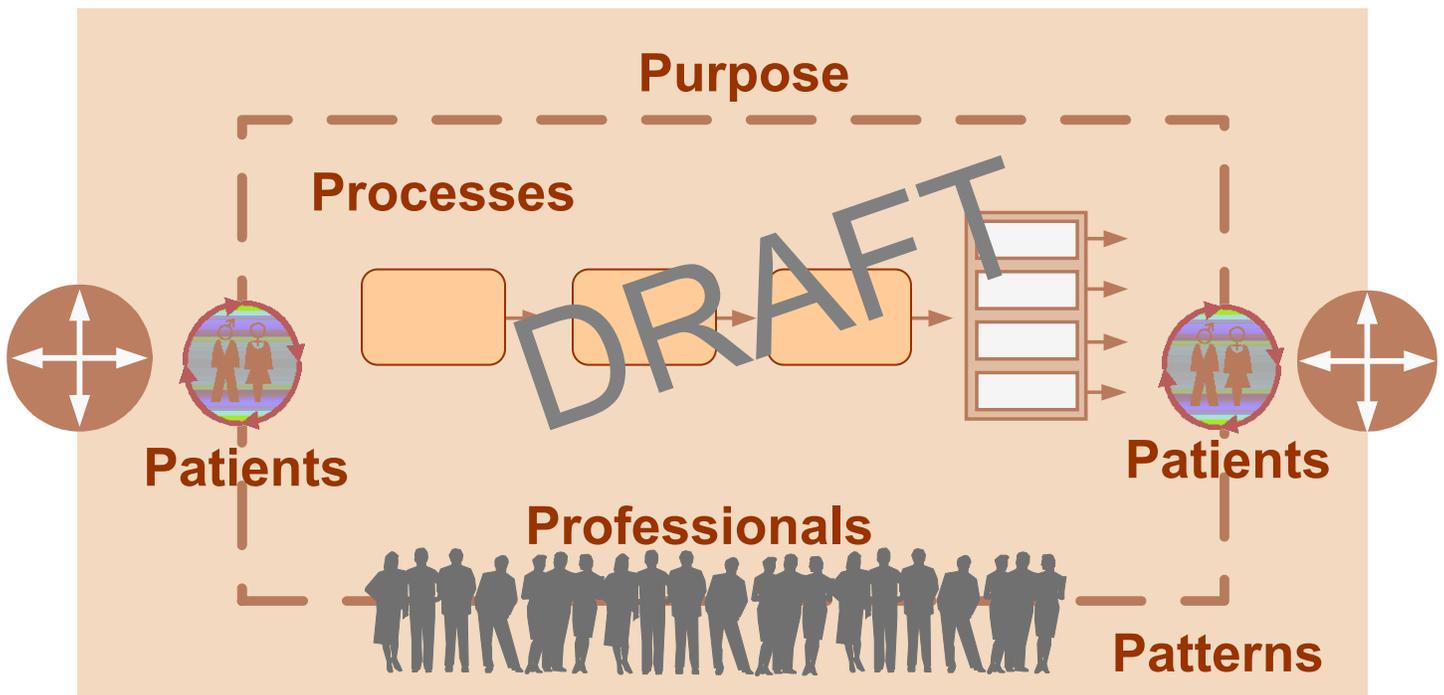


Clinical Microsystems

“The Place Where Patients, Families and Clinical Teams Meet”

Assessing, Diagnosing and Treating Your Inpatient Unit



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 hospitals. The quality of hospital care can be no better than the quality produced by the small systems that come together to provide care. Here is the hospital quality equation:

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

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

Note: We have developed this workbook with tools to give ideas to those interested in improving healthcare. “Dartmouth-Hitchcock Medical Center and the developers of this workbook are pleased to grant use of these materials without charge, providing that recognition is given for their development, that any alterations to the documents for local suitability and acceptance are shared in advance, and that the uses are limited to their own use and not for re-sale.”

The Path Forward

A Microsystem Self-Assessment, Diagnosis and Treatment Plan

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 unit. Include MDs, RNs, NPs, CNSs, clinical support staff, clerical staff, patients and families along with any other professionals who are regularly in the unit 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 unit
- 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 Inpatient Unit

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 Inpatient Unit will create a sense of equal value and ability to contribute to the improvement activities.

Start with Purpose. Why does your Inpatient Unit exist?

