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Quality Improvement Workbook

Quality Improvement Workbook

Quality Improvement Planning Tool

Organization: _____

Clinical Topic: _____

Focus Area Within Topic: _____

Start Date: _____

Team Leader: _____

This worksheet provides a structured framework in which to narrow down, collect data, and select and organize a team for the problem area chosen. Worksheets A – N will help start the process of identifying an area for improvement and forming a team to address that improvement. Please complete all steps and worksheets in this section and then continue to Worksheet A (Identifying Areas for Improvement).

Step	Details	Date Completed
Create a team with appropriate staff for addressing this area.	Proceed to Worksheet A (Forming a Team). ▪ Involve staff from different departments, units and shifts. ▪ Ask for volunteers. ▪ Be sure to include executive leadership as appropriate. **To organize team meetings*:*** Proceed to Worksheet B (Team Meeting Notes). ▪ Take simple notes at team meetings and record next steps. ▪ Circulate Team Meeting Notes to team members at each meeting.	
Determine goal for improvement.	Proceed to Worksheet C (Goal Setting). ▪ Goal should be clear, focused and realistic. ▪ The entire team should know, understand and "buy into" the goal.	
Formulate a data plan.	▪ Collect data relevant to your goal. ▪ Record findings. ▪ After review, if the records indicate that your organization is meeting its goal for this area, repeat Steps 2 – 3. ▪ After review, if the records indicate that your organization is not meeting its goal for this area, proceed to the next step.	
Conduct an assessment and root cause analysis. Define current process – identify what you are currently doing.	▪ Sometimes there is more to the story than meets the eye. The right tool can help identify the true root cause of a problem. Choose tools that will help organize information about current care processes and outcomes. • Identify where and why the problem exists. • Don't jump to conclusions; problems are often caused by poor systems rather than an individual's performance. • Brainstorm all possible ideas and causes for problem. • Use the tools and worksheets in this workbook to assist your efforts. • By targeting the true root cause, sustainable improvement can be made. Summarize and discuss findings with the team (Worksheet J)	
Develop change in process – identify an improvement based on the root cause analysis.	Proceed to Worksheet K (Process Improvement Plan). ▪ Change should be small and measurable.	

Quality Improvement Planning Tool, continued

Step	Details	Date Completed
Develop implementation strategy on small scale.	Proceed to Worksheet L (Implementation Strategy). ▪ Plan how improvement will be implemented.	
Implement improvement (pilot test).	Proceed to Worksheet M (Testing). ▪ Start **small** with one unit or shift. ▪ Make change. ▪ Determine start/evaluation date.	
Evaluate tested change.	Proceed to Page 2 of Worksheet M (Test Evaluation). ▪ After change is implemented, review charts and collect data for compliance. ▪ Evaluate date ▪ Did change meet goal?	
Develop implementation strategy across organization.	▪ If no revision is needed, plan organization-wide change utilizing information from Worksheet L (Implementation Strategy). ▪ Continue larger tests of change until team agrees that process change is ready to implement fully within the organization.	
Implement improved process across organization.	▪ Implement tested change. ▪ Educate staff. ▪ Make changes and communicate. ▪ Make the process visible.	
Monitor improvement.	Proceed to Worksheet N (Ongoing Monitoring). ▪ Develop plan to review and monitor improvement. ▪ Review process and collect data. ▪ Make changes as necessary. ▪ Recognize and reward team!	
Celebrate!	Celebrate successes with entire organization! • Recognize staff members' contributions to improvement.	

Worksheet A
Forming a Team

"Teams always outperform an individual."

A team is a small group of people with complementary skills, committed to working together toward a common purpose, holding one another mutually accountable. The work of a project team focuses on system-level processes in order to achieve sustainable improvements.

- Identify all members who will work on this project.
- Teams should have 3-4 members who will plan, implement, and evaluate the work of the team.
- Roles of team members should include:
    - Process Owner: Holds direct responsibility and ownership of a particular process.
    - Support: Provides assistance, materials, information, or services needed to carry out the project.
    - Team Leader: Initiates the project and adds to the project team authority. Typically the most senior member of the team.
    - Team Mentor: Participates on the project team and is responsible for carrying out actions within the project action plan.
- Assess current project team to ensure that it includes appropriate members from various levels of the organization who work in areas related to the topic chosen for improvement. Include direct care staff, administrators, supervisors, and ancillary departments such as pharmacy, nutrition, social service, therapy, and environment.
- Involve staff from various shifts and units.

TEAM MEMBERS		
Name	**Position**	**Contact Information**
Alternates:		

.

Worksheet A, continued
Forming a Team

- Provider meeting ground rules
    a. Start and end on time.
    b. Use an agenda.
    c. No sidebar conversations.
    d. All ideas will be considered.
    e. Include additional ground rules as agreed upon by team members.

- Identify time and place for short weekly meetings (no more than 30 minutes).
    - Team does not have to meet at same time and place each week.
    - Meetings can be more or less frequent, as needed.
    - Post meeting schedule in a place accessible to all team members.

MEETING SCHEDULE		
Date	Time	Place

Worksheet B

Team Meeting Notes

Team Members: _____

Meeting Date: _____

Team Goal: _____

Main Points of Discussion	Next Steps	Person Responsible	Due Date

Worksheet C
Goal-Setting

A goal is a clear statement of an intended improvement and how it will be measured. Your goal should answer the question, "What do you want to accomplish?" A goal should be short enough for everyone to be able to remember. Well written goals should also be S.M.A.R.T.:

S – Specific
M –Measurable
A – Achievable
R – Realistic
T – Time-based

Post your goal as a visible reminder for all staff. Use it to stay focused, to establish boundaries for what is and is not included, and to define your success. Write your goal below in the space below.

