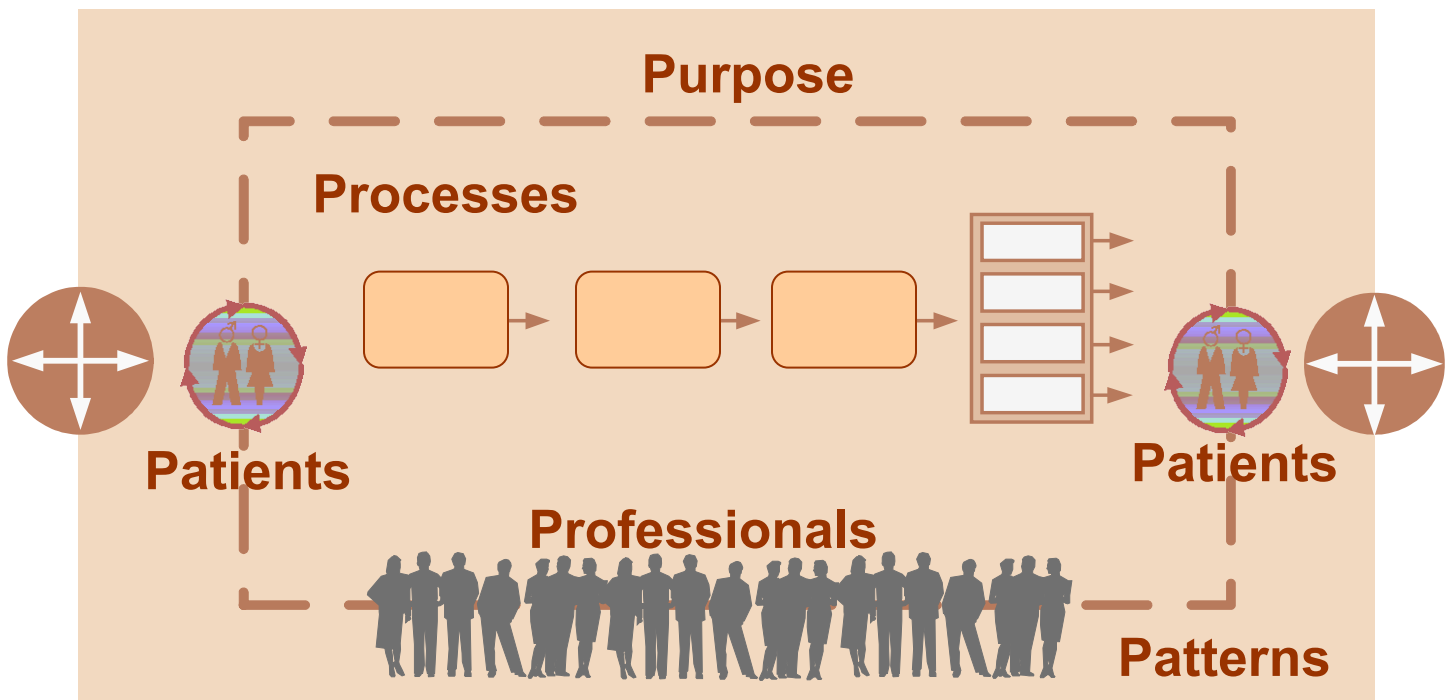# Clinical Microsystems

"The Place Where Patients, Families and Clinical Teams Meet"

Assessing, Diagnosing and Treating Your Outpatient Primary Care Practice

www.clinicalmicrosystem.org

Strategies for Improving "The place where patients, families and clinical teams meet."

A Microsystem Self-Assessment, Diagnosis and Treatment Plan

Clinical microsystems are the front-line units that provide most health care to most people. They are the places where patients, families and care teams meet. Microsystems also include support staff, processes, technology and recurring patterns of information, behavior and results. Central to every clinical microsystem is the patient.

The microsystem is the place where:

- Care is made

- Quality, safety, reliability, efficiency and innovation are made

- Staff morale and patient satisfaction are made

Microsystems are the building blocks that form practices. The quality of care can be no better than the quality produced by the small systems that come together to provide care. Here is the quality equation:

$$\text{Health System Quality} = \text{Quality of Microsystem}_1 + \text{Quality of Microsystem}_2 + \text{Quality of Microsystem}_{3-n}$$

All health care professionals—and we believe all front line clinical and support staff are professionals—have 2 jobs. Job 1 is to provide care. Job 2 is to improve care.

Finding time to improve care can be difficult, but the only way to improve and maintain quality, safety, efficiency and flexibility is by blending analysis, change, measuring and redesigning into the regular patterns and the daily habits of front-line clinicians and staff. Absent the intelligent and dedicated improvement work by all staff in all units, the quality, efficiency and pride in work will not be made nor sustained.

This workbook provides tools and methods that busy clinical teams can use to improve the quality and value of patient care as well as the work-life 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, community-based and academic.

The Path Forward

This workbook provides a guide for making a path forward towards higher performance. Just as you can assess, diagnose and treat patients; you can assess, diagnose and treat your clinical microsystem. This workbook is designed to guide your clinical microsystem on a journey to develop better performance. There are many good ways to improve performance; research shows that this is one of those good ways.

You can access more examples, tools and blank forms to customize at **www.clinicalmicrosystem.org**

The Path Forward

Step 1: Organize a "Lead Team"

Successful, sustainable cultural change requires the commitment and active involvement of all members of the clinical microsystem. To keep the microsystem on track and focused, a "Lead Team" of representatives of all roles should be formed.

Step 2: Do the Assessment

Assess your microsystem using the "5Ps" as your guide. Review your current performance metrics.

- **Purpose**
- **Patients**
- **Professionals**
- **Processes**
- **Patterns**
- **Metrics That Matter**

Step 3: Make a Diagnosis

Based on Step 2, review your assessment and Metrics That Matter to make your diagnosis. You should select a "Theme and Aims" for improvement based on this diagnosis and your organization strategic priorities.

Step 4: Treat Your Microsystem

Use scientific improvement methods and tools.

Step 5: Follow-up

Design and execute monitoring processes, outcomes and results. Move to your next improvement themes.

STEP 1: Organize a "Lead Team"

Assemble a "Lead Team" to represent all disciplines and roles in your practice. Include MDs, RNs, NPs, clinical support staff, clerical staff, patients and families along with any other professionals who are regularly in the practice providing care and service.

Must dos:
- Lead Team should meet weekly to maintain focus, make plans and oversee improvement work
- Effective meeting skills should be used in the weekly meetings
- Monthly ALL staff meetings should be held to engage and inform all members of the practice
- Explore creative ways to communicate and stay engaged with all staff on all shifts and all days of the week Use email, newsletters, listservs, paper, verbal, visual displays, communication boards and buddy systems
- Remember true innovation is achieved through active engagement of the patient and family with the Lead Team

STEP 2 Assess Your Primary Care Practice

Complete the "5Ps" assessment. This process needs to be completed by the interdisciplinary team. Building common knowledge and insight into the microsystem by all members of the practice will create a sense of equal value and ability to contribute to the improvement activities.

Start with Purpose. Why does your practice exist?
Raise this question to EVERYONE in your practice to create the best statement of purpose that everyone can buy into.

Assess Your Patients, Professionals, Processes and Patterns using the worksheets in the "Greenbook." The aim is to create the "Big picture" of your system to see beyond one patient at a time. Assessing the "5Ps" and then reflecting on their connections and interdependence often reveals new improvement and redesign opportunities.

Create a timeline for the assessment process. The whole workbook DOES NOT need to be completed within 2 weeks. Some microsystems have the capacity and resources to move quickly through the workbook in a short period of time. Many microsystems need to pace themselves through the workbook and complete the worksheets and assessment through a longer timeline. Some microsystems may need to start an important improvement immediately while starting the assessment process. In this case, the ongoing assessment will give you needed context and will help you make better improvements.

Remember however you choose to progress through the workbook, it MUST be done within the context of your interdisciplinary team.

Use the Data Review sheet to help outline and track which data and information will be retrieved in current systems and which data/info will be measured through a worksheet. Review the worksheets of the Assess, Diagnose and Treat Your Primary Care Practice workbook. Determine which worksheets you will copy and use to collect new data and information. Which worksheets will you NOT use because you have data systems that can provide useful, timely data for you without a special effort?