Raise this question to EVERYONE in your unit 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 Inpatient 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 Inpatient 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. Living Situation		
B3. Patient Type-LOS average-Range		
B4. Mortality Rate		
B5. List Your Top Diagnosis/Conditions		
B6. Point of Entry		
B7. Discharge Disposition		
B8. Patient Satisfaction Scores (Patient Survey pg 7)		
B9. Patient Population Census (“A Day In The Life” pg 8)		
Page 6 C Know Your Professionals		
C1. Current Staff Travelers On-Call Staff Float Pool		
C2. Admitting Medical Service		
C3. Supporting Diagnostic Departments		
C4. Staff Satisfaction Scores (Staff Survey pg 9) (Personal Skills Assessment pg 10 – 11) (Activity Survey pg 12)		
Page 6 D Know Your Processes		
D1. Create Flow Charts of Routine Processes		
D2. Capacity-Rooms and Beds		
D3. Turnovers/Bed/Year		
D4. Linking microsystems (Patient Cycle Time Tool pg 13) (Core and Supporting Processes pg 14) (High Level Flowchart pg 15)		
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 16) (Telephone Tracking Log pg 17) (Call Light / Alarm Tracking Log pg 18)		

Inpatient Unit Profile

A. Purpose:

Why does your unit exist?

Administrative Director:	Site Contact:	Date:
Nurse Director:	Medical Director:	

B. Know Your Patients: Take a close look into your unit, 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 Pts:	%	List Your Top 10 Diagnoses/Conditions	Patient Satisfaction Scores	% Always
19-50 years		1.	Nurses	
51-65 years		2.	Doctors	
66-75 years		3.	Environment	
76+ years		4.	Pain	
		5.	Discharge	% Yes
		6.	Overall	% Excellent
		7.	Pt Population Census: Do these numbers change by season? (Y/N)	
		8.		
		9.	Pt Census by Hour	
		10.		
			Pt Census by Day	
% Females				
			Pt Census by Week	
Living Situation	%			
Married			Pt Census by Year	
Domestic Partner				
Live Alone			30 Day Readmit Rate	
Live with Others				
Skilled Nursing Facility			Our patients in Other Units	
Nursing Home				
Homeless			Off Service Patients on Our Unit	
Patient Type	LOS avg.	Range	Frequency of Inability to Admit Pt	
Medical				
Surgical			*Complete "Through the Eyes of Your Patient", pg 8	
Mortality Rate				

C. Know Your Professionals: Use the following template to create a comprehensive picture of your unit. 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?

Current Staff	Day FTEs	Evening FTEs	Night FTEs	Weekend FTEs	Over-Time by Role	Admitting Medical Service	%
MD Total						Internal Medicine	
Hospitalists Total						Hematology/Oncology	
Unit Leader Total						Pulmonary	
CNSs Total						Family Practice	
RNs Total						ICU	
LPNs Total						Other	
LNAs Total							
Residents Total						Supporting Diagnostic Departments	
Technicians Total						(e.g. Respiratory, Lab, Cardiology, Pulmonary, Radiology)	
Secretaries Total							
Clinical Resource Coord.							
Social Worker							
Health Service Assts.							
Ancillary Staff							

Do you use Per Diems? Yes _____ NO _____	Staff Satisfaction Scores	
Do you use Travelers? Yes _____ NO _____	How stressful is the unit?	% Not Satisfied _____
Do you use On-Call Staff? Yes _____ NO _____	Would you recommend it as a good place to work?	% Strongly Agree _____
Do you use a Float Pool? Yes _____ NO _____		

***Each staff member should complete the Personal Skills Assessment and "The Activity Survey", pgs 10 - 12**

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. Create flow charts of routine processes.	Do you use/initiate any of the following?	Capacity	# Rooms _____	# Beds _____
a) Overall admission and treatment process	Check all that apply	# Turnovers/Bed/Year _____		
b) Admit to Inpatient Unit	<input type="checkbox"/> Standing Orders/Critical Pathways			
c) Usual Inpatient care	<input type="checkbox"/> Rapid Response Team	Linking Microsystems (e.g. ER, ICU, Skilled Nursing Facility)		
d) Change of shift process	<input type="checkbox"/> Bed Management Rounds			
e) Discharge process	<input type="checkbox"/> Multidisciplinary/with Family Rounds			
f) Transfer to another facility process	<input type="checkbox"/> Midnight Rounds			
g) Medication Administration	<input type="checkbox"/> Preceptor/Charge Role			
h) Adverse event	<input type="checkbox"/> Discharge Goals			

2. Complete the Core and Supporting Process Assessment Tool, pg 14

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 unit meet regularly as a team?	• Do the members of the unit regularly review and discuss safety and reliability issues?	• What have you successfully changed?
• How frequently?		• What are you most proud of?
• What is the most significant pattern of variation?		• What is your financial picture?

