the <u>previous section</u>. For additional information on the Model for Improvement, go to http://www.ihi.org/knowledge/Pages/HowtoImprove/.

Motivational Interviewing: Motivational interviewing is a direct, client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence.

Narrative Report: This is a monthly report submitted to summarize changes that have been tested or implemented within participating organizations.

Office Hours: These are scheduled conference calls or WebEx conferences with multiple participating organizations that are used to address specific topics and or interest areas. These sessions are typically WebEx sessions, and attendance is optional.

Organization: The organization is the entirety of a health program or system, whether it consists of a single or multiple sites. Within IPC, an organization is defined by governance and includes all sites that report to a single CEO and are guided by a single governing body.

Optimized Care Team: A multidisciplinary care team, the optimized care team has each member of the team working most effectively together to maximize the supply of the clinic's services and to improve the flow of work and patients. Specific changes that contribute to optimizing the care team might include: (a) staff members working to the highest level of their licensure, training, and competency; (b) cross-training staff to assume different duties as needed; (c) establishing protocols for conditions and processes that can be clearly delineated; (d) limiting interruptions; and (e) meeting regularly. For more information, visit

http://www.ihi.org/knowledge/Pages/Changes/OptimizetheCareTeam.aspx.

Patient-Centered Care: Care that is truly patient centered considers patients' cultural traditions, their personal preferences and values, their family situations, and their lifestyles. It makes patients and their significant others an integral part of the care team who collaborate with health care professionals in making clinical decisions. Patient-centered care puts responsibility for important aspects of self-care and monitoring in patients' hands—along with the tools and support they need to carry out that responsibility. Patient-centered care ensures that transactions between providers, departments, and health care settings are respectful, coordinated, and efficient. When care is patient centered, unneeded and unwanted services can be reduced. For additional information and ideas, visit http://www.ihi.org/explore/PFCC/Pages/default.aspx.

PDSA or PDSA Cycle: This is another name for a cycle (structured trial) of a change that includes four phases: plan, do, study, and act. See the definition of cycle above.

Pilot Site: The clinic location for initial, focused changes is a pilot site. After implementation and refinement, the process will be spread to additional locations.

Planning Group: A planning group is a multidisciplinary group of people with expertise in the content of the collaborative that works with the national leads, improvement advisor, director, and IHS core group to specify goals, high-leverage changes, sequencing, and measures. It serves as faculty, reviews IPC progress, and participates in LISTSERV discussion and questions.

Prework Period: Prework is the period between the beginning of prework conference calls and Learning Session 1. During this time, teams have several important tasks to accomplish, including participation in a series of prework calls. The material covered and assignments completed relating to these calls are vital to the early success of each participating organization.

Process Change: A specific change in a process in the organization, a process change is more focused and detailed than a change concept. A process change describes what specific changes should occur. "Institute a pain management protocol for patients with moderate to severe pain" is an example of a process change.

Process Mapping: An activity that diagrams the steps, decision points, and influencing factors in a workflow process to bring forth a clearer understanding of that process or series of parallel processes.

Project Manager: This is an individual who tracks the progress, interaction, and tasks of various parties in such a way that reduces the risk of failure, maximizes benefits, and restricts costs of an improvement initiative.

Public Health Nursing (PHN): Public health nursing is the practice of promoting and protecting the health of the American Indian and Alaska Native populations using knowledge from nursing, social, and public health sciences. PHN practice is population-focused (individual, family, community, and systems) with goals of promoting health and preventing disease and disability through primary, secondary, and tertiary prevention interventions.

QILN: The Quality and Innovation Learning Network, or QILN, is open to all programs that have participated in the IPC Collaborative or have achieved the fundamental elements of the Indian health medical home.

RPMS: The Resource and Patient Management System (RPMS) is an integrated solution for the management of clinical, business practice, and administrative information in health care facilities of various sizes. It includes flexible hardware configurations and more than 50 software applications. Network communication components combine to provide comprehensive clinical, financial, and administrative solutions. For more information, visit http://www.ihs.gov/rpms.

Run Chart: This is a graphic representation of data over time; it is also known as a time series graph or line graph. This type of data display is particularly effective for process improvement activities.

Sampling Plan: The sampling plan is a specific description of the data to be collected, the interval of data collection, and the subjects from whom the data will be collected. It emphasizes the importance of gathering samples of data and how to obtain "just enough" information.