Example: Over the next two months, increase the number of care plans that provide for medication on a regular schedule, from 50% to 75%, (e.g., around the clock, not just PRN for residents with daily pain).

OUR GOAL

Worksheet D
Data Plan

Data collection is the process of preparing and collecting data to provide information regarding a specific topic. Information should be collected in an orderly way and can be used to research, test, or evaluate outcomes. Data collection plays an important role in improvement projects. A sound collection plan ensures data will be useful in measuring the right outcomes or processes and ensures that each element is measured correctly. Data are collected to review or analyze outcomes and performance. Answer the following questions to develop a data plan:

What data will be relevant to your goal (be specific)?

What data are currently being collected?

What additional data are needed?

What tools are being used to collect data (e.g. checklist to audit MAR, observation, interviews, etc.)?

Who will collect the data (e.g. nursing supervisor or shift supervisor)?

What is the sample size of the data that will be collected?
(e.g., 20% of new admissions, or 10 charts of high-risk patients)?

Who is responsible for keeping data? (e.g., DON will maintain collected data.)

What are the date(s) to collect and review data?

Data Collection Period

- ☐ Each shift
- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Quarterly
- ☐ Other _____

Begin Date:

☐ _____

End Date:

☐ _____

Data Review Frequency

- ☐ Each shift
- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Quarterly
- ☐ Other _____

Begin Date:

☐ _____

End Date:

☐ _____

Worksheet D, continued
Data Plan

Report the Data

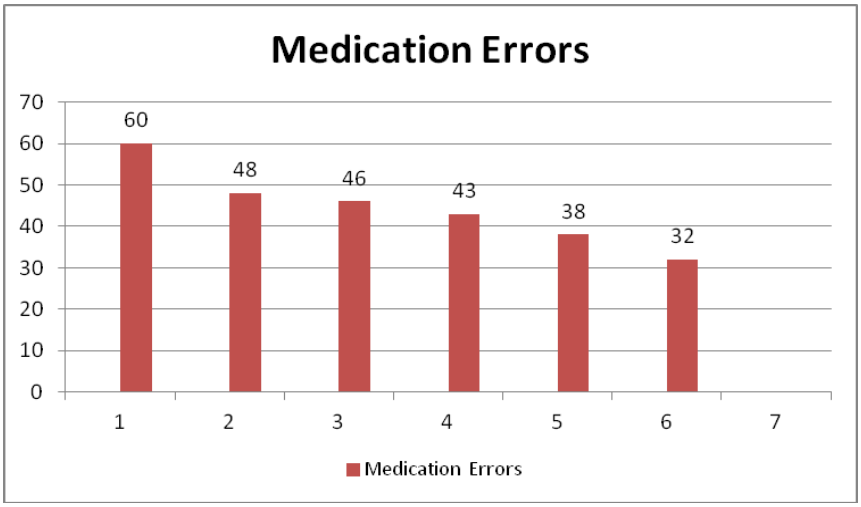
Data can be displayed using a various methods.

- Visual Information can help a team focus on the causes that will have the greatest impact if solved.
- Information should be displayed in an easy to interpret visual format.
- Status of information can quickly be determined as moving in positive or negative direction.
- Trends and patterns can be identified easily.

Below are two examples of easy to use charts. Either chart can provide the team with information to use in the improvement planning process.

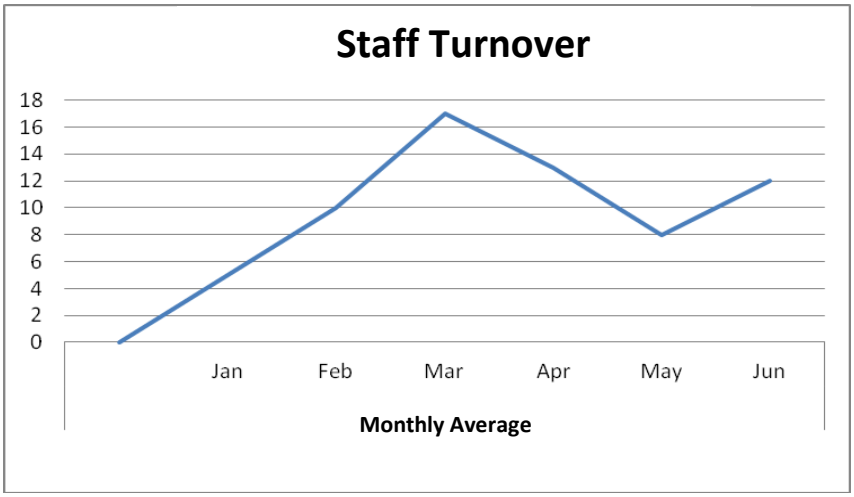
PARETO CHART: List problem categories on the horizontal axis and frequencies on the vertical axis.

Goal: Reduce medication errors by 25% in 6 months



RUN CHART: List the measurement item(s) on the vertical axis; list the time or sequence scale on the horizontal axis.

Goal: Reduce monthly staff turnover by 25% in 6 months



Worksheet E
The 5 Whys

The Five Whys tool aids in the identification of the root cause of a problem. Begin by identifying a specific problem, and ask why this is occurring. Continue to ask "Why?" to identify causes until the underlying cause is determined. Each "Why?" should build from the previous answer. There is nothing magical about the number five; sometimes a root cause may be reached after asking "Why?" just a few times; other times deeper questioning is needed.

Steps

a) Define a problem; be specific.

