

Problem Solving in the Medical Practice Using the Five Whys

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There is no doctor or medical practice that hasn't experienced a problem or a crisis in either the care of patients or the business aspect of the practice. Unfortunately, most doctors have few or no skills in crisis management or nonclinical problem solving. This task often is left to the office manager or the practice's medical director. This article discusses the use of the root cause analysis and how it can be applied to nearly every medical practice. The "five whys" concept is a way to try to find the causes of potentially complex problems. When done properly, this strategy will help you to get to the root cause of many issues so that it can be addressed, rather than just focusing on symptoms of that problem.

KEY WORDS: Problem solving; medical practice; healthcare practice.

When done properly, the "five whys" strategy has been shown not only to be effective, but also to be easy to use on a wide range of issues throughout many medical practices.

It also can be combined and used with a variety of other techniques used to identify and solve workplace problems.

The five whys technique, which began in Japan at the Toyota Motor Company, is based on a scientific approach to problem solving. It has been applied through just about every type of industry around the world and could easily be used in the healthcare profession as well.

In the five whys process, you ask "why?" at least five times to get to the root cause of a problem. The process starts out with a problem that is affecting the practice, and then keeps asking why things happened until the root cause of the issue has been identified.

One of the best ways to get a good understanding of the five whys is to look at examples of how it has been explained with an example from the automotive industry. The following example is commonly used—how to discover the root cause of a car that will not start. The initial problem is "The car will not start." From there, the five whys are asked:

- Why won't the car start? *Answer:* The battery is dead.
- Why is the battery dead? *Answer:* The alternator is not working properly.
- Why isn't the alternator working? *Answer:* The serpentine belt has broken.

- Why did the serpentine belt break? *Answer:* It was not replaced when worn.
- Why wasn't it replaced? *Answer:* The owner did not follow the recommended service schedule.

The last why is considered the root cause of the problem. If the owner of the vehicle had followed the recommended service schedule, this issue would not have happened. Not only that, but following the recommended service schedule will help to prevent a wide range of other problems including a decrease in radiator, brake, and oil fluids.

APPLYING THE FIVE WHYS PROCESS TO THE HEALTHCARE PRACTICE

The problem to be solved is the practice is running behind schedule:

- Why is the practice already one hour behind schedule in seeing patients by mid-morning when the doctor is supposed to start seeing patients at 9:00 AM? *Answer:* Patients are arriving 30 to 60 minutes late for their appointments.
- Why are patients showing up late for their appointments? *Answer:* The doctor is usually 30 to 60 minutes late, and patients don't want to wait to be seen so they arrive and check in 30 to 60 minutes after their designated appointment times.
- Why is the doctor 30 to 60 minutes late by mid-morning? *Answer:* The doctor arrives for his office clinic 30

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minutes late because patients usually are not taken to the exam rooms until 9:30. Instead the doctor goes to the computer to check e-mails.

- Why are patients put in the rooms 30 minutes after their appointment times? *Answer:* The staff doesn't arrive until 8:30 and is not ready to place patients in the rooms until 9:30.

Solution: Start the day at 8:00 A.M. and start putting patients in the room at 8:45. Inform the doctor that he or she should arrive in the office by at least 8:45, allowing a few minutes to look at the computer, and that patients are to be seen starting promptly at 9:00.

FINDING THE ROOT CAUSE

The primary goal of the five whys is to take a problem and find the root cause so a solution can be identified and put in place. When done properly, a practice can find the root cause of most problems so that they can take actions to prevent it from happening in the future.

One of the best things about the five whys is that it is inexpensive to implement. A medical practice or a hospital can begin using it without added expense. The only cost is the time required to go through the process.

WHY LOOK FOR THE ROOT CAUSE

Most medical practices solve problems by identifying a problem and then using a quick fix for prompt resolution. In the long run, it is much better to identify the root cause of the issue and fix it—that will prevent the problem from occurring again. Seeking a root cause solution rather than just addressing the symptoms allows the practice to reduced recurrence (by dealing with the root cause, the symptoms are less likely to happen again in the future); prevent problems *before* they occur; gather information that identifies other issues that are impacting the practice; and place an emphasis on quality and safety over speed.

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Every practice is unique, and all workplaces have their own set of problems that need to be dealt with. Implementing the use of the five whys can help medical practices to better understand their issues, and give them a clear roadmap on how those issues can be addressed permanently.

GETTING STARTED WITH THE FIVE WHYS

The five whys system can be customized based on the specific needs of a given practice. Most practices or hospitals that are implementing this type of strategy will use some general rules or guidelines that can help keep the strategy focused on finding the root cause of the problem. Here are a few rules of performing the five whys:

- Form the questions from the patient's point of view. For example, when the practice runs behind schedule, patients are not happy that they are being seen 60 or even 90 minutes after their designated appointment. Another example would be that patients complain that they don't receive results of lab tests or imaging studies until two or three weeks after the test or the procedure.
- Keep asking or drilling until the root cause is discovered (even if more than five whys are required). This strategy is looking to find the root cause of the problem, not to place blame on any person(s) in the practice.
- Base all statements on facts, not assumptions or hearsay.
- Make sure to clearly distinguish the causes of problems from the symptoms of the problem (example: *Doctor doesn't start on time* is a problem; *Patients are upset* is a symptom).
- Involve physicians, nurses, administration, and ancillary personal as needed.
- Focus on long-term success rather than short-term or quick-fix solutions.
- Write down the problem at the top of a white board or flip chart and make sure that everyone understands the problem.
- Try to make your answers concise and precise.
- Be patient and don't jump to conclusions.
- Focus on the process, not on finding someone to blame.
- Perform a root cause analysis as soon as possible after the error or variance occurs; otherwise, important details may be missed.
- Explain that the purpose of the root cause analysis process is to focus on fixing or correcting the error and the systems involved. Make a point of stressing that the purpose of the analysis is not to assign blame but to solve problems.
- Ask the question "Why?" until the root cause is determined. It is important to understand that in healthcare there may be more than one root cause for an event or a problem. The difficult part of identifying the root cause often requires persistence.
- Finally, after the root cause is identified, conclude with the solution that will prevent the error from occurring again

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It is this last step—identifying corrective action(s)—that will prevent recurrence of the problem that initially started the analysis. It is necessary to check that each corrective action, if it were to be implemented, is likely to reduce or prevent the specific problem from occurring.

The purpose of identifying solutions to a problem is to prevent recurrence. If there are alternative solutions that are equally effective, then the simplest or lowest-cost approach is preferred.

It is important that the group that identifies the solutions that will be implemented agrees on those solutions. Obtaining a consensus of the group that all are in

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agreement before solutions are implemented is important. You want to make every effort not to introduce or create a new problem that is worse than the original issue that you were attempting to solve.

The primary aims of root cause analysis are:

- To identify the factors that caused the problem that may even result in harmful outcomes;
 - To determine what behaviors, actions, inactions, or conditions need to be changed;
 - To prevent recurrence of similar and perhaps harmful outcomes; and
- AQ5** ■ To identify solutions that will promote the achievement of better outcomes and improved patient satisfaction.

To be effective, root cause analysis must be performed systematically using the five whys to drill down to the seminal event that initiates or produces the problem. The best result occurs when the root cause is identified and then backed up by documented evidence. For this systematic process to succeed, a team effort is typically required.

Bottom Line: Root cause analysis can help transform a reactive culture or one that moves from one crisis to the next into a forward-looking culture or a practice that solves problems *before* they occur or escalate into a full-blown crisis. More importantly, a practice that uses the five whys/ root cause analysis reduces the frequency of problems occurring over time. ■■