***Complete "Metrics that Matter", pgs 20 & 21**

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 hospitalization to give real time measurement of satisfaction.
- Use the Inpatient Unit 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 Inpatient Unit.

Patient/Family Satisfaction with Inpatient Experience Survey “Point of Service”

Date: _____

Think about this hospital stay.

1. How often did nurses listen carefully to you?

- Always Usually Sometimes Never

2. How often did doctors listen carefully to you?

- Always Usually Sometimes Never

3. How often was the area around your room quiet at night?

- Always Usually Sometimes Never

4. How often was your pain well controlled?

- Always Usually Sometimes Never

5. Did doctors, nurses or other hospital staff talk with you about whether you would have the help needed when you left the hospital?

- Yes No

6. How would you rate your overall hospital experience?

- Excellent Very Good Good Fair Poor

7. Would you recommend this hospital to your friends and family?

- Definitely Yes Probably Yes Probably No Definitely No

8. What would make this Inpatient Unit better for you?

Thank You For Completing This Survey

Adapted from Hospital CAHPS © 2004

Patients

- Gain insight into how your patients experience your Inpatient Unit. One simple way to understand the patient experience is to experience the care. Members of your staff should do a "A Day in the Life of an Inpatient" on your Inpatient Unit. 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 - "A Day in the Life of an Inpatient"

Tips for making the "Day in the Life" most productive:

1. Determine with your staff where the starting point and ending points should be, taking into consideration admissions, the actual inpatient process, change of shift, discharge process 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 lab tests, rounds, medications, and shift reports. Sit where the patient sits. Wear what the patient wears. Make a realistic paper trail including chart, lab reports and discharge planning.
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

Professionals

- Creating a joyful work environment starts with a basic understanding of staff perceptions of the unit. All staff members should complete this survey. Use a tally sheet to summarize results.
- Ask all Inpatient Unit staff to complete the Staff Survey. Often you can distribute this survey to any professional who spends time in your unit. 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 workplace.

Inpatient Unit Staff Satisfaction Survey

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

- 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 Inpatient Unit notices that I did it.

- Strongly Agree Agree Disagree Strongly Disagree

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

- 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 Inpatient Unit is a better place to work than it was 12 months ago.

- Strongly Agree Agree Disagree Strongly Disagree

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

- Strongly Agree Agree Disagree Strongly Disagree

9. What would make this Inpatient Unit better for patients?

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

Professionals

- Development of each member in the unit 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.

Inpatient Unit Resources—Personal Skills Assessment				
Name: _____	Unit: _____			
Role: _____	Date: _____			
Clinical Competencies:				
<i>Please create your list of clinical competencies and evaluate.</i>	Want to Learn	Never Use	Occasionally	Frequently
	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Clinical Information Systems (CIS):				
<i>What features and functions do you use?</i>	Want to Learn	Never Use	Occasionally	Frequently
Provider/On Call Schedule	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Patient Demographics	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Lab Results	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Pathology	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Problem List	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Review Reports/Notes	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Documentation	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Direct Entry	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Note Templates	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Medication Lists	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Insurance Status	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Durable Power of Attorney	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Radiology	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
OR Schedules	<input type="checkbox"/>	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:				
<i>Please rate the following on how often you use them.</i>	Want to Learn	Never Use	Occasionally	Frequently
CIS*	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
E-mail	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
PDA (i.e. Palm Pilot)	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Digital Dictation Link	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Word Processing (e.g. Word)	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Spreadsheet (e.g. Excel)	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Presentation (e.g. Power Point)	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10

Inpatient Unit Resources—Personal Skills Assessment page 2

Name: _____ Unit: _____

Technical Skills cont'd:

<i>Please rate the following on how often you use them.</i>	Want to Learn	Never Use	Occasionally	Frequently
Database (e.g. Access or File Maker Pro)	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Patient Database/Statistics	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Internet/Intranet	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Printer Access	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Fax	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Copier	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Telephone System	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Voice Mail	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Pagers	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Tube System	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Acudose/Pyxis	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10

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

Improvement Skills and Knowledge:	Want to Learn	Never Use	Occasionally	Frequently
<i>What improvement tools do you currently use?</i>				
Flowcharts/Process Mapping	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Trend Charts	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Control Charts	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Plan/Do/Study/Act (PDSA) Improvement Model	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Aim Statements	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Fishbones	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Measurement and Monitoring	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
Surveys-Patient and Staff	<input type="checkbox"/>	1 2 3	4 5 6 7	8 9 10
STAR Relationship Mapping	<input type="checkbox"/>	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, CNSs, 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.