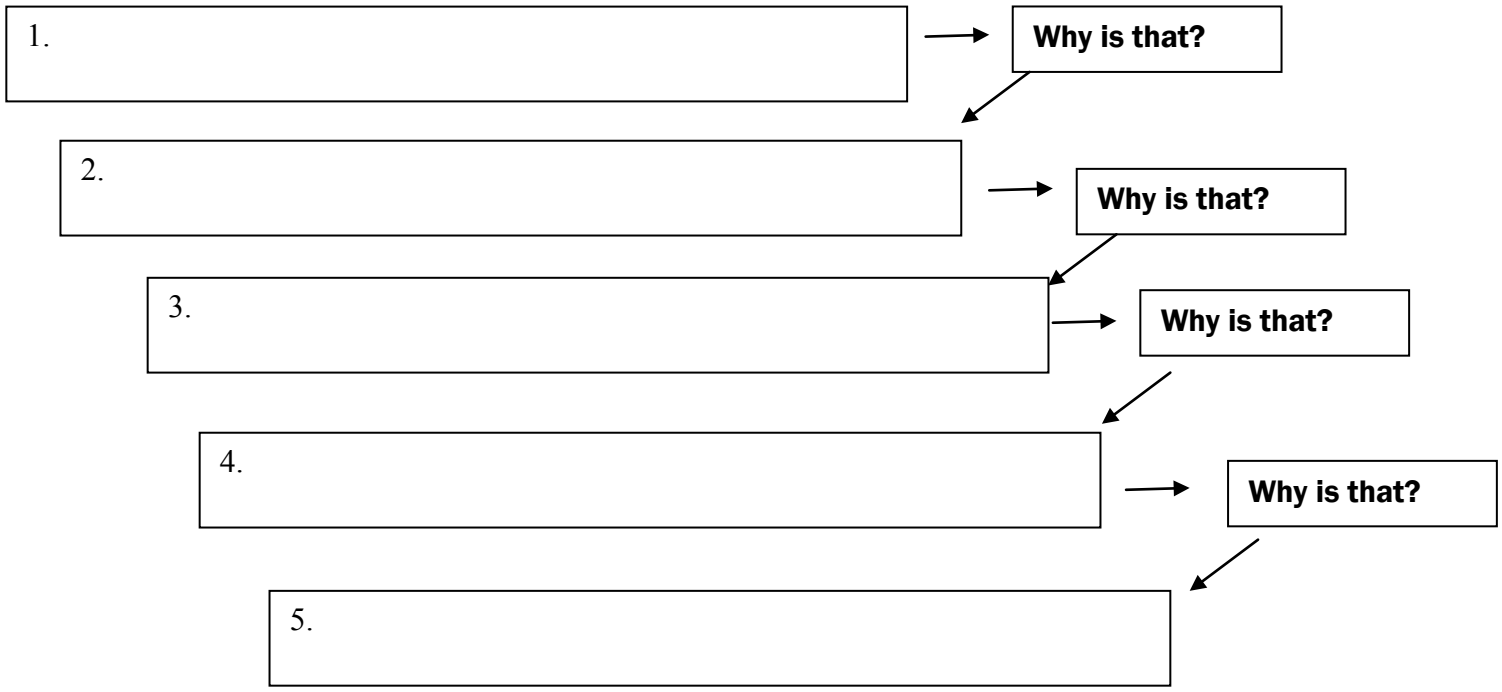
b) Ask why this problem occurs and list the reasons in Box 1.

c) Select one of the reasons from Box 1 and ask, "Why does this occur?" List the reasons in Box 2.

d) Continue this process of questioning until you have uncovered the root cause of the identified problem. If there are no identifiable answers or solutions, address a different reason.

The problem: _____.

Why does this occur?



Worksheet F
Cause-and-Effect (Fishbone) Diagram

Cause-and-Effect (Fishbone) diagram

- Aids in organizing many potential causes.
- Encourages broad thinking.
- Best used once you have a defined the problem.
- May also be used to prevent future problems.

Steps

1. Name the problem or effect that is being investigated. Be as specific as possible.
   Write the effect at the head of a fishbone diagram.
2. Decide the major categories for causes. Typical categories are: personnel (manpower or staffing), machines, materials, methods (processes) and environment.
3. Brainstorm for more detailed causes and add the causes to the diagram. Then, either:
   a. Work through each category, and brainstorm potential causes and ask why each major cause happens; or
   b. Brainstorm (individually or as a group); come up with ideas in any order. Arrange in the fishbone diagram, placing each idea under the appropriate category.
4. Review the diagram for completeness. Eliminate causes that do not apply; brainstorm for additional unidentified causes.
5. Discuss the final diagram. Identify the causes that are most important for additional investigation. Mark the causes that will be investigated.
6. Develop plans for confirming that the potential causes are actual causes.
   DO NOT TAKE ACTION until you have verified the cause.

Verifying potential causes

Emphasis is on data analysis to verify whether a cause and effect relationship exists and how strong it is.
It is important to the success of an improvement project to confirm whether an identified potential cause actually *contributes* to the problem; before proceeding, confirm a cause-and-effect relationship.

Event Investigation

Detailed investigation following an event:

- Include all staff involved. Each staff member should tell what he/she did or observed.
- Include a review of documentation.
- Develop timelines as appropriate.

