Quality Improvement Practices

Dr. Benson: Welcome to the Quality Improvement Practices course. I'm Dr. Benson, and I supervise residents here at Memorial Hospital.

Ashley: Excuse me, Dr. Benson. On my family medicine clinical rotation, I noticed a lot of patients with the flu who did not get vaccinated in spite of all of our outreach attempts.

Dr. Benson: If I hear you correctly, you're concerned that these patients aren't taking advantage of the vaccines we make available. Is that right?

Ashley: Yes, that's it.

Dr. Benson: Why do you think that is?

Ashley: I don't know. But it doesn't seem right that so many people are suffering from what may be a preventable illness. I wish there was something I could do.

Dr. Benson: Do you think you could come up with a quality improvement recommendation that would help the situation?

Ashley: That sounds like a good idea and I know it's supposed to be part of my training requirements. But I'm not really sure I even know where to begin.

Dr. Benson: Tell you what. Stop by my office after your shift, and we can talk about this in more detail. I can help get you started on the right path.

Ashley: Thanks, Dr. Benson. I'll see you there.

Dr. Benson: Ashley’s right. Quality improvement, or QI, is more than simply an aspect of your training. It’s also a mindset that identifies gaps in care and finds ways to provide better, safer and more reliable care to our patients.

Once you’ve completed this course on Quality Improvement Practices, you will be able to:

- Define the professional and practical importance of and need for quality improvement training
- Identify opportunities for quality improvement
- Describe some of the areas where improvements can be made and the processes for doing so
- List the reasons or triggers that motivate a quality improvement initiative, and
- Identify the steps required to implement a quality improvement program
Medical care is constantly being updated and our goal is to make sure it continues to improve. QI strategies can be used to improve care, ensuring we keep up with ever evolving standards.

**Dr. Benson:** Why do you think we need quality improvement?

**Ashley:** I can think of many good reasons.

**Dr. Benson:** Excellent. Let’s walk through them. Click on each reason to learn more.

**Ashley:** People trust me with their health and their lives. When I took the Hippocratic Oath, I promised to be professional and to provide the best possible care for my patients. QI gives me the opportunity to implement changes to fulfill that promise. It’s part of my commitment to the core principles of being a physician: continuous improvement and lifelong learning.

The Accreditation Council for Graduate Medical Education (ACGME) says quality improvement should have the same priority as research and patient care.

ACGME Next Accreditation says that residents should be involved in quality improvement in learning and practice.

Under ACGME’s Clinical Learning Environment Review (CLER) guidelines, institutions are assessed on how much they engage residents in quality improvement practices.

Some health plans require you to be involved in quality improvement to maintain your credentials.

**Dr. Benson:** Remember, medicine is an art and a science, always changing and evolving. Old ways of doing things are constantly being replaced or superseded by new methods. Quality improvement fuels and accompanies many of these changes.

Quality improvement starts when you ask yourself, what are the things I deal with regularly that I think could be improved?

These fall into two basic categories, patient care and patient care systems. Click on each to learn more.

Patient care is anything that impacts the way we diagnose or treat patients, from identifying a condition to prescribing medication to performing complex surgeries.

Patient care systems are the processes and procedures in place to monitor and facilitate patient care. These can be procedures governing a patient handoff, sharing electronic health records, or the steps taken during the intake process.

Sometimes it’s hard to know what I can do as a resident.

I want to help people and make an impact—it’s why I got into medicine.

Sometimes I get concerned that I won’t be heard or that my contributions will go unnoticed. I mean, I’m not doing it just for the credit, but I do want to be acknowledged.

I don’t want to miss an opportunity to contribute to making things better. It’s that opportunity that keeps my passion for medicine alive.
Dr. Benson: In the interests of keeping that spark alive, how do you know when quality improvement needs to occur?

Ashley: I think there are things that prompt me to look more closely at potential areas for improvement.

Dr. Benson: Click on the right and left arrows to cycle through Ashley’s triggers. Are they similar to yours?

Ashley: There are benchmarks, like recent literature that could highlight a deficiency or a gap in care in your facility.

Dr. Benson: Standards for electronic health records change, and we need to be sure our electronic health records are up to date with the most current standards. There are several aspects of your clinical experience that could highlight the need for potential quality improvement. This might include making a mistake, such as not initiating anticoagulation therapy for an elderly patient’s new onset atrial fibrillation.

A trigger could also be a personal tragedy, such as a close family member who died from a cancer that could have been cured if diagnosed earlier.

A near-miss event can also be a QI trigger. For example, if a patient was allergic to a medicine but you accidentally wrote a prescription for the generic name of the same drug…and the pharmacist caught the error.

Or you could notice a situation that needs to be improved, like trying to determine whether patients can obtain flu vaccinations in their community.

Or you might notice a problem or inefficiency in one of our systems or processes, such as realizing the need for a flu vaccination is typically discovered at or after discharge.

In addition to the ethical dilemmas, there are regulations in place concerning gifts.

Every QI initiative starts with developing the right attitude and outlook. Click on each of the different ideas to learn more about them.

Ask yourself questions when you witness an outcome. For example:

Is this the outcome that was expected?

Is it the best outcome?

How could it be better? Be achieved faster?

When you notice or experience a near miss, think about how the situation occurred. Ask:

What could have or should have been done that would’ve prevented this from occurring?

Was it a specific mistake? Or was it a process error?
What can be changed to prevent this from happening in the future?

Always keep in mind that the goal in QI is improvement. The change you bring about doesn’t need to make the situation perfect; it just has to make it better or more efficient than it was before.