Special Diabetes Program for Indians (SDPI): SDPI is a congressionally established grant program that provides funding for diabetes treatment and prevention services at 399 IHS, Tribal, and Urban Indian health programs. The SDPI grant programs use proven, evidence-based, and community-driven diabetes treatment and prevention strategies that address each stage of the disease. Find more information at

http://www.ihs.gov/MedicalPrograms/Diabetes/?module=programsSDPI.

Self-Management Support (SMS): SMS is the care and encouragement provided to people with chronic conditions to help them understand their central role in managing their illness, make informed decisions about care, and engage in healthy behaviors. For more information, go to http://www.ihi.org/knowledge/Pages/Changes/SetandDocumentSelfManagementGoalsCollaborativ elywithPatients.aspx.

Service Population: A broad operational definition of population is meant to capture all of those who might reasonably be expected to use the services of a given organization. This definition of population is different than the several other operational definitions for population currently in use in the Indian health system. For IPC purposes, service population is defined as all persons who have one visit within the past three years anywhere in the organization.

Site: An organization may have one or more sites of care, i.e., satellite clinics. As part of IPC, organizations develop plans for spread to each of their sites.

Small Multiples: Small multiples are sets of thumbnail-size graphics on a single page that represent aspects of a single phenomenon. Small multiples are used to display comparative data from IPC.

Sponsor: The executive in the organization who supports the team and controls all the resources employed in the processes to be changed is the sponsor. The sponsor or senior leader works to connect the team's aim to the organization's mission, provides resources for the team, removes barriers to the team's progress, and promotes the spread of work of the team to other sites, providers, and conditions.

Storyboard: The storyboard displays information about a team and its progress. The storyboard is displayed at learning sessions to help create an environment conducive to sharing and learning from the experiences of others.

Technical Expert: The technical expert is the team member in the organization who has a strong understanding of the process to be improved and changes to be made. A technical expert may also provide expertise in process improvement, data collection and analysis, and team function.

Test: A small-scale trial of a new approach or a new process, a test is designed to learn if the change results in improvement and to fine-tune the change to fit the organization and patients. Tests are carried out using one or more PDSA cycles.

Transparency: Sharing performance data in an effort to make organizations more accountable and promote improvement is transparency.

Virtual Training/Learning: This is a process to create and provide access to learning when the source of information and the learners are separated by time or distance (or both). Virtual training or learning is also the process of creating an educational experience of equal qualitative value for the learner to best suit his or her needs when a face-to-face meeting is not possible. Web conferencing is usually used to conduct live meetings or presentations via the Internet. In a web conference, each participant or team sits at a computer and is connected to other participants via the Internet.

Virtual Environment: The types of available technologies used in the virtual environment are divided into two groups: synchronous and asynchronous. Synchronous technology is a mode of online delivery where all participants are "present" at the same time. Examples include telephone, videoconferencing, and web conferencing. Asynchronous technology is a mode of online delivery where participants access course materials on their own schedules, and participants are not required to be together at the same time. Examples include audiocassette, e-mail, printed materials, extranet, etc.

REFERENCES

Acton K. J. et al. (2002) Trends in diabetes prevalence among American Indian and Alaska Native children, adolescents, and young adults. *American Journal of Public Health*, 9, 1485–1490.

American Lung Association (2005). Lung Disease Data in Culturally Diverse Communities: 2005.

Deming, W. E. (2000). *The new economics for industry, government, and education* (2nd ed.). The plan-do-study-act cycle. Cambridge, MA: Massachusetts Institute of Technology (original work published 1994).

Howard B. V. et al. (1999). Rising tide of cardiovascular disease in American Indians, the strong heart study. *Circulation*, 99, 2389–2395.

Indian Health Service. (2004). *National Diabetes Program Special Diabetes Program for Indians Interim Report to Congress*.

Indian Health Service. (2004). *Trends in Indian Health, 2000–2001 Edition*. (DHHS: Publication No.___) Washington, DC: U.S. Government Printing Office.

Langley, G. L., Nolan, K. M., Nolan, T. W., Norman, C. L., Provost, L. P. (2009). *The improvement guide: A practical approach to enhancing organizational performance* (2nd ed.). San Francisco, CA: Josey-Bass.

Wagner E. H. (1998). Chronic disease management: What will it take to improve care for chronic illness? *Effective Clinical Practice*, 1, 2–4.