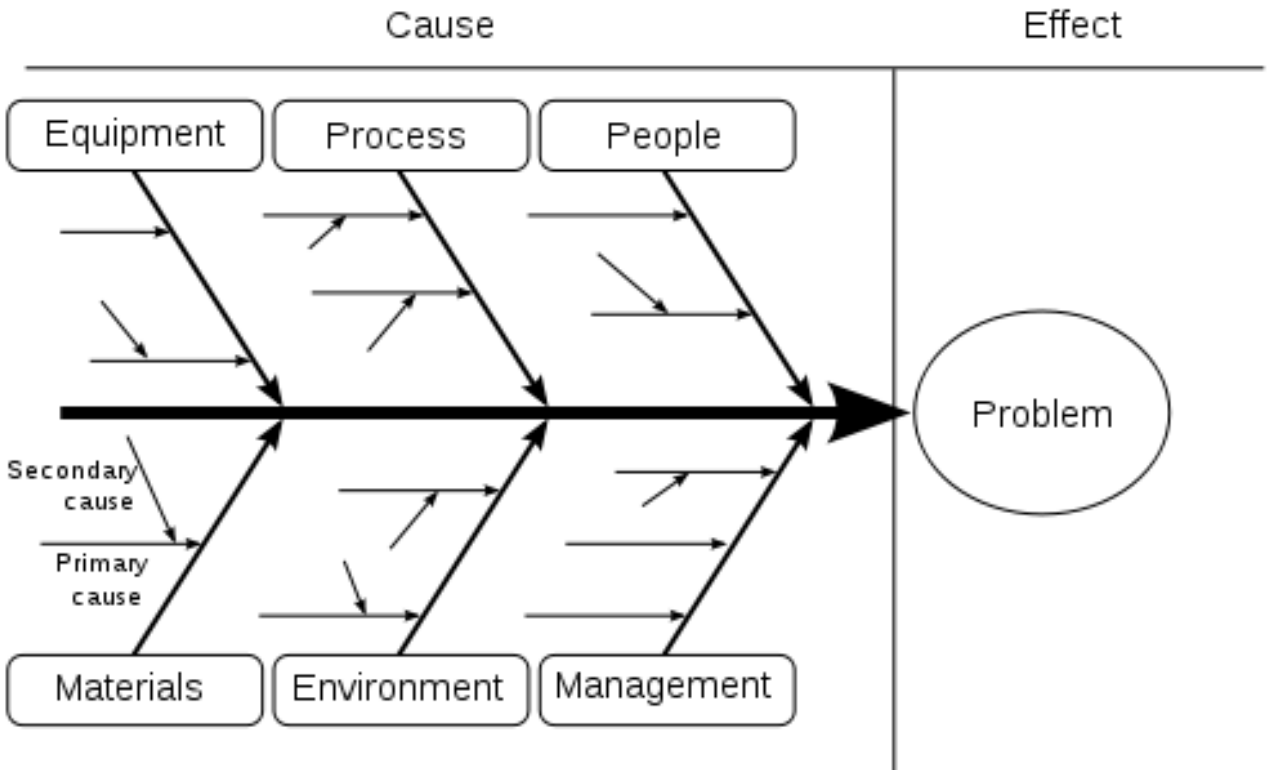
Identify:

- Technical factors
- Organizational factors
- Human factors
- Other factors

Worksheet F, continued
Cause-and-Effect (Fishbone) Diagram

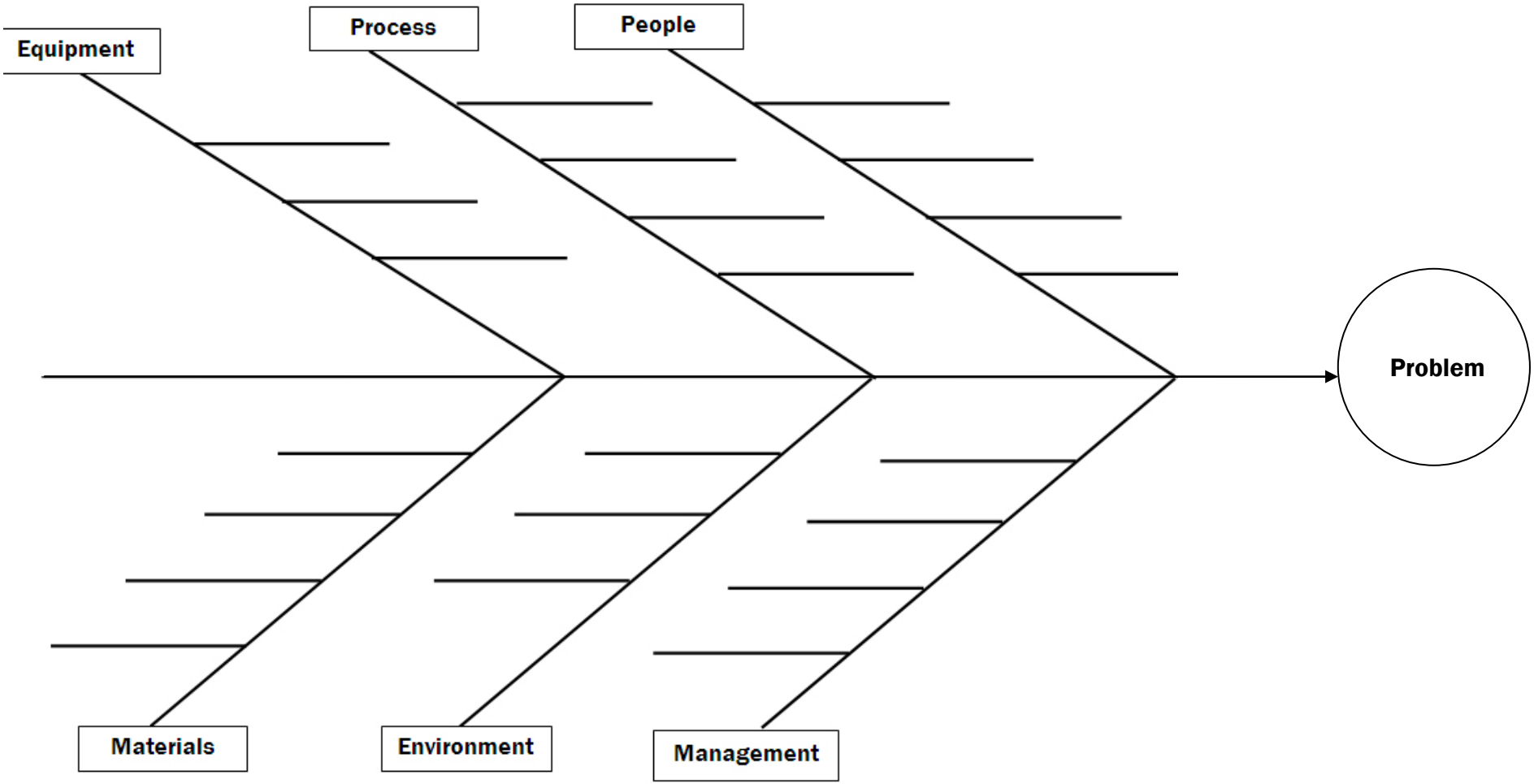
The Fishbone Diagram

- The Cause-and-Effect (Fishbone) diagram starts with the problem at the head of the fish.
- Under each general category of the Fishbone, answer the question, why?" for the identified problem.
- Once the Fishbone diagram is completed, the various causes are discussed to determine the root of the problem - or the real reasons why the problem exists. It is from this discussion that the focus for the improvement plan begins.



Worksheet F, continued

Cause-and-Effect (Fishbone) Diagram



Worksheet G
Current Process Analysis

A process is a series of activities or steps that are meant to achieve a particular result. Everything is a process, whether it is admitting a resident, serving meals, assessing pain, or managing a nursing unit. The ultimate goal of defining a process is identifying problems in the current one. When defining a process for your facility, think about staff roles in the process, the tools or materials used and the flow of activities.

Have the team identify and define every step in the current process that the facility has chosen to improve:

- Take time to brainstorm and listen to every team member.
- The process must be understood and documented.
- Each step in the process should be very specific.
- Write each process step on its own post-it note or index card.
- Add, remove and change the order of steps until the entire team agrees on a final process.
- If the problem is that there is no process *(e.g., there is no current process to screen for pain upon admission/readmission)*, then identify one *(e.g., the process for admission/readmission)*.
- If processes are different for different shifts, identify each individual process.

EXAMPLE: PROCESS FOR MAKING BUTTERED TOAST	
Step	**Definition**
1	Check to see if there is bread, butter, knife, and toaster.
2	Purchase any missing supplies from the store.
3	Plug in the toaster if it is not already.
4	Check setting on toaster – adjust to darker or lighter as preferred.
5	Put a slice of bread in toaster.
6	Turn toaster on.
7	Wait for bread to toast.
8	When toast is ready, remove from toaster and put on plate.
9	Use knife to cut pat of butter and spread on toast.

Team discussion

Evaluate your current process as you define it:

- What policies and procedures do we have in place for this process?
- What forms do we use?
- How does our physical environment support or hinder this process?
- What staff members are involved in this process?
- What part of this process does not work?
- Do we unnecessarily duplicate any work?
- Are there any delays in the process? Why?

Continue asking questions that are important for learning more about this process. When you discover a problem in your current process, be sure to evaluate and determine the underlying cause(s).

Worksheet H
Process Observation

A *process observation worksheet* is used as a data collection tool during direct process observation. Processing steps from the process flow diagram are numbered and recorded sequentially on a process observation worksheet template.

An observer records the duration, wait time and the length of the physical path taken to complete the step on a process observation worksheet.

Steps to creating/using a process observation worksheet:

- Clarify the purpose of observation.
- Create a form to capture process data and observations.
- Train all observers on the use of the form. Make sure everyone is using the form in the same way.

1. List the steps from the process map in sequential order. Steps following decision points may be listed as separate rows and numbered as sub-steps of decision point.

2. Observe the process and collect information on process step durations, wait times, and travel distances.

3. Multiple observations should be done in order to determine the range of variation in processing steps/time.

Sample Process Observation Form – Compliance with a procedure or protocol.

Process Observed: _____Date:_____Time:__

Step	Description	Worker	Compliance with protocol	Reason for non-compliance	Observations

Worksheet I
SWOT Analysis

Why use the tool? SWOT (Strengths-Weaknesses-Opportunities-Threats) analysis is an effective way of identifying your strengths and weaknesses, and of examining the opportunities and threats you face. Carrying out an analysis using the SWOT framework helps you to focus your activities into areas where you are strong and where the greatest opportunities lie.

How to use tool: To carry out a SWOT analysis, write down answers to the following questions. Where appropriate, use similar questions:

Strengths ▸ What advantages do you have? ▸ What do you do well? ▸ What relevant resources do you have access to? ▸ What do others see as your strengths?	**Weaknesses** ▸ What could you improve? ▸ What do you do badly? ▸ What should you avoid?
Opportunities ▸ Where are the good opportunities facing you? ▸ What are the industry trends that could affect you in the future?	**Threats** ▸ What obstacles do you face? ▸ What is your competition doing? ▸ Are the requirements or expectations of your services changing? ▸ Is changing technology threatening your position/business? ▸ Do you have financial problems? ▸ Could any of your weaknesses seriously threaten your business?

Worksheet I, continued
SWOT Analysis

Strengths	Weaknesses
Opportunities	**Threats**

Worksheet J
Assessment Summary

The following questions may help your team in discussion of the root cause analysis findings; identifying key areas of opportunity can help inform your next steps.

1. **What did you learn?**

2. **What themes emerged?**

3. **What findings did you find surprising?**

4. **What assumptions did you have previously that are now challenged?**

5. **What new questions do you have?**

6. **Based on your findings, should any new team members be added?**

7. **Based on the discussion from questions 1-6, what are the team's next steps?**

8. **Based on your organization's priorities and goals, what types of tools and resources would be most helpful?**

Worksheet K
Process Improvement Plan

Identify a manageable change based on the outcome of root cause analysis. What will we do/change to address the root of the problem?