Quality improvement isn’t usually a one-step solution. It’s a continuous process of improvement. As you learn more, the solution you propose today could be added to or improved upon tomorrow.

Remember. Quality improvement starts with the right outlook and attitude. When you believe you can be better, you’re always on the lookout for things that can be improved.

Every quality improvement project has at least six components.

Click on each image learn more.

Before you can improve a process or system, you have to identify that something needs to be improved. In this step you ask yourself, how can this specific process be more efficient, or safer, or less cumbersome? This issue is typically discovered using one of the QI triggers we talked about earlier.

Once you’ve identified an issue, the next step is to put together a team of people with diverse skillsets to address all aspects of the issue.

Identify people who understand the situation and can help you define the specific problem and connect you with people who can help solve it.

As a resident, you’ll want to engage a sponsor or mentor as well.

Next, your team defines the problem as specifically as possible. Collect data to better understand the problem and how or why it came about. Walk through the process step by step to uncover any inefficiencies.

Sometimes your team can help you see the problem behind the issue so you can focus on what really needs to change.

Once you’ve defined the problem, you and your team will set a goal and formulate a plan of action, sometimes called an intervention. Be sure your goal is SMART—a widely used acronym for goal setting. SMART stands for specific, measurable, action-oriented, realistic, and timely.

Implement your intervention. It’s often a good idea to test your proposed solution on a small scale to make sure it works the way you intended before launching it on a wider scale.

Study the results to see if your intervention should be updated, adapted, or eliminated in favor of another approach.

**Dr. Benson:** There are different strategies used for quality improvement initiatives, all of which include the components we just defined.

The most straightforward model is the Plan, Do, Study, Act Model or PDSA, which combines the six components of a QI process into four basic steps.
Ashley: Can we take a few minutes to walk through using this model to create a QI project?

Dr. Benson: That sounds like a plan.

Click Next to get started.

Dr. Benson: Let’s use the influenza example we discussed to walk through the PDSA example.

Ashley: That’d be really helpful.

Dr. Benson: Alright. You’ve noticed that many patients have been admitted lately with influenza…

…far more cases than we might expect based on the availability of flu vaccinations in the area.

Ashley: Right. To me the issue is, can we promote the availability of the vaccine to reduce the number of influenza cases?

Dr. Benson: Before we start to talk about solutions, let’s talk about applying the PDSA model to see how we could reduce…

…the number of influenza cases among the people we care for.

First you’d PLAN. Identify the problem, gather a team to help address it, define the problem as precisely as possible, choose an option for solving it, make a plan for data collection and decide how you will measure and know if the solution tested led to improvement.

Next is the DO stage. Implement the proposed solution and collect the data you will need to know if it did or did not lead to improvement.

Then you STUDY. Analyze the data and study the results.

Finally, ACT by further refining the change based on the analysis of results from the first PDSA cycle.

Let’s work through this together. What would you do?

Ashley: Since this is the “Plan” stage, I’d need to identify the problem, recruit the team to further define it, choose a solution, and decide what to measure and what data to collect so we’ll know if it worked.

Dr. Benson: And make sure your team includes an attending mentor and sponsor.

Ashley: For this problem we don’t have a lot of data. So before we can effectively solve the problem, we’d have to try and find out why it was happening.

Dr. Benson: And how would you do that?

Ashley: To get at the root cause, the first thing my team would want to know… is the current influenza immunization rates and how they compare with national averages and our local rate.

I’d also like to know about how available flu vaccinations are in our community.
Next. I'd want to find out if the people who come to see us are receiving flu vaccinations.
I'm thinking about suggesting that we add two questions to the admission form:
Have you had a flu vaccination this year?
If not, would you like to have a flu vaccination now?

**Dr. Benson:** The “Do” step is where you implement a solution and collect data on current immunization rates.

**Ashley:** Which we use in the next step, right?

**Dr. Benson:** Yes.
In the “Study” step, we review and analyze the information and results that were gathered in the “Do” step.

**Ashley:** I get it. This is where the team would discuss the findings and if the changes we made achieved the results we wanted to see.

Then we'd decide if another cycle of improvement is needed.

**Dr. Benson:** That's right. While the “Study” step might seem like the simplest, it can sometimes be the most challenging. Once you put the proposed solution into place, you review the results to determine if the solution you put into practice got you to the goal.

In this case, did it increase the rate of influenza vaccinations among the people we care for?

Finally, ACT is where you decide your next steps.

Click on each image to see your options.

Let's take a moment and review some important concepts.

When you're establishing a quality improvement initiative or are part of a quality improvement team, keep the following points in mind:

Quality improvement is part of your ongoing commitment to your profession and your patients

Develop a mindset focused on quality so you can recognize quality improvement opportunities when you see them

Follow the Plan, Do, Study, Act model

**Ashley:** Thanks for your time and help, Dr. Benson. I think I'm ready to assemble my team.

**Dr. Benson:** That's wonderful. And since this is your first QI project, please include me so I can help you along the way.

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Ashley: I’d appreciate your input. I’m excited to make a difference, and to find better ways of taking care of my patients.

Dr. Benson: That’s what being a great physician is all about. Good luck, and keep me in the loop. I’m really proud of Ashley for taking initiative. And I’m confident that you’ll be able to do the same.

This concludes the course on “Quality Improvement Practices.”

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If you’d like to review any of this material again, click Course Map to navigate back to a topic.

There is also a downloadable transcript of this course available in the Resources tab, along with links to resources you can use to learn more about this important topic.

When you are finished, click Exit to close the course and then take the assessment.