A Toolkit for Healthcare Providers

Quality Improvement
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QUALITY IMPROVEMENT FUNDAMENTALS

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BENEFITS OF THE "5 WHYS"

Basic Benefits:
- Help identify the root cause of a problem.
- Determine the relationship between different root causes of a problem.
- One of the simplest tools; easy to complete without statistical analysis.

When Are 5 Whys Most Useful?
- When problems involve human factors or interactions.
- In day-to-day business life.

How To Complete The 5 Whys:
1. Write down the specific problem. Writing the issue helps you formalize the problem and describe it completely. It also helps a team focus on the same problem.

2. Ask why the problem happens and write the answer down below the problem.

3. If the answer you just provided doesn't identify the root cause of the problem that you wrote down in step 1, ask Why again and write that answer down.

4. Loop back to step 3 until the team is in agreement that the problem's root cause is identified. Again, this may take fewer or more times than five Whys.

"5 Whys" Examples:

Problem Statement: The Washington Monument was disintegrating.

1. **Why?**
   a. Use of harsh cleaning chemicals
2. **Why?**
   a. Used to clean pigeon poop
3. **Why so many pigeons?**
   a. They eat the spiders and there are a lot of spiders at the monument
4. **Why so many spiders?**
   a. They eat the gnats and there are lots of gnats at the monument.
5. **Why so many gnats?**
   a. They are attracted to the lights at dusk.

Solution: Turn the lights on at a later time.

BENEFITS OF THE "5 WHYS"

Let's take a look at a slightly more humorous example of the **5 Whys**.

Problem Statement: You are on your way home from work and your car stops in the middle of the road.

1. **Why** did your car stop?
   a. - Because it ran out of gas.

2. **Why** did it run out of gas?
   a. - Because I didn't buy any gas on my way to work.

3. **Why** didn't you buy any gas this morning?
   a. - Because I didn't have any money.

4. **Why** didn't you have any money?
   a. - Because I lost it all last night in a poker game.

5. **Why** did you lose your money in last night's poker game?
   a. - Because I'm not very good at "bluffing" when I don't have a good hand

BENEFITS OF THE "5 WHYS"

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PRESENTING PROBLEM: AN EMPLOYEE FALLS AND INJURES HER BACK…

Cause Questions/Answers	Cause Classification	Possible Solution
No one asks, "Why?" It's assumed that the employee isn't safety conscious…	Safety	Send employee to a safety refresher course.
Why did the employee fall? She slipped on residual absorbent pellets…	Housekeeping	Send a memo to operators about cleaning around their workstations.
Why were the absorbent pellets on the floor? To soak up the oil leak…	Operator procedures	Send a memo to the equipment operators on the importance of checking equipment for fluid leaks.
Why was there an oil leak? The equipment was 2 months behind in its preventive maintenance schedule…	Maintenance	Have a meeting with the maintenance staff to review the preventive maintenance schedule.
Why was the PM schedule not being followed? The department was down two maintenance technicians.	Supervisory	Put in a requisition for the technicians or increase overtime.
Why was the department down two technicians? Hiring freeze for indirect labor…	Management Policy	Change the hiring policy.

Bottom line: What other seemingly unrelated problems sprang from this root cause? Would any of the other "shallower" solutions have solved the real problem?

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5 WHYS WORKSHEET

TEAM:_____   DATE:_____

PROBLEM STATEMENT:

CAUSE CANDIDATE:

WHY:

WHY:

WHY:

WHY:

WHY:

RECOMMENDATION:

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PDSA CYCLE WORKSHEET

AIM: (Overall goal you would like to reach)

Every goal will require multiple smaller tests of change.

PLAN:

Describe your first (or next) test of change	Person Responsible	When to Be Done	Where to be Done

List the tasks needed to set up this test of change	Person Responsible	When to be Done	Where to be Done
1- 2- 3- 4- 5-			

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds
1- 2- 3- 4-	1- 2- 3- 4-

PDSA CYCLE WORKSHEET

DO: **Describe what actually happened when you ran the test**

STUDY: **Describe the measured results and how they compare to the predictions**

ACT: **Describe what modifications to the plan will be made for the next cycle from what you learned**

FOCUS – PDSA ROAD MAP

Find an opportunity to improve
1. Align with organizational goals
2. Identify the known gap between knowledge and practice
3. Determine that CQI methodology is the best approach to use for this opportunity
4. Process interest from internal/external customers

Organize an effort
1. Identify key players in process and recruit them
2. Identify the team leader/process owner
3. Select team members from appropriate levels in the organization
4. Agree on mission statement

Clarify current understanding of the process
1. Understand how current process works
2. Flow chart the actual process
3. Identify customers and suppliers in the process
4. Set up measurement process and collect data. Be innovative.