1. **Brainstorm all potential solutions before rejecting any ideas.**

   The purpose is to generate ideas; all contributions should be considered.
   Use this space for brainstorming:

2. **Identify criteria that will guide the selection of solutions to the problem, such as:**
   - Cost
   - Value
   - Potential benefits to organization, patients or staff
   - Ease of implementation

3. **Evaluate a few of the solutions listed above. Don't be afraid to combine ideas! As a team, agree on the best solutions to test.**
   - An agreement is when each team member can "live with" the solution, even if it's not his/her favorite.

4. **Write the consensus decision about each process change or improvement to make:**

Worksheet L
Implementation Strategy

The implementation strategy identifies how the change will be accomplished, and includes tactics for how it will be communicated, implemented and evaluated. Planning through the change will help coordinate the team's activity. A common tool for documentation of your implementation strategy is an action plan document; see Appendix B: Action Plan.

1. **Create an implementation strategy that incorporates the following questions:**
   - **What** is the change?
   - **Why** has the team suggested this change? What is the goal?
   - **Who** will be involved in the change? Are there other staff members who may be affected?
   - **Where** will the change take place? Remember to start small!
   - **When** will the change be made (start date)?
   - **When** will it be evaluated (evaluation date)?
   - **How** will it be evaluated – how will you know if you can expand to other areas?

3. **Communication is the key!**
   - **Share** the answers to the above questions with the staff who will be involved in making the change.
   - **Talk** about the change positively.
   - **Ask** for feedback about how to implement the proposed change

Worksheet M
Testing

Before implementing each change process, consider whether it may be appropriate to test it on a small scale. The purpose of testing change ideas on a small scale is to establish what the likely outcomes will be before subjecting the entire organization to a change that may not be such a great idea after all. Some changes may not require testing (i.e. reviewing policies & procedures); other change ideas (i.e. implementing electronic charting, a new assessment form, or a new communication process such as SBAR) can benefit greatly from a small scale test of change.

What is the aim or purpose of this test?

Plan

What are we trying to accomplish?
How will we know when a change is an improvement?
What change can we make that will result in improvement?

What is your next test of change?
Who/where/what will be part of your test?
What is the timeline for testing?

List the tasks needed to set up this change. For each item, list who is responsible and timeline for completion.

Predict what will happen when the test is carried out.
What are the measures to determine if the prediction holds true?

DO

Describe what happened when you ran the test.
What was actually done?
What are the measured results?
What are additional observations?

STUDY

Review & summarize the results & observations, and compare findings to the predictions.

ACT

Determine next steps.
Spread the idea (adopt).
Modify and retest (adapt).
Test new idea (abandon this one!).

Worksheet M, continued
Testing

Evaluating the pilot test involves collecting data to check whether the implemented change has helped your facility reach its goal, and allows your team to organize observations that have been made throughout the pilot test.

1. Evaluation questions to ask during a team meeting (or in an anonymous questionnaire, if you prefer):

a) Do we need to reevaluate our initial goal?
b) What is working well? Why?
c) What is not working? Why?
d) What could be different?
e) Do we need to revise the materials used?
f) How does staff feel about the process change?
g) Are residents positively affected by the change in process?

2. Collect data to evaluate change.

Has the change had an impact?
Example: 5 out of 5 new admissions have completed assessment forms within 24 hours
Example: 5 out of 5 call lights received response within X minutes.

Goal:

_____

_____

Data source (i.e., medical records, staff survey, etc.):

EXAMPLE				
Date	**Chosen measure for evaluation**	**Number of cases reviewed (A)**	**Number of cases with positive results (B)**	**B out of A (B/A)**

Continue data collection as often as desired during the pilot test.

Results

Dates of pilot test: _____

Did team reach its goal? ☐ Yes ☐ No

Does the team need to revise the process or make changes?

☐ Yes What changes need to be revised? Repeat the pilot-test, if necessary.

☐ No Continue to Worksheet A (Identifying Areas for Improvement) to design an implementation strategy for the entire facility. Use Worksheet K (Ongoing Monitoring) to monitor improvement once a change to the process has been successfully implemented.

Worksheet N
Ongoing Monitoring

Monitoring the implemented change will allow your team to regularly evaluate whether or not the change has made an impact on overall care delivery.

- Decide who on staff will perform tracking related to the facility-wide implementation.
- Decide when this monitoring will be completed (e.g., monthly, bimonthly or quarterly).
- Decide how data will be collected and evaluated.

Goal_____

Example: Pain assessments will be completed on all residents within 24 hours of admission.

Date of facility-wide implementation_____

How will you know if you have achieved implementation?

Example: We will know when 10 out of 10 admissions/readmissions, this month, show that a pain assessment was completed upon admission/readmission.

We will know when_____

Record Findings

Date	Chosen measure for evaluation	Number of cases reviewed (A)	Number of cases with positive results (B)	B out of A (B/A)

Review the following:

1. Based on the data collected, check to see if the process has been completely implemented. If so, continue to monitor as long as necessary.
2. Based on the data collected, check to see if implementation of the new (improved) process has had an impact on the delivery of care. If not, you should ask the following questions:
   - Has the process been successful on some shifts or units, but not others? If so, why?
   - Is further staff education needed? In what areas?
   - Does the process need to be revised for facility-wide implementation? If so, plan a pilot test with some revision to the process. Use these worksheets to plan the pilot test, if necessary.