Inpatient Unit Activity Survey Sheet			
Position: MD	% of Time	Position: RN	% of Time
Activity: <u>See Patients</u> Specific Items Involved:		Activity: <u>Reports</u> • Shift • Other facilities •	15%
• Review chart history	35%	Activity: <u>Patient/Family Education</u> Specific Items Involved:	3%
• Assess/diagnose patient		•	
• Determine treatment plan		Activity: <u>Direct Patient Care</u> • Bedside care • Transfer patients • •	30%
Activity: <u>Document Patient Encounter</u> Specific Items Involved:	20%	Activity: <u>Phone Calls with Ancillary Departments</u> Specific Items Involved:	5%
• Write/dictate admission notes		•	
• Write/dictate progress notes		Activity: <u>Patient Care Documentation</u> Specific Items Involved:	22%
Activity: <u>Write Prescriptions</u>	5%	• Nursing care • Orders	
Activity: <u>Complete Forms</u> Specific Items Involved:	10%	Activity: <u>Complete Forms</u> Specific Items Involved:	18%
• Referrals		• Lab requisitions • Referrals	
• Consults		Activity: <u>Page Physicians</u> Specific Items Involved:	5%
Activity: <u>Telephone Calls/Pages</u> Specific Items Involved:	10%	•	
• Answer nursing questions		Activity: <u>Miscellaneous</u> Specific Items Involved:	2%
• Family/patient calls		• CME; attend seminars; attend meetings	
Activity: <u>Evaluate Test Results</u> Specific Items Involved:	5%		
• Review results and determine next actions		Total	100%
Activity: <u>Manage Charts</u>	6%		
Activity: <u>Coordinate Care/Discharge Plan</u> Specific Items Involved:	5%		
• Meetings with Clinical Resource Coordinator			
• Meetings with family and social worker			
Activity: <u>Miscellaneous</u> Specific Items Involved:	4%		
• CME; attend seminars; attend meetings			

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 tally 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, 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:		Total
Patient Activities		AM	PM	
Patient Education				14
Family Education				11
Bedside Care				42
Indirect Patient Activities				
Phone Calls				26
Orders				19
Reporting				16
Page Physicians				15
Documentation				5
Total		75	73	148

Processes

- Beginning to have all staff understand the processes of care and services in the Inpatient Unit is a key to developing a common understanding and focus for improvement. Start with the high level process of a patient being admitted to your Inpatient Unit by using the Patient Cycle Time Tool. You can assign someone to track all admissions for a week to get a sample, or the cycle time tool can be initiated for all admissions 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.

Inpatient Unit Patient Cycle Time	
	Day: _____ Date: _____
Time	
<input type="text"/>	1. Notification of new patient.
<input type="text"/>	2. Arrival time to unit.
<input type="text"/>	3. Patient in bed.
<input type="text"/>	4. Patient oriented by staff to unit.
<input type="text"/>	5. LNA/RN initiates admission process.
<input type="text"/>	6. Time physician came into the room.
<input type="text"/>	7. History and physical completed by MD.
<input type="text"/>	8. Treatments started (eg. IV).
<input type="text"/>	9. Medications dispensed.
<input type="text"/>	10. Tests drawn.
<input type="text"/>	11. Patient admission complete.
Comments:	