Microsystem Assessment of Data Sources and Data Collection Actions

- With your interdisciplinary team, review the Assess, Diagnose and Treat workbook-"The Greenbook". Use this form to determine which measures you can obtain from your organization and therefore, don't need to use the worksheets. Be sure the data is current and not months old.
- Determine which worksheets will be used. Plan who, when and how the worksheets will be completed.
- Decide who oversees the compilation of each worksheet or alternative data source.

Page/Type of Data	Data Source/Data Collection Action	Date/Owner
Page 6 B Know Your Patients		
B1. Estimated Age Distribution of Patients		
B2. Estimated Number of Unique Patients in Practice		
B3. Disease Specific Heath Outcomes		
B4. List Your Top Diagnosis/Conditions		
B5. Top Referrals		
B6. Patients Who Frequent Practice		
B7. Clinical Microsystems		
B8. Patient Satisfaction Scores (Patient Survey pg 7)		
(Chronic Care Survey pg 10-11)		
B9. Patient Population Census		
("Walk Through" pg 9)		
B10. Out of Practice Visits		
Page 6 C Know Your Professionals		
C1. Current Staff		
Float Pool		
On-Call		
C2. 3rd Next Available		
C3. Days of Operation		
C4. Hours of Operation		
C5. Appointment Type		
C6. Appointment Duration		
C7. Staff Satisfaction Scores (Staff Survey pg 12)		
(Personal Skills Assessment pg 13 – 14)		
(Activity Survey pg 15)		
Page 6 D Know Your Processes		
D1. Create Flow Charts of Routine Processes		
D2. (Patient Cycle Time Tool pg 16/17)		
D3. (Core and Supporting Processes pg 18)		
D4. (High Level Flowchart pg 19)		
Page 6 E Know Your Patterns		
E1. Most Significant Pattern		
E2. Successful Change		
E3. Most Proud of		
E4. Financial Picture		
(Unplanned Activity Tracking Card pg 20)		
(Telephone Tracking Log pg 21)		

Primary Care Practice Profile

A. Purpose:
Why does your practice exist?

Site Name:	Site Contact:	Date:
Practice Manager:	MD Lead:	Nurse Lead:

B. Know Your Patients:
Take a close look into your practice, create a "high-level" picture of the PATIENT POPULATION that you serve. Who are they? What resources do they use? How do the patients view the care they receive?

Est. Age Distribution of Patients:	%	List Your Top 10 Diagnoses/Conditions		Top Referrals (e.g. GI Cardiology)	Patient Satisfaction Scores	% Excellent
Birth-10 years		1.	6.		Experience via phone	
11-18 years		2.	7.		Length of time to get your appointment	
19-45 years		3.	8.		Saw who patient wanted to see	
46-64 years		4.	9.		Satisfaction with personal manner	
65-79 years		5.	10.		Time spent with person today	
80 + years						

		Patients who are frequent users of your practice and their reasons for seeking frequent interactions and visits	Other Clinical microsystems you interact with regularly as you provide care for patients (e.g. OR, VNA)	Pt Population Census: Do these numbers change by season? (Y/N)	#	Y/N
% Females				Patients seen in a day		
Est. # (unique) pts. In Practice				Patients seen in last week		
Disease Specific Health Outcomes, pg 24				New patients in last month		
				Disenrolling patients in last month		
Diabetes HgA1c =				Encounters per provider per year		
Hypertension B/P =				Out of Practice Visits		
LDL <100 =				Condition Sensitive Hospital Rate		
				Emergency Room Visit Rate		

*Complete "Through the Eyes of Your Patient", pg 9

C. Know Your Professionals:
Use the following template to create a comprehensive picture of your practice. Who does what and when? Is the right person doing the right activity? Are roles being optimized? Are all roles who contribute to the patient experience listed? What hours are you open for business? How many and what is the duration of your appointment types? How many exam rooms do you currently have? What is the morale of your staff?

Current Staff	FTEs	Comment/Function	3rd Next Available		Cycle Time	Days of Operation	Hours
			PE	Follow-up	Range		
Enter names below totals Use separate sheet if needed						Monday	
MD Total						Tuesday	
						Wednesday	
						Thursday	
						Friday	
						Saturday	
NP/PAs Total						Sunday	

Do you offer the following? Check all that apply.

RNs Total		Group Visit
		E-mail
		Web site
LPNs Total		RN Clinics
		Phone Follow-up
		Phone Care Management
LNA/MAs Total		Disease Registries
		Protocols/Guidelines

Appoint. Type	Duration	Comment:
Secretaries Total		
Others:		

Staff Satisfaction Scores		%
How stressful is the practice?	% Not Satisfied	
Would you recommend it as a good place to work?	% Strongly Agree	

Do you use Float Pool? ____ Yes ____ No
Do you use On-Call? ____ Yes ____ No

*Each staff member should complete the Personal Skills Assessment and "The Activity Survey", pgs 13-15

D. Know Your Processes:
How do things get done in the microsystem? Who does what? What are the step-by-step processes? How long does the care process take? Where are the delays? What are the "between" microsystems hand-offs?

1. **Track cycle time for patients from the time they check in until they leave the office using the Patient Cycle Time Tool. List ranges of time per provider on this table, pg 16/17**

2. **Complete the Core and Supporting Process Assessment Tool, pg 18**

E. Know Your Patterns:
What patterns are present but not acknowledged in your microsystem? What is the leadership and social pattern? How often does the microsystem meet to discuss patient care? Are patients and families involved? What are your results and outcomes?

- Does every member of the practice meet regularly as a team?
- How frequently?
- What is the most significant pattern of variation?

- Do the members of the practice regularly review and discuss safety and reliability issues?

- What have you successfully changed?
- What are you most proud of?
- What is your financial picture?

*Complete "Metrics that Matter", pgs 23-24

Patients

- Patients have valuable insight into the quality and process of care we provide. Real time feedback can pave the way for rapid responses and quick tests of change. This "Point of Service" Survey can be completed at the time of the visit to give real time measurement of satisfaction.
- Use the Primary Care Profile to review *"Know Your Patients."* Determine if there is information you need to collect or if you can obtain this data within your organization. Remember the aim is to collect and review data and information about your patients and families that might lead to a new design of process and services.
- Conduct the Patient/Family Satisfaction Survey for 2 weeks with families if you currently DO NOT have a method to survey families. If you have a method, be sure the data is up to date and reflects the current state of your practice.

Patient/Family Satisfaction with Primary Care Practice Access Survey
"Point of Service"

Date: _____

Think about this visit.

1. How would you rate your satisfaction with getting through to the office by phone?

❑ **Excellent**   ❑ **Very Good**   ❑ **Good**   ❑ **Fair**   ❑ **Poor**

2. How would you rate your satisfaction with the length of time you waited to get your appointment today?

❑ **Excellent**   ❑ **Very Good**   ❑ **Good**   ❑ **Fair**   ❑ **Poor**

3. Did you see the clinician, or staff member, that you wanted to see today?

❑ **Yes**   ❑ **No**   ❑ **Did not matter who I saw today**

4. How would you rate your satisfaction with the personal manner of the person you saw today (courtesy, respect, sensitivity, friendliness)?

❑ **Excellent**   ❑ **Very Good**   ❑ **Good**   ❑ **Fair**   ❑ **Poor**

5. How would you rate your satisfaction with the time spent with the person you saw today?

❑ **Excellent**   ❑ **Very Good**   ❑ **Good**   ❑ **Fair**   ❑ **Poor**

Comments:

_____

_____

_____

_____

Thank You For Completing This Survey

Patients

Today's Office Visit

Please rate the following questions about the visit you just made to this office.