Appendix A: Plan-Do-Study-Act (PDSA) Planning Worksheet - *Example*

Project Team _____Team Leader _____ Date_____Objective_____

Instructions

- Use the following table to describe the changes that you will test.
- Identify who will be responsible for carrying out the test of change.
- Estimate how long the test is expected to take (O = Project Start Date; X = Project Completion Date)

PDSA Cycle #	Description of Change	Person Responsible	**Month:** July				**Month:** August				**Month:** September				**Month:** October			
			Week				**Week**				**Week**				**Week**			
			1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
1. a	*Reorganize one exam room to allow for EHR data input at point of care*	*Joe, MA*	*O*	*X*														
1. b	*Standardize exam room set-up throughout the office*	*Joe, MA*		*O*		*X*												
2. a	*Patient data, reason for visits, expectations entered into EHR prior to MD exam on Dr. Smith's patients*	*Jill, Receptionist Jane LVN*			*O*		*X*											
2. b	*Modify process and test with three other clinicians*	*Jill, Receptionist Jane LVN*					*O*			*X*	**Implement Process** →							
3.	*Create protocol for staff to query system to identify patients who need follow-up care*	*Jones, MD JR, Office Manager*								*O*		*X*						

Appendix A: Plan-Do-Study-Act (PDSA) Planning Worksheet

Project Team _____ ***Team Leader*** _____ ***Date*** _____

Objective _____

Instructions

- Describe the changes that you will test.
- Identify who will be responsible for carrying out the test of change.
- Estimate how long the test is expected to take.

PDSA Cycle #	Description of Change	Person Responsible	Month:				Month:				Month:				Month:			
			Week				Week				Week				Week			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Appendix B: Action Plan - *Guidance*

Use this form to develop your quality improvement action plan. Clarification for each component is provided below, followed by an example and a blank template.

ORGANIZATION NAME	
Action Plan for PROJECT	
Initiated DATE – Updated DATE	
AIM Statement:	*Clearly state the aim/goal that you are trying to accomplish.* *The aim should be S.M.A.R.T:* *Specific* *Measurable* *Action-Oriented* *Realistic* *Time & Resource Constrained*

ITEM	ROOT CAUSE	PLAN	RESPONSIBILITY	DATE DUE/COMPLETED	MEASUREMENT PLAN	STATUS	RESULTS/LESSONS LEARNED
Identify key areas for improvement.	*Identify the root cause of the problem (findings of the Root Cause Analysis [RCA]). The root cause is the factor that when fixed prevents the problem from re-occurring.*	*Identify plan for accomplishing the improvement in each area identified for change.*	*Identify project leader and team. Make sure to include individuals that directly work in the area that is under improvement. Assign clear responsibilities to each team member.*	*Set deadlines. Identify when completed.* *Due (D)* *Completed (C)* *D – xx/xx/xxxx* *C – xx/xx/xxxx*	*Describe the plan to collect information to evaluate the results and to monitor progress.*	*Describe the status of progress overtime*	*Plan-Do-Study-Act (PDSA)* ▪ *Record what you have learned.* ▪ *What has worked/not worked?* ▪ *Identify changes you would make to your project plan and plans you have moving forward.* ▪ *Identify potentials to spread good practices across your organization.*

Appendix B - *Example*

Quality Care Practice of Youngstown							
Action Plan for Aspirin Therapy							
Initiated 9/01 /12 – Updated 10/22/12							
AIM Statement:	**To improve the heart health of our patients by increasing awareness of appropriate low-dose aspirin therapy, with 90% of high-risk patients receiving education by the end of CY 2012.**						
ITEM	**ROOT CAUSE**	**PLAN**	**RESPONSIBILITY**	**DATE DUE/COMPLETED**	**MEASUREMENT PLAN**	**STATUS**	**RESULTS/LESSONS LEARNED**
Staff Education	Lack of familiarity with current guidelines	1. Conduct frontline staff education 2. Conduct competency assessment	• Dr. Hauser • All frontline staff	1. D – 11/01/12 C – 10/10/12 2. D – 11/15/12 C – 10/31/12	• 100% staff attendance • 100% on assessment	Complete	100% of frontline staff received training and achieved score of 100% on competency assessment (3 on second attempt).
Patient Education: EMR/systems	No aspirin education in system	1. Add education to EMR 2. Implement chart audits to verify (through 2012)	Mary	1. D – 11/01/12 C – 10/29/12 2. D – 12/31/12	Audit charts monthly to see if education has been given from EMR: target 100% compliance	EMR updates complete	Dr. Jones has problems accessing the internet to get patient education on aspirin. We will provide materials at check out and make sure it is tracked for Meaningful Use.
Patient Education: Office reminders	Incomplete understanding of aspirin therapy	1. Obtain materials and MD approval 2. Display patient posters	• Robin/Dr. Hauser • Jennifer	1. D – 11/01/12 C – 10/10/12 2. D – 11/15/12 C – 10/31/12	1 poster in each high-traffic area	Complete	Ohio KePRO posters displayed in waiting area and examination rooms.

Appendix B: Action Plan

Action Plan for	
Initiated / / – Updated / /	
AIM Statement:	

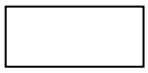
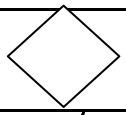
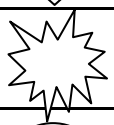
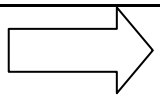
ITEM	ROOT CAUSE	PLAN	RESPONSIBILITY	DATE DUE/COMPLETED	MEASUREMENT PLAN	STATUS	RESULTS/LESSONS LEARNED

Appendix C
Process Mapping

Steps:

1. Determine the boundaries (start and stop) of the process being studied.
2. Have participants identify the steps in the process. Write each step on a sticky note or card using the appropriate symbol.
3. For current state maps, include rework loops, delays, etc.
4. Work as a team to arrange the steps in order. Do this by posting the steps in order on a blank flip chart or paper.
5. Discuss the results. Does it match reality as it is known to the team? Adjust the map by moving the sticky notes as needed.
6. When complete, number the tasks sequentially through the most direct route.
7. Transfer the completed map to paper or computer.
8. Note the date the map was created and the participants.