Processes

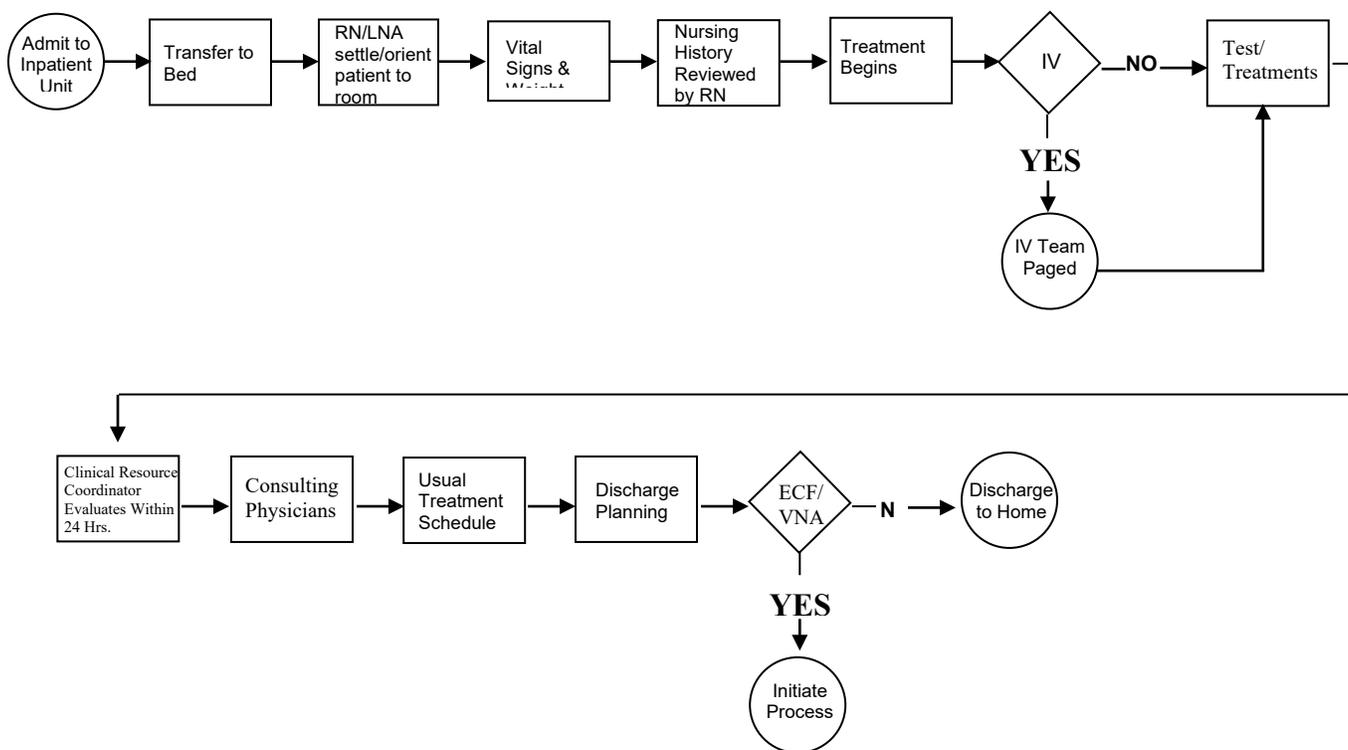
- Review, adapt and distribute the Core and Supporting Processes evaluation form to ALL Inpatient staff. Be sure the list is accurate for your Inpatient setting and then ask staff to evaluate the CURRENT state of these processes. Rate each process by putting a tally mark under the heading which most 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.

Inpatient Unit 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
Admission							
Routine Care							
Transfer from Inpatient							
Discharge							
Medication Administration							
Adverse Drug Event							
Code							
Feeding Patients							
Pain Management							
Monitoring Confusion							
At Risk for Falls							
At Risk for Decubitus							
Answering Patient Lights							
Restraint Process							
Communicating with Families							
Laboratory Specimens							
Pharmacy Ordering							
Pharmacy Receiving							
Pharmacy Questions							
Dietary Process							
Physician Orders							
Medical Records							
CIS							
Follow Up Appointments							
End of Life/Code Status							
Bed Management							
Answering Phones							
Hazardous Materials							
Housekeeping							
Consultations							
Materials and Equipment							

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 admission process or the entire Inpatient Unit experience. Start with just ONE flow chart. Eventually you will wish to create flowcharts for many different processes in-and-between your Inpatient Unit. Keep the symbols simple!
- Review the flowchart to identify unnecessary rework, delays and opportunities to streamline and improve.

Inpatient Unit High Level Flowchart



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 Inpatient Unit to discover interruptions in work flow. Circles in the example indicate processes to further evaluate for possible improvements.

Inpatient Unit Unplanned Activity Tracking Card	
Unplanned Activity Tracking	
Name: _____	
Date: _____ Time: _____	
Place a tally mark for each occurrence of an unplanned activity	Total
Admissions	
Interruptions	
• Phone	
• Secretary	
• Pharmacist	
• Nursing	
• Students/Faculty	
• Dietary	
• Housekeeping	
• Clinical Resource Coordinator	
• Other Inpatient Units	
• Family Discussions	
Pages	
Patient Lights	
Missing Chart	
Missing Supplies	
Missing Test Results	
Equipment Alarms	
Other	○
	○
	○

Unplanned Activity Tracking	
Name: _____	
Date: _____ Time: _____	
Place a tally mark for each occurrence of an unplanned activity	Total
Admissions IIII IIII IIII IIII	20
Interruptions	
• Phone IIII IIII IIII	15
• Secretary	
• Pharmacist IIII IIII	10
• Nursing	
• Students/Faculty IIII IIII II	12
• Dietary	
• Housekeeping IIII IIII IIII IIII	20
• Clinical Resource Coordinator	
• Other Inpatient Units IIII	5
• Family Discussions	
Pages IIII IIII	10
Patient Lights	
Missing Chart	
Missing Supplies	
Missing Test Results IIII	5
Equipment Alarms	
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 Inpatient Unit 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.