	Excellent	Very Good	Good	Fair	Poor
1. The amount of time you waited to get an appointment.	☐	☐	☐	☐	☐
2. Convenience of the location of the office.	☐	☐	☐	☐	☐
3. Getting through to the office by phone.	☐	☐	☐	☐	☐
4. Length of time waiting at the office.	☐	☐	☐	☐	☐
5. Time spent with the person you saw.	☐	☐	☐	☐	☐
6. Explanation of what was done for you.	☐	☐	☐	☐	☐
7. The technical skills (thoroughness, carefulness, competence) of the person you saw.	☐	☐	☐	☐	☐
8. The personal manner (courtesy, respect, sensitivity, friendliness) of the person you saw.	☐	☐	☐	☐	☐
9. The Clinician's sensitivity to your special needs or concerns.	☐	☐	☐	☐	☐
10. Your satisfaction with getting the help that you needed.	☐	☐	☐	☐	☐
11. Your feeling about the overall quality of the visit.	☐	☐	☐	☐	☐

General Questions

Please answer the general questions about your satisfaction with this practice.

12. If you could go anywhere to get health care, would you choose this practice or would you prefer to go someplace else?

☐ Would choose this practice ☐ Might prefer someplace else ☐ Not sure

13. I am delighted with everything about this practice because my expectations for service and quality of care are exceeded.

☐ Agree ☐ Disagree ☐ Not sure

14. In the last 12 months, how many times have you gone to the emergency room for your care?

☐ None ☐ One time ☐ Two times ☐ Three or more times

15. In the last 12 months was it always easy to get a referral to a specialist when you felt like you needed one?

☐ Yes ☐ No ☐ Does not apply to me

16. In the last 12 months how often did you have to see someone else when you wanted to see your personal doctor or nurse?

☐ Never ☐ Sometimes ☐ Frequently

17. Are you able to get to your appointments when you choose?

☐ Never ☐ Sometimes ☐ Always

18. Is there anything our practice can do to improve the care and services for you?

☐ No, **I'm satisfied** with everything ☐ Yes, **some things** can be improved ☐ Yes, **many things** can be improved

Please specify improvement: _____

19. Did you have any good or bad surprises while receiving your care?

☐ Good ☐ Bad ☐ No surprises

Please describe: _____

About You

20. In general, how would you rate your overall health?

☐ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor

21. What is your age?

☐ Under 25 years ☐ 25 – 44 years ☐ 45 – 64 years ☐ 65 years or older

22. What is your gender?

☐ Female ☐ Male

Patients

- Gain insight into how your patients experience your practice. One simple way to understand the patient experience is to experience the care. Members of the staff should do a "Walk Through" in your practice. Try to make this experience as real as possible, this form can be used to document the experience. You can also capture the patient experience by making an audio or videotape.

Through the Eyes of Your Patients

Tips for making the "Walk Through" most productive:

1. Determine with your staff where the starting point and ending points should be, taking into consideration making the appointment, the actual office visit process, follow-up and other processes.
2. Two members of the staff should role play with each playing a role: patient and partner/family member.
3. Set aside a reasonable amount of time to experience the patient journey. Consider doing multiple experiences along the patient journey at different times.

4. Make it real. Include time with registration, lab tests, new patient, follow-up and physicals. Sit where the patient sits. Wear what the patient wears. Make a realistic paper trail including chart, lab reports and follow-up.
5. During the experience note both positive and negative experiences, as well as any surprises. What was frustrating? What was gratifying? What was confusing? Again, an audio or video tape can be helpful.
6. Debrief your staff on what you did and what you learned.

Date: _____

Staff Members: _____

Walk Through Begins When: _____

Ends When: _____

Positives	Negatives	Surprises	Frustrating/Confusing	Gratifying

Patients

Staying healthy can be difficult when you have a chronic condition. We would like to learn about the type of help you get from your health care team regarding your condition. This might include your regular doctor, the nurse, or the physician's assistant who treats your illness.

Assessment of Care for Chronic Conditions ©

Over the past 6 months, when I received care for my chronic conditions, I was:

	None of the Time	A Little of the Time	Some of the Time	Most of the Time	Always
1. Asked for my ideas when we made a treatment plan.	□1	□2	□3	□4	□5
2. Given choices about treatment to think about.	□1	□2	□3	□4	□5
3. Asked to talk about any problems with my medicines or their effects.	□1	□2	□3	□4	□5
4. Given a written list of things I should do to improve my health.	□1	□2	□3	□4	□5
5. Satisfied that my care was well organized.	□1	□2	□3	□4	□5
6. Shown how what I did to take care of myself influenced my condition.	□1	□2	□3	□4	□5
7. Asked to talk about my goals in caring for my condition.	□1	□2	□3	□4	□5
8. Helped to set specific goals to improve my eating or exercise.	□1	□2	□3	□4	□5
9. Given a copy of my treatment plan.	□1	□2	□3	□4	□5
10. Encouraged to go to a specific group or class to help me cope with my chronic condition.	□1	□2	□3	□4	□5
11. Asked questions, either directly or on a survey, about my health habits.	□1	□2	□3	□4	□5
12. Sure that my doctor or nurse thought about my values, beliefs, and traditions when they recommended treatments to me.	□1	□2	□3	□4	□5
13. Helped to make a treatment plan that I could carry out in my daily life.	□1	□2	□3	□4	□5
14. Helped to plan ahead so I could take care of my condition even in hard times.	□1	□2	□3	□4	□5

Cont'd

Patients

	None of the Time	A Little of the Time	Some of the Time	Most of the Time	Always
15. Asked how my chronic condition affects my life.	□1	□2	□3	□4	□5
16. Contacted after a visit to see how things were going.	□1	□2	□3	□4	□5
17. Encouraged to attend programs in the community that could help me.	□1	□2	□3	□4	□5
18. Referred to a dietitian, health educator, or counselor.	□1	□2	□3	□4	□5
19. Told how my visits with other types of doctors, like an eye doctor or surgeon, helped my treatment.	□1	□2	□3	□4	□5
20. Asked how my visits with other doctors were going.	□1	□2	□3	□4	□5

Obtaining deeper information about your patients can be difficult. One method is to use the **HowsYourHealth** web site **www.howsyourhealth.org** A beginning step is to have all the practice staff complete the survey to gain insight into the process for patients and for the practice to see how aggregate data about a group can help develop plans of care.

www.howsyourhealth.org Go to the website for more information. On the front page choose, "For Health Professionals." This will tell you about the features of the program and how to customize the survey for your setting.

Getting Good Medical Care and Improving Your Health…

Our Proven WEB SITE will help you!

…May Seem Confusing

www.howsyourhealth.org

1. **What matters to you: fun, easy, brief, for ages 9-99**
2. **Instant, personalized information**
3. **Completely confidential with no advertising**
4. **Gets patient and doctor on the same page**
5. **And much more**

Many Things to Do!

Lots of Information!

How do you use the web site?
Go to **www.howsyourhealth.org**. On the front page choose
"For Health Professionals" to get information on the
features of the program and how to customize it for your setting.

Professionals

- Creating a joyful work environment starts with a basic understanding of staff perceptions of the practice. All staff members should complete this survey. Use a tally sheet to summarize results.
- Ask all practice staff to complete the Staff Survey. Often you can distribute this survey to any professional who spends time in your practice. Set a deadline of one week and designate a place for the survey to be dropped off. You may have an organization-wide survey in place that you can use to replace this survey, but be sure it is CURRENT data, not months old, and that you are able to capture the data from all professionals specific to the Primary Care Practice workplace.

Primary Care Staff Satisfaction Survey

1. I am treated with respect every day by everyone that works in this practice.

❑ Strongly Agree   ❑ Agree   ❑ Disagree   ❑ Strongly Disagree

2. I am given everything I need—tools, equipment, and encouragement—to make my work meaningful to my life.

❑ Strongly Agree   ❑ Agree   ❑ Disagree   ❑ Strongly Disagree

3. When I do good work, someone in this practice notices that I did it.

❑ Strongly Agree   ❑ Agree   ❑ Disagree   ❑ Strongly Disagree

4. How stressful would you say it is to work in this practice?

❑ Very stressful   ❑ Somewhat stressful   ❑ A little stressful   ❑ Not stressful

5. How easy is it to ask anyone a question about the way we care for patients?

❑ Very easy   ❑ Easy   ❑ Difficult   ❑ Very difficult

6. How would you rate other people's morale and their attitudes about working here?

❑ Excellent   ❑ Very Good   ❑ Good   ❑ Fair   ❑ Poor

7. This practice is a better place to work than it was 12 months ago.

❑ Strongly Agree   ❑ Agree   ❑ Disagree   ❑ Strongly Disagree

8. I would recommend this practice as a great place to work.

❑ Strongly Agree   ❑ Agree   ❑ Disagree   ❑ Strongly Disagree

9. What would make this practice better for patients?

_____

10. What would make this practice better for those who work here?

_____

Professionals

- Development of each member in the practice is a key to success for staff and the microsystem. The Personal Skills Assessment tool helps determine the education and training needs of staff. All staff members complete this survey and then discuss the action plan with leadership and other staff. A plan is developed to help members achieve goals so they can become the best they can be.
- This tool provides guidance for individual development plans along with assessing the "group" needs to plan larger learning and training sessions.