Understand the causes of variation
1. Analyze data
2. Understand the capacity for variation in the system
3. Understand common cause and special cause variation

Select a strategy
1. Look for ways to limit variation in the process
2. Identify better ways to do things
3. Learn what has worked at other organizations (copy)
4. Remember that solution doesn't have to be perfect the first time

Plan the improvement
1. Make predictions and identify ways to counteract resistance to change
2. Identify key people to assist with implementation
3. Be sure you have the necessary support of management and staff
4. Develop a plan to include who, what, where, and when

Do the improvement
1. Implement the improvement in small test of change (pilot)
2. Collect data before, during, and after the pilot
3. Elicit the help of those who pilot change to make it better
4. Pilot again with changes, OR roll out system-wide

Study the results
1. Collect data on how well the process is being implemented
2. Collect data to determine if the desired outcomes are being achieved
3. Analyze results and make needed changes

Act to hold the gains and continue to improve
1. Determine how/when data will be collected to understand if gains made are held over time.
2. Ask the question "How can this process be improved further?"
3. Keep it on some meeting agenda at least annually
4. Establish ongoing education plan

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ROOT CAUSE ANALYSIS WORKSHEET

TEAM: _____ **TEAM LEADER:** _____ **DATE:** _____

PROBLEM STATEMENT: _____

_____

IDENTIFY AND CATEGORIZE THE "MOST LIKELY" CAUSE CANDIDATES FROM THE BRAINSTORMING EXERCISE:

Materials (supplies, medication)	Methods (procedures, process, practices)	Equipment (tools, forms, communication media	People (education, training, orientation)	Environment (lighting, rooms, hallway, etc.)

Root Causal Factor Identified - (After Applying "Five Why" Technique): _____

_____

Intervention - (Apply PDSA cycle): _____

_____

DATE TO IMPLEMENT INTERVENTIONS: _____ **FOLLOW-UP DATE(S) RESULTS:** _____

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Goal: The goal is to learn about each other's perspective regarding a common interest or topic and thereby gain ideas that can help lead the way to making improvements. Participate in a way of sharing that enables everyone to learn from each other.

Description: Learning Circles provide a structured way of conversation that ensures everyone is part of the sharing. In a learning circle, everyone has the opportunity to speak once before anyone speaks again. In the first round of speaking, people share their own experiences and perspectives rather than commenting on what they've heard from others. After everyone has had an opportunity to speak once and have their own ideas heard, then everyone in the group is free to explore and discuss what they have heard from each other.

Follow these steps for learning circle success:

1. Identify a group leader of facilitator. This leader can be an expert on the subject or not. The leader's job is to facilitate the discussion, not to determine the subject matter, set the agenda or drive the discussion to a prejudged outcome. The facilitator should reinforce the ground rules for a successful learning circle.
2. Have each person keep his or her initial comments to approximately two minutes.
3. Invite anyone who feels so moved to be the one to start the conversation by sharing his or her own experience.
4. Have the person to the right or left take their turn next, sharing their own experiences in approximately two minutes.
5. Follow around the circle with each person speaking in turn about his or her own experiences for about two minutes.
6. If anyone wants to pass, they can.
7. After the group has gone full circle, go back to anyone who passed and ask if they would like to speak.
8. Open the conversation up for anyone to add to what they have said, ask each other questions, comment on what they have heard, and generally engage in discussion.

Discussion: Often in a group discussion, some people feel more easily able to jump in, while others tend to shy away from participation. Through use of a learning circle, the group gets the benefit of everyone's experience and perspective.

Time needed: For a group of 8-10 people, a learning circle needs at least 30 minutes to allow for everyone to speak and for discussion and exploration of what has been said.

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SAMPLE LEARNING CIRCLE QUESTIONS
FOR NURSING HOMES

- How can we improve our current Pressure Ulcer Prevention Program?

- How do we feel about using restraints in our home?

- How can we reduce falls in our home?

- What do we do in our home that we should never stop doing?

- What do we do that we should stop doing immediately?

- What's the best part about working at _____?

- If you could change one thing here, what would it be?

- When we talk about *change,* I feel....

- What does teamwork mean to you?

- What have you learned that you would like to pass on to other co-workers?

- A good co-worker is…..

- A good boss is.....

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Change to be made	Action Steps	Time Frame		Person(s) Responsible	Monitoring measures and frequency of data collection
		Start	Finish		

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PROJECT PLANNING WORKSHEET

FACILITY NAME:_____ WING/HALL #:_____

Selected Improvement Strategy (*circle one*):   **Community   Organizational Commitment   Assessment & Monitoring**

Prevention & Treatment   Wound Treatment

Use the following table to describe the changes that you will test, who will be responsible for carrying out the test of change, and how long you expect the test to take. In the description, include the number of patients, charts, providers, etc, that you will involve in the test.

Description of Change	Person Responsible	Timeline for Change																
		Month 1				Month 2				Month 3				Month 4			
		Date or Week				Date or Week				Date or Week				Date or Week			

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TEAM MEETING NOTES

TEAM MEMBERS: _____

TEAM START DATE: _____

TEAM GOAL: _____

Date	Main points of discussion	Next steps	Person Responsible	Due by:

Continue to jot down team meeting notes on other pages. Share updated Team Meeting Notes with all members of team after each meeting.