Inpatient Unit 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	
Family															
Total															
Admitting															
Total															
MD Office															
Total															
Other Hospital															
Total															
Vendors															
Total															
Ancillary Departs.															
Total															
Clinical Resource Coord.															
Total															
VNA/SNF															
Total															
Personal															
Total															
Misdirect Call															
Total															
DAY TOTAL															

Patterns

- Collect total data using this worksheet to see the patterns and volumes of alarms in your unit.
- Use one worksheet per shift. This data can be collected by room number or by staff person.

Inpatient Unit Call Light / Alarm Tracking											
AM PM Date: _____											
<input type="checkbox"/> Lights <input type="checkbox"/> Alarm											TOTAL
7:00 – 8:00											
8:00 – 9:00											
9:00 – 10:00											
10:00 – 11:00											
11:00 – 12:00											
12:00 – 1:00											
1:00 – 2:00											
2:00 – 3:00											
3:00 – 4:00											
4:00 – 5:00											
5:00 – 6:00											
6:00 – 7:00											
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.

Inpatient Unit Metrics That Matter

1. **What?** 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. **Why?** 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. **How?** Here are steps you can make to take advantage of MTMs.

Lead Team

Work with your Lead Team to establish the need for metrics and their routine use. Quality begins with the intention to achieve measured excellence.

Balanced Metrics

Build a balanced set of metrics 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 data owner(s) 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 display 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

Review your set of metrics on a regular basis—daily, weekly, monthly, quarterly, annually. Use 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” Inpatient Units should be monitoring.
- List your current performance in these metrics and what the targets are.

Inpatient Unit Metrics That Matter			
Name of Measure	Definition & Data Owner	Current & Target Values	Action Plan & Process Owner
General Metrics			
<u>Patient-Centered Outcome Measures</u>			
Pressure ulcer prevalence**			
Restraint prevalence**			
<u>Flow</u>			
Diversions from unit			
Delayed discharge			
Inpatient LOS			
<u>Staffing Patterns</u>			
Traveler RNs			
Nursing care hours per patient per day **			
Voluntary Turnover**			
<u>Safety</u>			
Falls per 1000 patient days**			
Workdays lost due to illness or injury ##			
Incident reports			
<u>Patient Satisfaction</u>			
Overall satisfaction ##			
<u>Finance</u>			
Patient days vs operating plan			
Operating margin			
<u>Infections</u>			
Urinary Catheter			
-associated urinary tract infection *			

- * Denotes NQF Hospital Care measure (2003)
- ** Denotes NQF Nursing-Sensitive Care measure (2004)
- # Denotes OSHA Safety Log measure
- ## Denotes IHI Whole System League measure (2004)

Metrics That Matter

Inpatient Unit Metrics That Matter			
Name of Measure	Definition & Data Owner	Current & Target Values	Action Plan & Process Owner
Medical Unit Specific			
<u>Pneumonia</u>			
Influenza screen/vaccination*			
Pneumonia screen/vaccination*			
Smoking cessation advice*			
<u>AMI</u>			
Aspirin at discharge*			
Beta blocker at discharge*			
Inpatient mortality*			
ACEI for LVSD*			
Smoking cessation advice*			
<u>Heart Failure</u>			
LVF assessment*			
ACEI for LVSD*			
Detailed discharge instructions*			
Smoking cessation advice*			
<u>Surgical Unit Specific</u>			
<u>Coronary Artery Bypass Graft</u>			
CABG volume*			
CABG using internal mammary artery*			
CABG mortality*			
<u>Surgical Complications</u>			
Timing of antibiotic administration			
Selection of antibiotic administration			
Duration of antibiotic prophylaxis			

- * Denotes NQF Hospital Care measure (2003)
- ** Denotes NQF Nursing-Sensitive Care measure (2004)
- # Denotes OSHA Safety Log measure
- ## Denotes IHI Whole System League measure (2004)

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., safety, flow, reliability, patient satisfaction, 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 Inpatient Unit

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: _____
(Name the process)

In: _____
(Clinical location in which process is embedded)

The process begins with: _____
(Name where the process begins)

The process ends with: _____
(Name the ending point of the process)

By working on the process, we expect: _____
(List benefits)

It is important to work on this now because: _____
(List imperatives)

Step 4 Treat Your Inpatient Unit

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 Inpatient Unit 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 Inpatient Unit

- Once you have completed the assessment and diagnosis of your Inpatient Unit 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.