Primary Care Practice Resources—Personal Skills Assessment

Name: _____   Unit: _____

Role: _____   Date: _____

Clinical Competencies:

Please create your list of clinical competencies and evaluate.	Want to Learn	Never Use			Occasionally				Frequently		
	❏	1	2	3	4	5	6	7	8	9	10

Clinical Information Systems (CIS):

What features and functions do you use?	Want to Learn	Never Use			Occasionally				Frequently		
Provider/On Call Schedule	❏	1	2	3	4	5	6	7	8	9	10
Patient Demographics	❏	1	2	3	4	5	6	7	8	9	10
Lab Results	❏	1	2	3	4	5	6	7	8	9	10
Pathology	❏	1	2	3	4	5	6	7	8	9	10
Problem List	❏	1	2	3	4	5	6	7	8	9	10
Electronic Health Record (EHR)											
Review Reports/Notes	❏	1	2	3	4	5	6	7	8	9	10
Documentation	❏	1	2	3	4	5	6	7	8	9	10
Direct Entry	❏	1	2	3	4	5	6	7	8	9	10
Note Templates	❏	1	2	3	4	5	6	7	8	9	10
Medication Lists	❏	1	2	3	4	5	6	7	8	9	10
Medication Ordering											
Action Taken on Surgical Pathology											
Insurance Status	❏	1	2	3	4	5	6	7	8	9	10
Durable Power of Attorney	❏	1	2	3	4	5	6	7	8	9	10
Radiology	❏	1	2	3	4	5	6	7	8	9	10
OR Schedules	❏	1	2	3	4	5	6	7	8	9	10

NOTE: CIS refers to hospital or clinic-based systems used for such functions as checking in patients, electronic medical records, accessing lab and x-ray information. Customize your list of CIS features to determine skills needed by various staff members to optimize their roles.

Technical Skills:

Please rate the following on how often you use them.	Want to Learn	Never Use			Occasionally				Frequently		
CIS*	❏	1	2	3	4	5	6	7	8	9	10
E-mail	❏	1	2	3	4	5	6	7	8	9	10
PDA (i.e. Palm Pilot)	❏	1	2	3	4	5	6	7	8	9	10
Digital Dictation Link	❏	1	2	3	4	5	6	7	8	9	10

Primary Care Practice Resources—Personal Skills Assessment page 2

Name: _____   Unit: _____

Technical Skills cont'd:

Please rate the following on how often you use them.	Want to Learn	Never Use			Occasionally				Frequently		
Central Dictation	❏	1	2	3	4	5	6	7	8	9	10
Word Processing (e.g. Word)	❏	1	2	3	4	5	6	7	8	9	10
Spreadsheet (e.g. Excel)	❏	1	2	3	4	5	6	7	8	9	10
Presentation (e.g. Power Point)	❏	1	2	3	4	5	6	7	8	9	10
Database (e.g. Access or File Maker Pro)	❏	1	2	3	4	5	6	7	8	9	10
Patient Database/Statistics	❏	1	2	3	4	5	6	7	8	9	10
Internet/Intranet	❏	1	2	3	4	5	6	7	8	9	10
Printer Access	❏	1	2	3	4	5	6	7	8	9	10
Fax	❏	1	2	3	4	5	6	7	8	9	10
Copier	❏	1	2	3	4	5	6	7	8	9	10
Telephone System	❏	1	2	3	4	5	6	7	8	9	10
Voice Mail	❏	1	2	3	4	5	6	7	8	9	10
Pagers	❏	1	2	3	4	5	6	7	8	9	10
Tube System	❏	1	2	3	4	5	6	7	8	9	10
	❏	1	2	3	4	5	6	7	8	9	10

Meeting & Interpersonal Skills:	Want to Learn	Never Use			Occasionally				Frequently		
What skills do you currently use?	❏	1	2	3	4	5	6	7	8	9	10
Effective Meeting Skills (brainstorm/multi-vote)	❏	1	2	3	4	5	6	7	8	9	10
Timed Agendas	❏	1	2	3	4	5	6	7	8	9	10
Role Assignments During Meetings	❏	1	2	3	4	5	6	7	8	9	10
Delegation	❏	1	2	3	4	5	6	7	8	9	10
Problem Solving	❏	1	2	3	4	5	6	7	8	9	10
Patient Advocacy Process	❏	1	2	3	4	5	6	7	8	9	10
Open and Effective Communication	❏	1	2	3	4	5	6	7	8	9	10
Feedback – provide and receive	❏	1	2	3	4	5	6	7	8	9	10
Managing Conflict/Negotiation	❏	1	2	3	4	5	6	7	8	9	10
Emotional/Spiritual Support	❏	1	2	3	4	5	6	7	8	9	10

Improvement Skills and Knowledge:	Want to Learn	Never Use			Occasionally				Frequently		
What improvement tools do you currently use?											
Flowcharts/Process Mapping	❏	1	2	3	4	5	6	7	8	9	10
Trend Charts	❏	1	2	3	4	5	6	7	8	9	10
Control Charts	❏	1	2	3	4	5	6	7	8	9	10
Plan/Do/Study/Act (PDSA) Improvement Model	❏	1	2	3	4	5	6	7	8	9	10
Aim Statements	❏	1	2	3	4	5	6	7	8	9	10
Fishbones	❏	1	2	3	4	5	6	7	8	9	10
Measurement and Monitoring	❏	1	2	3	4	5	6	7	8	9	10
Surveys-Patient and Staff	❏	1	2	3	4	5	6	7	8	9	10
StAR Relationship Mapping	❏	1	2	3	4	5	6	7	8	9	10

Professionals

- What do you spend YOUR time doing? What is your best estimation of how much time you spend doing it? The goal is to have the right person doing the right thing at the right time. The group can discuss which activities are or are not appropriate for the individual's level of education, training, and licensure.
- You can start with one group of professionals such as MDs, NPs, RNs or clerical staff, assessing their activities using the Activity Survey. This estimate of who does what is intended to reveal, at a high level, where there might be mismatches between education, training, licensure and actual activities. It is good to eventually have all roles and functions complete this survey for review and consideration. Be sure to create the same categories for each functional role. Some groups may hesitate to make time estimates; if this happens, just ask them to list their activities for the first review.

Primary Care Practice Activity Survey Sheet

Position: MD	% of Time	Position: RN	% of Time
Activity: See Patients in Clinic Specific Items Involved: • Review chart history • Assess/diagnose patient • Determine treatment plan	30%	Activity: Triage Patient Issues/Concerns • Phone • Face to face •	15%
Activity: Minor Procedures	9%	Activity: Patient/Family Education Specific Items Involved: •	3%
Activity: See Patients in Hospital	2%		
Activity: Follow up Phone Calls Specific Items Involved: • Answer patient messages and requests	10%	Activity: Direct Patient Care • See patients in clinic • Injections • Assist provider with patients •	30%
Activity: Dictate/Document Patient Encounter Specific Items Involved: • Dictate encounter • Review transcriptions and sign off	25%	Activity: Follow-up Phone Calls Specific Items Involved: •	22%
Activity: Complete Forms Specific Items Involved: • Referrals • Camp/school physicals	5%	Activity: Review and Notify Patients of Lab Results Specific Items Involved: • Normal with follow-up • Drug adjustments	5%
Activity: Write Prescriptions Specific Items Involved: •	5%	Activity: Complete Forms Specific Items Involved: • Referrals • Camp/school physicals	18%
Activity: Manage Charts	5%	Activity: Call in Prescriptions Specific Items Involved: •	5%
Activity: Evaluate Test Results Specific Items Involved: • Review results and determine next actions	5%		
Activity: See Patients in Nursing Home	2%		
Activity: Miscellaneous Specific Items Involved: • CME; attend seminars; attend meetings	2%	Activity: Miscellaneous Specific Items Involved: • CME; attend seminars; attend meetings	2%
Total	100%	**Total**	100%

Activity Occurrence Example:

What's the next step? Insert the activities from the Activity Survey Here.