Examples of Shapes Used in Process Mapping

	Square or Rectangle: Events or processing steps that have a single possible outcome
	Diamond: Events or processing steps that have multiple possible outcomes; decisions
	Star: Events that occur resulting in an interruption to the processing flow
	Circle: Beginning or End processing step or event
	Solid line – information flow
	Arrow – process flow

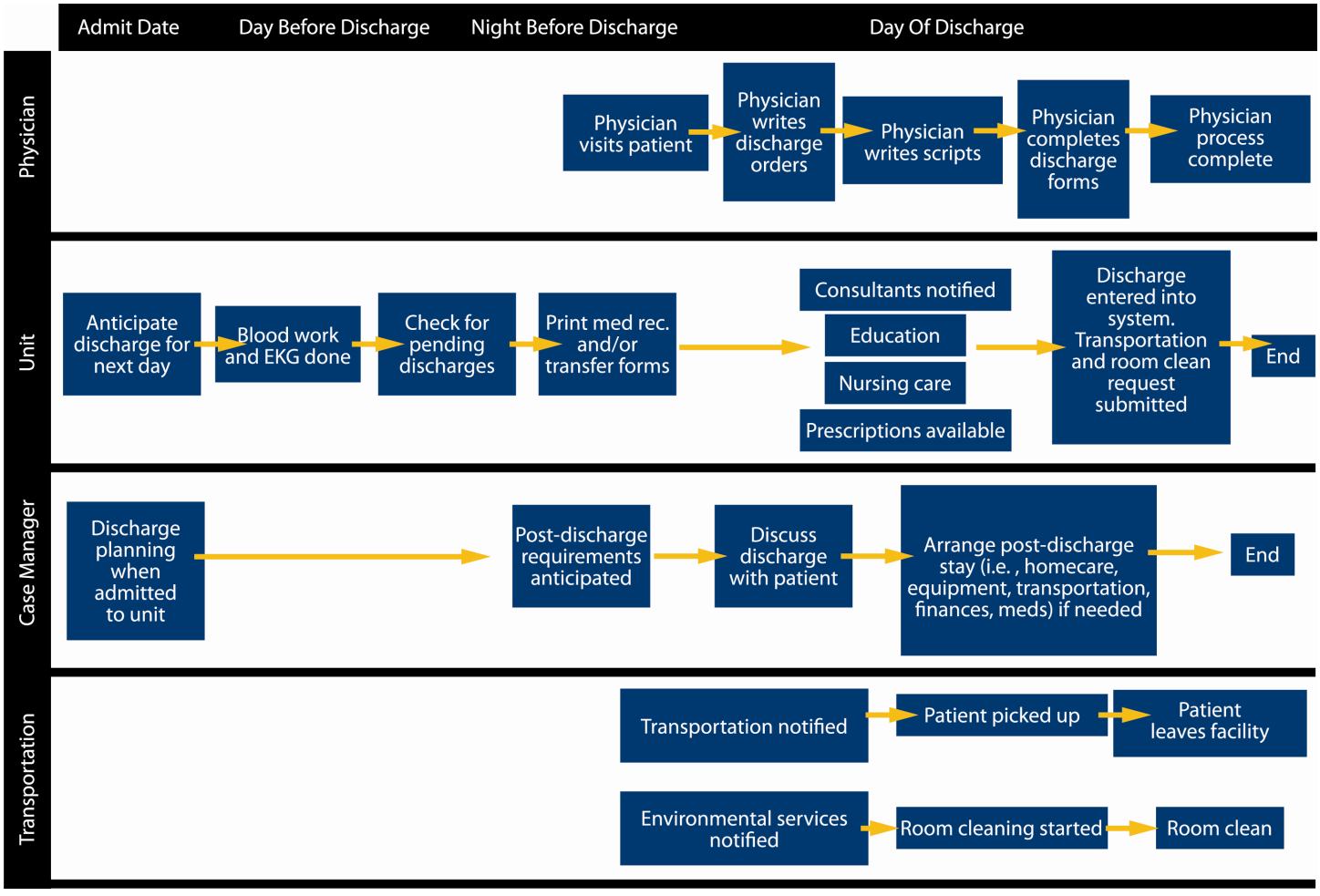
Suggested Next Steps:

- Walk the process forward to understand what happens. Then walk the process backward as if you are a customer. Ask questions such as, "Why is this done this way?" "What can be changed to make the process patient centric?"
- Step back and discuss which metrics could be used to measure process effectiveness, efficiency and customer satisfaction.
- Emphasizes who does what.
- Helpful in studying handoffs between people or workgroups in a process.

Appendix D
Swim Lane Flowchart

Steps:

1. Follow the flowcharting steps. The swim lane flowchart identifies WHO does each step, not just what is done.
2. Identify the various people or job functions involved in the process. List them down the left side of a flip chart or paper.
3. Brainstorm the steps in the process and write them on sticky notes.
4. Place each sticky note in order in the appropriate swim lane.
5. Use flowchart symbols as appropriate.
6. Take note of communication paths with handoffs. Use dotted lines to reflect informal lines of communication.



Appendix E
Process Observation Form: Workflow

Sample Process Observation Form - Workflow
Process Observed: _____Date:_____Time:_____

Step	Description	Worker	Task Time	Wait Time	Observations