Inpatient Unit Change Ideas to Consider:

1. Staggered nursing/support staff shifts to match demand and flow of patients.
2. Open visitation.
3. Midnight rounds with “on-call physicians” conducted after change of shift report to pre-plan anticipated needs of the patients to decrease the number of night pages and calls.
4. Communication boards in patient rooms stating goals and the plan of care to be used by staff, patients and families.
5. Goal focused shift reports.
6. Pathways and order sets/protocols to standardize by diagnosis.
7. Interdisciplinary rounds including patient and families.
8. One form documentation for ALL health care professionals.
9. Patient controlled hospital menus.
10. Interdisciplinary discharge rounds.
11. Dedicated Admission RN.
12. Admission registration at the bedside.
13. Rapid Response team for clinical emergencies.
14. Plan for discharge on admission. Predict day and time and plan in advance with staff and patient/families.

*Visit www.ihl.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)

Meetings:

Review of Tomorrow and Proactive Planning

Meetings:

Treat Your Inpatient Unit

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 an Inpatient Unit 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.

Case Study

Review the example of how a microsystem was able to do their assessment, diagnosis and treatment. Included is an example of a storyboard to be used to “tell the story” of microsystem improvement and to keep all staff informed of activities and results.

Inpatient Unit Case Study

An example of an inpatient unit journey through this process is presented by Dartmouth-Hitchcock Medical Center (DHMC). The inpatient unit is called 1 East and is a medical specialty unit. The accompanied storyboard on pg 29 provides information and data to be embedded in the unit environment to “get everyone in the game” of improvement through illustration and updates of improvement progress and data.

Introduction

The “Medical Specialties Unit” is a 34 bed inpatient unit that cares for general medicine and subspecialty patients. It is a complex microsystem involving seven medical specialties, acute or chronic disease exacerbations, palliative care and preventive care.

The Patient Population, Top Diagnostic Categories and Staffing Mix are portrayed on the Storyboard.

Our Developmental Journey

In July 2003, team leaders from the Medical Specialties Unit attended the Dartmouth Microsystems Course and spent time in initial evaluation and assessment using “Greenbook” tools. Over the next several weeks, team leaders engaged in further assessments through formal observations and extensive interviews with patients and staff; culminating in a staff retreat in September 2003.

Assess: Purpose: Medical Specialty microsystem team leaders attended the July 2003 Microsystems Course and worked to define purpose with continued work at the Staff Retreat in September 2003. The retreat was a two day facilitated event held at Lake Morey. During the event the unit was staffed by travelers, per diems and some staff who traveled back and forth to the retreat.

Patients: Stephen Liu, MD interviewed patients from July–November 2003 using Greenbelt tools. Our patients are surveyed using the Press Ganey Patient Satisfaction tool. On a quarterly basis, the results are reviewed and analyzed.

Professionals: Steven Liu, MD interviewed many staff from July–November 2003 using Greenbook tools. At the retreat, staff enjoyed several activities that helped them get to know each other better.

Processes: Mary Evanofski & Suzanne Beyea conducted 20 hours of observations and 10 hours of small group staff meetings in August and September 2003. Observations allowed study of RN activities, communication processes and environmental factors that affect care.

Patterns: Mary Evanofski & Micheal Landon facilitated work and flow simulation exercises at the staff retreat. The staff then debriefed to analyze and identify opportunities for improvement.

Diagnosis: Both clinical and non-clinical opportunities were identified. This microsystem team decided to focus on the environment of care and how physical space, clutter, noise and light affect the patient experience, communication patterns, efficiency and staff satisfaction.

Treatment: Over the next several months staff joined teams to implement incremental changes through a series of PDSA (Plan-Do-Study-Act) cycles. See Storyboard.

Results: Press Ganey patient satisfaction scores have improved consistently and significantly over the past four quarters rising from an overall score of 82.8, QI 2003 to 86.3, QIII 2004. Baird Borling employee satisfaction scores, conducted in March 2002 and again in March 2004, showed significantly high scores compared to organizational and national scores in the areas of: a)staff involvement in decision making, b)staff given constructive feedback, c)ability of staff to express a concern, d)supply and equipment availability, e)leadership and f)confidence in treatment for a relative or close friend.

Lessons Learned

- The Greenbook Assessing Your Practice served as a great guide for the journey and provided many tools which were useful in assessment and diagnosis.
- There were many, many ideas about how to improve and what to do however even small changes take time, careful planning and buy-in from all of the individuals who work within and interact with the microsystem.
- By building on PDSA changes, significant change results in slow cultural change.