Activities are combined by role from the data collected above. This creates a master list of activities by role. Fill-in THE NUMBER OF TIMES PER SESSION (AM and PM) THAT YOU PERFORM THE ACTIVITY. Make a mark by the activity each time it happens, per session. Use one sheet for each day of the week. Once the frequency of activities is collected, the practice should review the volumes and variations by session, day of week, and month of year. This evaluation increases knowledge of predictable variation and supports improved matching of resources based on demand.

Role: RN	Date:	Day of Week:	
Visit Activities	AM	PM	Total
Triage Patient Concerns	⅃⊦⊦⊤ ‖	⅃⊦⊦⊤ ‖	14
Family/Patient Education	⅃⊦⊦⊤ ‖‖	‖‖	11
Direct Patient Care	⅃⊦⊦⊤ ⅃⊦⊦⊤ ⅃⊦⊦⊤ ⅃⊦⊦⊤		⅃⊦⊦⊤ ⅃⊦⊦⊤ ⅃⊦⊦⊤ ⅃⊦⊦⊤		42
Non-Visit Activities			
Follow-up Phone Calls	⅃⊦⊦⊤ ⅃⊦⊦⊤	⅃⊦⊦⊤ ⅃⊦⊦⊤ ⅃⊦⊦⊤		26
Complete Forms	⅃⊦⊦⊤ ⅃⊦⊦⊤		⅃⊦⊦⊤ ‖‖	19
Call in Prescriptions	⅃⊦⊦⊤		⅃⊦⊦⊤ ⅃⊦⊦⊤	16
Miscellaneous			15
Total	63	65	128

Processes

- Beginning to have all staff understand the processes of care and services in the practice is a key to developing a common understanding and focus for improvement. Start with the high level process of a patient entering your practice by using the Patient Cycle Time tool. You can assign someone to track all visits for a week to get a sample, or the cycle time tool can be initiated for all visits in a one week period with many people contributing to the collection and completion of this worksheet.
- Typically, other processes will be uncovered to measure and you can create time tracking worksheets like this template to measure other cycle times.

Primary Care Practice Patient Cycle Time

Day: _____   **Date:** _____

Scheduled Appointment Time _____   **Provider you are Seeing Today** _____

Time

	1. Time you checked in.
	2. Time you sat in the waiting room.
	3. Time staff came to get you.
	4. Time staff member left you in exam room.
	5. Time provider came in room.
	6. Time provider left the room.
	7. Time you left the exam room.
	8. Time you arrived at check out.
	9. Time you left practice.

Comments:

Processes

- Beginning to have all staff understand the processes of care and services in the practice is a key to developing a common understanding and focus for improvement. Start with the high level process of a patient entering your practice by using the Patient Cycle Time tool. You can assign someone to track all visits for a week to get a sample, or the cycle time tool can be initiated for all visits in a one week period with many people contributing to the collection and completion of this worksheet.
- Typically, other processes will be uncovered to measure and you can create time tracking worksheets like this template to measure other cycle times.

Primary Care Practice Patient Cycle Time—Academic Example

Type of Visit: _____   **Day:** _____   **Date:** _____

Scheduled Appointment Time _____   **Provider you are Seeing Today** _____

Time

[ ]	**1. Time you checked in.**
[ ]	**2. Time you sat in the waiting room.**
[ ]	**3. Time staff came to get you.**
[ ]	**4. Time staff member left you in exam room.**
[ ]	**5. Time provider came in room. If the provider left the room more than once, please note the times.**

	1	2	3
Time Left	[ ]	[ ]	[ ]
Time Returned	[ ]	[ ]	[ ]

[ ]	**6. Time provider left the room.**
[ ]	**7. Time you left the exam room.**
[ ]	**8. Time you arrived at check out.**
[ ]	**9. Time you left practice.**

Comments:

Processes

- Review, adapt and distribute the Core and Supporting Processes evaluation form to ALL practice staff. Be sure the list is accurate for your practice and then ask staff to evaluate the CURRENT state of these processes. Rate each process by putting a tally mark under the heading which most closely matches your understanding of the process. Also mark if the process is a source of patient complaints.
  Tally the results to give the Lead Team an idea as to where to begin to focus improvement from the staff perspective.
- **Steps for Improvement:** Explore improvements for each process based on the outcomes of this assessment tool. Each of the processes below should be flowcharted in its' current state. Once you have flowcharted the current state of your processes and determined your Change Ideas, use the PDSA Cycle Worksheet to run tests of change and to measure.

Primary Care Practice Know Your Processes Core and Supporting Processes							
Processes	**Works Well**	**Small Problem**	**Real Problem**	**Totally Broken**	**Cannot Rate**	**We're Working On It**	**Source of Patient Complaint**
Answering Phones							
Appointment System							
Messaging							
Scheduling Procedures							
Order Diagnostic Testing							
Reporting Diagnostic Test Results							
Prescription Renewal							
Making Referrals							
Pre-authorization for Services							
Billing/Coding							
Phone Advice							
Assignment of Patients to Your Practice							
Orientation of Patients to Your Practice							
New Patient Work-ups							
Minor Procedures							
Education for Patients/Families							
Prevention Assessment/Activities							
Chronic Disease Management							
Palliative Care							

Processes

- Deming has said, "If you can't draw a picture of your process you can't improve anything." He is referring to the improvement tool of process mapping. With your interdisciplinary team, create a high level flow chart of the appointment process or the entire treatment experience. Start with just ONE flow chart. Eventually you will wish to create flowcharts for many different processes in-and-between your practice. Keep the symbols simple!
- Review the flowchart to identify unnecessary rework, delays and opportunities to streamline and improve.

Primary Care Practice High Level Flowchart

Pt enters room for appt. → Provider enters room → Provider discusses Pt's needs → Provider examines Patient → Provider IDs need for urine specimen → Patient given specimen cup → Provider completes paperwork → Follow-up instructions given to Patient → Patient leaves

Symbol Key:

⬭ Process beginning or end	◇ Decision points	→ Process flow direction
▭ Activity step	▱ Waits and delays	◯ Connector (e.g. off page)

Patterns

- Patterns are present in our daily work and we may or may not be aware of them. Patterns can offer hints and clues to our work that inform us of possible improvement ideas. The Unplanned Activity Tracking Card is a tool you can ask staff to carry to track patterns of interruptions, waits and delays in the process of providing smooth and uninterrupted patient care. Start with any group in the staff. Give each staff member a card to carry during a shift, to mark each time an interruption occurs when direct patient care is delayed or interrupted. The tracking cards should then be tallied by each person and within each group to review possible process and system redesign opportunities. Noticing patterns of unplanned activities can alert staff to possible improvements.
- This collection tool can be adapted for any role in the Primary Care Practice to discover interruptions in work flow. Circles in the example indicate processes to further evaluate for possible improvements.

Primary Care Practice Unplanned Activity Tracking Card

Unplanned Activity Tracking		Unplanned Activity Tracking	
Name:		Name:	
Date: Time:		Date: Time:	
Place a tally mark for each occurrence of an unplanned activity	**Total**	**Place a tally mark for each occurrence of an unplanned activity**	**Total**
Interruptions		Interruptions	
• Phone		• Phone IIII IIII IIII	15
• Secretary		• Secretary	
• RN		• RN IIII IIII	10
• Provider		• Provider	
Hospital Admissions		Hospital Admissions IIII IIII II	12
Patient Phone Calls		Patient Phone Calls	
Pages		Pages IIII IIII IIII IIII	20
Missing Equipment		Missing Equipment	
Missing Supplies		Missing Supplies IIII	5
Missing Chart: Same Day Patient		Missing Chart: Same Day Patient	
Missing Chart: Patient		Missing Chart: Patient IIII IIII	10
Missing Test Results		Missing Test Results	
Other		Other	◯
			◯

Patterns

- Patterns can be found through tracking the volumes and types of telephone calls. Review the categories on the telephone tracking list to ensure they reflect the general categories of calls your practice receives. Ask clerical staff to track the telephone calls over the course of a week to find the patterns of each type of call and the volume peaks and valleys.
- Put a tally mark each time one of the phone calls is for one of the listed categories. Total the calls for each day and then total the calls in each category for the week. Note the changes in volume by the day of the week and am/pm.