Conclusion and Next Steps

Staff interviews conducted 9 months after the retreat revealed thoughtfulness, optimism and hope. There is still much to do to further enhance the patient experience. Communication, especially between nursing staff and MDs remains a challenge. The historical and traditional class schedule and curriculum encourage medical students and residents to hurry through rounds and actually creates a barrier to frequent and effective RN-MD communication. Over the next year, we plan to work with our residents and the medical school to devise other means to enhance communication.

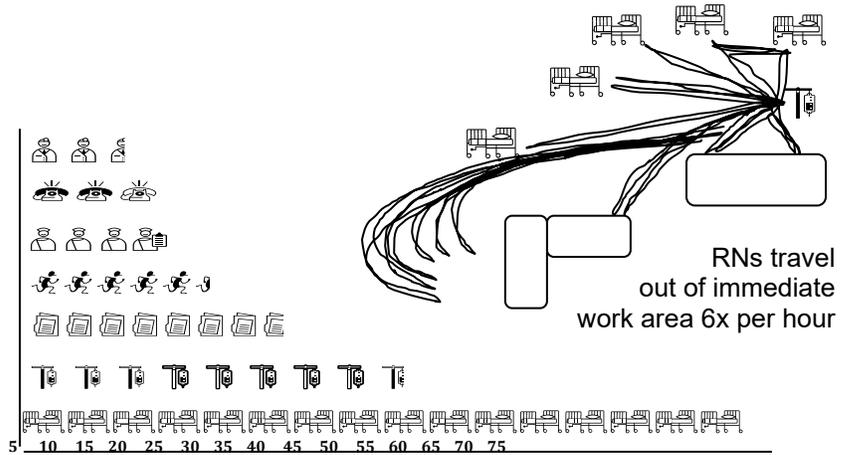
Medical Specialties Unit – One East - DHMC

AIM: Inpatient care for general internal medicine & subspecialty patients

SPECIFIC AIM: Improve environment of care to enhance patient experience & staff satisfaction

TEAM LEADERS

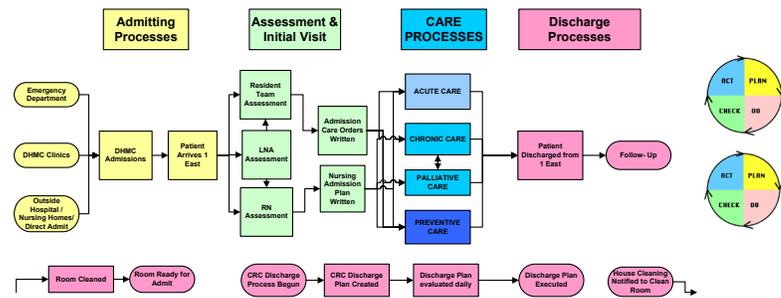
Ed Merrens, MD, Medical Director
 Donna Brown, RN, Director
 Glenn King, RN, Unit Manager
 Robin Taft, RN, Unit Manager
 Michael Landon, Org Dev Specialist
 Suzanne Beyea, RN, PhD, Director Nurse Research
 Stephen Liu, Sr. Resident
 Mary Evanofski, Facilitation



BACKGROUND

- 34 bed unit with occupancy rate of nearly 100%. Average discharge volume is 176/month. Mean patient age of 64, ALOS 4.4 days.
- Top diagnostic categories: Cardiovascular, Renal, Pulmonary, Gastrointestinal and Nutritional-Metabolic diseases.
- Staff includes 36 budgeted RNs, 15.5 budgeted LNAs, 3 Resident teams composed of senior resident, junior resident & two interns.

RN Activity over 4 Hours



Flowcharting



Flow simulation exercise at staff retreat

TIMELINE

- Microsystems Course 7/03
- Observations & Assessment 9/03
- Staff Retreat 10/03
- PDSA cycles 10/03 to present

METHODOLOGY

Team Leaders attend Microsystems, earn Green Belt and evaluate Patients, Professionals, Process, Patterns

- Observation & Analyses
- Flowcharting,
- Cause & Effect Diagrams
- Staff Retreat
- Diagnosis of problems & causes
- Teams
- Incremental Changes (PDSAs)

CHANGES

- PDSA: Environment: Cycles 1 - 4**
- Relocate Supplies & Equipment
 - Eliminate clutter on a regular basis
 - Reduce Unnecessary Noise
 - Implement Daytime Quiet Hour

PDSA: Communication: Cycles 1 - 3

- LNA & RN Daily Rounds
- Encourage RN "Eavesdropping" on rounds
- Implement Orientation for new Residents to include "who to talk to" on unit

RESULTS

Press Ganey Patient Satisfaction overall score increase from 82.6 to 86.3

Baird Borling Staff Satisfaction above organizational & national averages