Primary Care Practice Telephone Tracking Log															
Week of ____	**Monday**		**Tuesday**		**Wednesday**		**Thursday**		**Friday**		**Saturday**		**Sunday**		**Week Total**
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
Appointment for Today															
Total															
Appointment for Tomorrow															
Total															
Appointment for Future															
Total															
Test Results															
Total															
Nurse Care															
Total															
Prescription Refill															
Total															
Referral Information															
Total															
Need Information															
Total															
Message for Provider															
Total															
Talk with Provider															
Total															
DAY TOTAL															

Metrics That Matter

- Measures are essential for microsystems to make and sustain improvements and to attain high performance. All clinical microsystems are awash with data but relatively few have rich information environments that feature daily, weekly and monthly use of Metrics That Matter (MTM). The key to doing this is to get started in a practical, doable way; and to build out your Metrics That Matter and their vital use over time. Some guidelines for your consideration are listed below. Remember these are just guidelines and your microsystem should do what makes sense in the way of collecting, displaying and using Metrics That Matter.

Primary Care Practice Metrics That Matter

1. **W**hat? Every microsystem has vital performance characteristics, things that must happen for successful operations. Metrics That Matter (MTMs) should reflect your microsystem's vital performance characteristics.

2. **W**hy? The reason to identify, measure and track MTMs is to ensure that you are not "flying blind."
   Safe, high quality and efficient performance will give you specific, balanced and timely metrics that show:
   a. When improvements are needed
   b. If improvements are successful
   c. If improvements are sustained over time, and
   d. The amount of variation in results over time

3. **H**ow? Here are steps you can make to take advantage of MTMs.

Lead Team	Work with your <u>Lead</u> <u>Team</u> to establish the <u>need</u> for metrics and their <u>routine</u> use. Quality begins with the intention to achieve measured excellence.
Balanced Metrics	Build a <u>balanced</u> set of <u>metrics</u> to provide insight into what's working and what's not working. Some categories to consider are: process flow, clinical, safety, patient perceptions, staff perceptions, operations, and finance/costs. Avoid starting with too many measures. Every metric should have an operational definition, data owner, target value and action plan. Strongly consider using the "national" JCAHO* and CMS* metrics whenever they are relevant to your microsystem. Consider other "vital" metrics based on your own experience, strategic initiatives and other "gold standard" sets such as measures from NQF* and professional organizations like ASTS*.
Data Owner	Start small and identify a data wall owner(s) who is guided by the Lead Team. Identify a <u>data</u> <u>owner(s)</u> for each metric. The owner will be responsible for getting this measure and reporting it to the Lead Team. Seek sources of data from organization wide systems. If the needed data is not available, use manual methods to measure. Strive to build data collection in the flow of daily work.
Data Wall	Build a data wall and use it daily, weekly, monthly, and annually. Gather data for each metric and <u>display</u> it on the "data wall" reporting: • Current value • Target Value • Action Plan to improve or sustain level Display metrics as soon as possible–daily, weekly, monthly metrics are most useful–using visual displays such as time trend charts and bar charts.
Review and Use	<u>Review</u> your set of metrics on a regular basis—daily, weekly, monthly, quarterly, annually. <u>Use</u> metrics to make needed improvements whenever possible. Make metrics fun, useful and a lively part of your microsystem development process. Discuss Metrics That Matter frequently and take action on them as needed.

* JCAHO, Joint Commission on Accreditation of Healthcare Organizations
 CMS, Centers for Medicare and Medicaid Services
 NQF, National Quality Foundation
 ASTS, American Society of Thoracic Surgeons

Metrics That Matter

- Review the currently determined "best metrics" your practice should be monitoring.
- List your current performance in these metrics and what the targets are.

Primary Care Practice Metrics That Matter			
Name of Measure	**Definition & Data Owner**	**Current & Target Values**	**Action Plan & Process Owner**
General Metrics			
Access			
3rd Available Appointment ##			
Staff Morale			
Staff Satisfaction ##			
Voluntary Turn Over ##			
Work days lost per employee per year #			
Safety & Reliability			
Identification of high risk patient diagnosis & associated medications that put patient at risk, (e.g. Coumadin, Insulin) & related tests you must track.			
Patient Satisfaction			
Overall ##			
Access ##			
Finance			
Patient-Centered Outcome Measures *			
Assessment of Care for Chronic Conditions ##			
Visit www.doqit.org for Data Submission Process information			
# Denotes OSHA Safety Log measure ## Denotes IHI Whole System Measures (2004)			

Metrics That Matter

Primary Care Practice Metrics That Matter			
Name of Measure	**Definition & Data Owner**	**Current & Target Values**	**Action Plan & Process Owner**
Patient-Centered Outcome Measures *			
Coronary Artery Disease (CAD)			
Antiplatelet Therapy			
Lipid Profile			
Drug Therapy for Lowering LDL Chol.			
LDL Cholesterol Level			
Beta-Blocker Therapy-Prior MI			
ACE Inhibitor Therapy			
Blood Pressure			
Heart Failure (HF)			
Left Ventricular Function (LVF) Assess.			
Left Ventricular Function (LVF) Testing			
Patient Education			
Beta-Blocker Therapy			
ACE Inhibitor Therapy			
Weight Measurement			
Blood Pressure Screening			
Warfarin Therapy for Pts with Atrial Fib			
Diabetes Mellitus (DM)			
HbA1c Management			
Lipid Measurement			
HbA1c Management Control			
LDL Cholesterol Level			
Blood Pressure Management			
Urine Protein Testing			
Eye Exam Foot Exam			
Preventive Care (PC)			
Influenza Vaccination			
Pneumonia Vaccination			
Blood Pressure Measurement			
Lipid Measurement			
LDL Cholesterol level			
Colorectal Cancer Screening			
Breast Cancer Screening			
Tobacco Use			
Tobacco Cessation			
Hypertension (HTN)			
Blood Pressure Screening			
Blood Pressure Control			
Plan of Care			

* CMS (Center for Medicare and Medicaid Services)
  American Medical Association (AMA) Physician Consortium for Performance Improvement
  National Diabetes Quality Improvement Alliance (Alliance)
  National Committee for Quality Assurance (NCQA)			

Step 3 Diagnose

With the Interdisciplinary Lead Team review the 5Ps assessment, Metrics That Matter, and with consideration of your organizational strategic plan, select a first "theme," (e.g., access, safety, flow, reliability, patient satisfaction, staff morale, prevention, supply and demand) for improvement.

- The purpose of assessing is to make an informed and correct overall diagnosis of you microsystem.
- First, identify and celebrate the strengths of your system.
- Second, identify and consider opportunities to improve your system.
    - The opportunities to improve may come from your own microsystem—based on assessment, staff suggestions and/or patient and family needs and complaints.
    - The opportunities to improve may come from outside your microsystem—based on a strategic project or external performance/quality measures.
    - Look not only at the detail of each of the assessment tools, but also synthesize all of the assessments and Metrics That Matter to "get the big picture" of the microsystem. Identify linkages within the data and information. Consider:
        - Waste and delays in the process steps. Look for processes that might be redesigned to result in better functions for roles and better outcomes for patients.
        - Patterns of variation in the microsystem. Be mindful of smoothing the variations or matching resources with the variation in demand.
        - Patterns of outcomes you wish to improve.
- It is usually smart to pick or focus on one important "theme" to improve at a time, and work with all the "players" in your system to make a big improvement in the area selected.
- Suggestions on how to make your diagnosis and select a theme follow next.

Diagnose Your Primary Care Practice

Write your Theme for Improvement

Overall Theme "Global" Aim Statement

Create an aim statement that will help keep your focus clear and your work productive:

We aim to improve: _____

<div align="center">(Name the process)</div>

In: _____

<div align="center">(Clinical location in which process is embedded)</div>

The process begins with: _____

<div align="center">(Name where the process begins)</div>

The process ends with: _____

<div align="center">(Name the ending point of the process)</div>

By working on the process, we expect: _____

<div align="center">(List benefits)</div>

_____

_____

It is important to work on this now because: _____

<div align="center">(List imperatives)</div>

_____

_____

_____

_____

Step 4 Treat Your Primary Care Practice

Draft a clear aim statement and way to measure the aim using improvement models—PDSA (Plan-Do-Study-Act) and SDSA (Standardize-Do-Study-Act).

- Now that you've made your diagnosis and selected a theme worthy of improving, you are ready to begin using powerful Change Ideas, improvement tools, and the scientific method to change your microsystem.
- This begins with making a specific aim and using Plan-Do-Study-Act (PDSA), which is known as the "model for improvement."
- After you have run your tests of change and have reached your measured aim, the challenge is to maintain the gains that you have made. This can be done using Standardize-Do-Study-Act (SDSA), which is the other half of making improvement that has "staying power."
- You will be smart to avoid totally reinventing the wheel by taking into consideration best known practices and Change Ideas that other clinical teams have found to really work. A list of some of the best "Change Ideas" that might be adapted and tested in your practice follows the aim statement worksheet.

Specific Aim Statement

Create a specific aim statement that will help keep your focus clear and your work productive.

Use numerical goals, specific dates, and specific measures.

Specific Aim:

Measures:

Treat Your Primary Care Practice

- Once you have completed the assessment and diagnosis of your practice and have a clear theme to focus on, review current best practice and Change Ideas to consider.
- The Change Ideas will continue to develop as more field testing is done and more colleagues design improvements.

Primary Care Practice Change Ideas to Consider:

You will find additional support and tools at the websites listed below

Change Ideas to Improve Access to Care http://www.clinicalmicrosystem.org/access.htm
1. Shape Demand
2. Match Supply and Demand
3. Redesign the System

Change Ideas to Improve Interaction
4. Design group visits or Shared Medical Appointments http://www.clinicalmicrosystem.org/sma.htm
5. Utilize email care
6. Create a practice website
7. Optimize professional roles to subpopulation care management

Change Ideas to Improve Reliability
8. Adapt the Chronic Care Model: "Improving Chronic Illness Care" (ICIC) http://www.improvingchroniccare.org

Change Ideas to Improve Vitality
9. Engage all staff in continuous improvement and research
10. Develop strategies to actively develop individual staff
11. Create a favorable financial status which supports investments in the practice
12. Utilize "daily huddle" process with MDs, RNs and clerical staff to review yesterday, plan for today, tomorrow and the coming week (pg28)

*visit www.ihi.org and www.clinicalmicrosystem.org for the latest ideas

Consider the Change Concepts on page 295 of The Improvement Guide by Langley, Nolan, Nolan, Norman and Provost (1996). The main change categories are listed below.

A. Eliminate Waste
B. Improve Workflow
C. Optimize Inventory
D. Change the Work Environment
E. Enhance the Producer/Customer Relationship
F. Manage Time
G. Manage Variation
H. Design Systems to Avoid Mistakes
I. Focus on the Product or Service

Langley G, Nolan K, Nolan T, Norman T, Provost L. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance*. 1st ed. The Jossey-Bass Business & Management Series. San Francisco, CA: Jossey-Bass Publishers; 1996: xxix, 370.

Huddle Sheet

- What can we proactively anticipate and plan for in our work day/week? At the beginning of the day, hold a review of the day, review of the coming week and review of the next week. Frequency of daily review is dependent on the situation, but a mid-day review is also helpful.
- This worksheet can be modified to add more detail to the content and purpose of the huddles.

Huddle Sheet
Practice: _____   Date: _____
Aim: Enable the practice to proactively anticipate and plan actions based on patient need and available resources, and contingency planning.
Follow-ups from Yesterday
"Heads up" for Today: (include special patient needs, sick calls, staff flexibility, contingency plans)
<u>Meetings</u>:
Review of Tomorrow and Proactive Planning
<u>Meetings</u>:

Treat Your Primary Care Practice

Plan-Do-Study-Act   PDSA

Complete the Plan-Do-Study-Act worksheet to execute the Change Idea in a disciplined measured manner, to reach the specific aim.

Plan ➡️ How shall we PLAN the pilot? Who? Does what? When? With what tools? What baseline data will be collected?

Tasks to be completed to run test of change	Who	When	Tools Needed	Measures

Do ➡️ What are we learning as we DO the pilot? What happened when we ran the test? Any problems encountered? Any surprises?

Study ➡️ As we study what happened, what have we learned? What do the measures show?

Act ➡️ As we ACT to hold the gains or abandon our pilot efforts, what needs to be done? Will we modify the change? Make a PLAN for the next cycle of change.

The Lead Team should continue to meet weekly to review progress in the design of the PDSA and then during the execution of the test of change in a pilot format to observe and learn about the Change Idea implementation. Remember to always test Change Ideas in small pilots to learn what adaptations and adjustments need to be made before implementing on a larger scale. Data collection and review during the testing is important to answer the question: How will we know if the Change Idea is an improvement?

Once the PDSA cycle is completed and the Lead Team reviews the data and qualitative findings, the plan should be revised or expanded to run another cycle of testing until the aim is achieved.

When the Change Idea has been tested and adapted to the context of the clinical microsystem and the data demonstrates that the Change Idea makes an improvement, the Lead Team should design the Standardize-Do-Study-Act (SDSA) process to ensure the process is performed as designed. During this process it is important to continually learn and improve by monitoring the steps and data to identify new opportunities for further improvement. You will realize you will move from "PDSA" to "SDSA" and back to "PDSA" in your continuous improvement environment. New methods, tools, technology or best practice will often signal the need to return to PDSA to achieve the next level of high performance. You want to be able to go from "PDSA" to "SDSA" and back to "PDSA" as needed. The Scientific method is a two-way street that uses both experimentation (i.e., PDSA) as well as standardization (i.e., SDSA).

Standardizing Current Best Process and Holding the Gains

Standardize-Do-Study-Act   SDSA

Standardize the process (specify what roles do what activities in what sequence with what information flow). A good way to track and standardize process is through the creation of a Primary Care Practice Playbook. The Playbook is the collection of process maps to provide care and services that all staff are aware of and accountable for. The Playbook can be used to orient new staff, document current processes and contribute to performance appraisals.

Do the work to integrate the standard process into daily work routines to ensure reliability and repeatability.

Study at regular intervals. Consider if the process is being "adhered" to and what "adjustments" are being made. Review the process when new innovations, technology or roles are being considered. Review what the measures of the process are showing.

Act based on the above, maintain or "tweak" the standard process and continue doing this until the next "wave" of improvements/innovations takes place with a new series of PDSA cycles.

STANDARDIZE ➡️ How shall we **STANDARDIZE** the process and embed it into daily practice? Who? Does what? When? With what tools? What needs to be "unlearned" to allow this new habit? What data will inform us if this is being standardized daily?

Tasks to be completed to run test of change	Who	When	Tools Needed	Measures
*Playbook-Create standard process map to be inserted in your Playbook.				

DO ➡️ What are we learning as we **DO** the standardization? Any problems encountered? Any surprises? Any new insights to lead to another PDSA cycle?

STUDY ➡️ As we **STUDY** the standardization, what have we learned? What do the measures show? Are there identified needs for change or new information or "tested" best practice to adapt?

ACT ➡️ As we **ACT** to hold the gains or modify the standardization efforts, what needs to be done? Will we modify the standardization?   What is the Change Idea? Who will oversee the new PDSA? Design a new PDSA cycle. Make a PLAN for the next cycle of change. Go to PDSA Worksheet.

Step 5 Follow-Up

- Monitor the new patterns of results and select new themes for improvement.
- Embed new habits into daily work: daily huddles, weekly Lead Team meetings, monthly "town hall" meetings, datawalls, and storyboards.

Follow-Up

Improvement in health care is a continuous journey.

The new patterns need to be monitored to ensure the improvements are sustained. Embedding new habits into daily work with the use of "huddles" to review and remind staff, as well as weekly Lead Team meetings keeps everyone focused on improvements and results that can lead to sustained and continuous improvements.

Datawalls, storyboards and monthly all-staff meetings are methods to embed new habits and thinking for improvement.

The Lead Team should repeat the process for newly recognized themes and improvements that are identified in the assessment and Metrics That Matter.

Assessing Your Practice Discoveries and Actions

Know Your Patients	Discoveries	Actions Taken
1. Age Distribution	1. 30% of our patients > 65 years old	1. Designated special group visits to review specific needs of this age group including physical limitations, dietary considerations.
2. Disease Identification	2. We do not know what percent our patients have diabetes.	2. Staff reviewed coding/ billing data to determine approximate numbers of patients with diabetes.
3. Health Outcomes	3. We do not know what the range of HgA1C is for out patients with diabetes of if they are receiving appropriate ADA recommended care in a timely fashion.	3. Staff conducted a chart audit with 50 charts during a lunch hour. Using a toll designed to track outcomes; each member of the staff reviewed 5 charts and noted their findings on the audit tool.
4. Most Frequent Diagnosis	4. We learned we had a large number of patients with stable hypertension and diabetes, seeing the physician frequently. We also learned that during certain season we had huge volumes of acute diseases such as URI, Pharyngitis and poison ivy.	4. Designed and tested a new model of care delivery for stable hypertension and diabetes optimizing the RN role in the practice using agreed upon guidelines, protocols and tools.
5. Patient Satisfaction	5. We don't know what patients think unless they complain to us.	5. Implemented the "point of service" patient survey that patients completed and left in a box before leaving the practice.

Know Your Professionals	Discoveries	Actions Taken
1. Provider FTE	1. We were making assumptions about provider time in the clinic without really understanding how much time providers are OUT of the Clinic with hospital rounds, nursing home rounds, etc.	1. Changed our scheduling processes, utilized RNs to provide care for certain subpopulations.
2. Schedules	2. Several providers are gone at the same time every week, so one provider is often left and the entire staff works overtime that day.	2. Evaluated the scheduling template to even out each provider's time to provide consistent coverage of the clinic.
3. Regular Meetings	3. The doctors meet together every other week. The secretaries meet once a month.	3. Entire practice meeting every other week on Wednesdays.
4. Hours of Operation	4. The beginning and the end of the day are always chaotic. We realized we are on the route for patients between home and work and want to be seen when we are not open.	4. Opened one hour earlier and stayed open one house later each day. The heavy demand was managed better and overtime dropped.
5. Activity Surveys	5. All roles are not being used to their maximum. RNs only room patients and take vital signs, medical assistants doing a great deal of secretarial paperwork and some secretaries are giving out medical advice.	5. Roles have been redesigned and matched to individual education, training and licensure.

Know Your Processes	Discoveries	Actions Taken
1. Cycle Time	1. Patient lengths of visits vary a great deal. There are many delays.	1. The staff identified actions to eliminate, steps to combine, and learned to prepare the charts for the patient visit before the patient arrives. The staff also holds daily "huddles" to inform everyone on the plan of the day and any issues to consider throughout the day.
2. Key Supporting Processes	2. None of us could agree on how things get done in out practice.	2. Detailed flow charting of our practice to determine how to streamline and do in a consistent manner.
3. Indirect Patient Pulls	3. The providers are interrupted in their patient care process frequently. The number one reason is to retrieve missing equipment and supplies from the exam room.	3. The staff agreed on standardization of exam rooms and minimum inventory lists that were posted inside the cabinet doors. A process was also determined on WHO and HOW the exam rooms would be stocked regularly and through the use of an assignment sheet, a person was identified and held accountable.

Know Your Patterns	Discoveries	Actions Taken
1. Demand on the Practice	1. There are peaks and lows of the practice depending on day of the week, session of the day or season of the year.	1. Resources and role are matched to demand volumes. Schedules are created which match resources to variation.
2. Communication	2. We do not communicate in a timely way, nor do we have a standard form to communicate.	2. Every other week practice meeting to help communication and e-mail use of all staff to promote timely communication.
3. Cultural	3. The doctors don't really spend time with non-doctors.	3. The staff meetings heightened awareness of behaviors has helped improve this.
4. Outcomes	4. We really have not paid attention to our practice outcomes.	4. Began tracking and posting on a data wall to keep us alter to outcomes.
5. Finances	5. Only the doctors and the practice managers know about the practice money.	5. Finances are discussed at the staff meetings and everyone is learning how we make a difference in our financial performance.

Assessing Your Practice Discoveries and Actions

Common High Yield Wastes	Recommended Method to Reduce Waste	Traps to Avoid
1. Exam rooms not stocked or standardized – missing supplies or equipment	- Create Standard Inventory supplies for all exam rooms. - Design process for regular stocking of exam rooms with accountable person - Standardize and utilize all exam rooms	- Don't assume rooms are being stocked regularly – track and measure. - Providers will only use "their own" rooms - Providers cannot agree on standard supplies; suggest "testing"
2. Too many appointment types which create chaos in scheduling	- Reduce appointment types to 2-4 - Utilize standard building block to create flexibility in schedule.	- Frozen schedules of certain types - Use one time (e.g. 10-15 minute "building blocks")
3. Poor communication amongst the providers and support staff about clinical sessions and patient needs.	- Conduct daily morning "huddles" to provide a forum to review the schedule, anticipate needs of patients, plan supplies/ information needed for a highly productive interaction between patient and provider.	- People not showing up for scheduled huddles. Gain support of providers who are interested, test ideas and measure results - Huddles last longer than 15 minutes, use a work sheet to guide huddle - Don't sit down
4. Missing information or chart for patient visit.	- Review patient charts BEFORE the patient arrives – recommended the day before to ensure information and test results are available to support the patient.	- Avoid doing chart review when patient is present - If you have computerized test results, don't print the results
5. Confusing messaging system	- Standardize messaging processes for all providers - Educate/ train messaging content - Utilize a process with prioritizing methods such as a "bin" system in each provider office.	- Providers want their "own" way – adding to confusion to support staff and decreases ability for cross coverage - Content of message can't be agreed upon – test something
6. High prescription renewal request via phone.	- Anticipate patient needs - Create "reminder" systems in office, e.g. posters, screensavers - Standardize information that	- Doesn't need to be the RN – Medical assistants can obtain this information
7. Staff frustrated in roles and unable to see new ways to function.	- Review current roles and functions using activity survey sheets - Match talent, education, training, licensure to function - Optimize every role - Eliminate functions	- Be sure to focus on talent, training and scope of practice not individual people.
8. Appointment schedules have limited same day appointment slots.	- Evaluate follow-up appointments and return visit necessity. - Extend intervals of standard follow-up visits - Consider RN visits - Evaluate the use of protocols and guidelines to provide advice for homecare- www.icsi.org - Consider phone care	- Don't set a certain number of same day appointments without matching variations throughout the year.
9. Missed disease-specific/ preventive interventions and tracking.	- Utilize the flow sheets to track preventative activities and disease-specific interventions. - Utilize "stickers" on charts to alert staff to preventative/ disease specific needs - Review charts before patient visits - Create registries to track subpopulation needs.	- Be alert to creating a system for multiple diseases and not have many stickers and many registries.
10. Poor communication and interactions between members.	- Hold weekly staff meetings to review practice outcomes, staff concerns, improvement opportunities. - Education and Development	- Hold weekly meetings on a regular day, time and place - Do not cancel – make the meeting a new habit
11. High no-show rate	- Consider improving same day access - Reminder systems	- Automated reminder telephone calls are not always well received by patients
12. Patient expectations of visit not met, resulting in phone calls and repeat visits.	- CARE vital sign sheet- www.howsyourhealth.org - Evaluating patient at time of visit if their needs were met	- Use reminders to question patient about needs being met - New habits not easily made.