QUICK START GUIDE:

Principles in Quality Improvement for Nutrition and Dietetics Credentialed Practitioners

TABLE OF CONTENTS

Revised November 2025

I. Overview

Credentialed nutrition and dietetics practitioners (CPs) are expected to provide quality services to ensure quality outcomes. Quality practice requires systematic measurement of patient, process, and/or product-related outcomes, regular performance evaluations, and continuous improvement. Consumers, third party payers, accreditation organizations, and regulatory agencies expect quality, evidence-based nutrition care, and access to data that reports quality measures and benchmarks services.

This document provides Registered Dietitian Nutritionists (RDNs) and Nutrition and Dietetics Technicians, Registered (NDTRs) with steps to advance understanding of quality improvement (QI) and how to approach QI implementation in every practice setting.

> EXPERT TIP
>
> New to Quality Improvement?
> Consider applying for the Quality & Process Improvement track
> of the Academy's Mentorship Program.

II. Introduction to Quality Improvement

a. What is QI?

Quality improvement consists of systematic and continuous rapid-cycle actions that lead to measurable improvement in services and/or the status of targeted individuals or groups. The Centers for Medicare and Medicaid Services (CMS) define quality improvement as the framework used to systematically improve care[1].

In other words, QI is about looking at how products and/or services are currently delivered, finding areas that could be optimized, and making small, systematic changes that lead to measurable improvements to meet guidelines and regulations, as well as organizational goals.

b. Why practice QI?

There are many reasons to conduct QI. Some of the main reasons include:

- Reduce variation, cost, and waste
- Improve delivery of services and outcomes for organizations and patients
- Allow for better organizational strategic planning
- Align departmental goals with the organization's mission and vision
- Create accountability for actions
- Foster positive interprofessional team relationships
- Recognize excellence
- Provide data and processes that enhance credentialed practitioners' value
- Provide supporting evidence for increases in staff or salary proposals

Revised November 2025

c. *When is QI performed?*

QI may be conducted at any time and throughout various stages of an organization's workflow to prevent errors, improve safety, reduce complications, improve productivity, reduce waste, and monitor outcomes.

d. *Who can conduct QI?*

- Any individual within an organization can conduct quality improvement. QI aims to engage staff to change systems, processes, and culture.
- Leaders as change agents (individuals who promote/enable change) develop or actively participate, implement, report and discuss QI within the organization.
- RDNs and NDTRs from all backgrounds and settings can initiate QI on any scale.
- No degree or certification is required to perform QI.

e. *How is QI completed?*

There are many QI tools and processes available that can be used to complete a quality improvement project. There are no right or wrong tools to use.

> **EXPERT TIP**
>
> Do not let your QI goals get derailed by the details of the QI process.
>
> Often, once you start your QI project, the steps will organically come together.

III. Performing Quality Improvement:

These steps outline a high-level approach to quality improvement. For a comprehensive action plan that supports a project from beginning to end, click here[2].

Step 1: Define the project goals

1.) **Define the problem:** Start by identifying the 5W/2H (what, where, when, who, why)

- ***What*** is happening currently compared to what should be happening already
- ***Where*** is the problem occurring
- ***When*** does the project process start and end/when does the problem occur
- ***Who*** is affected and how are they affected (staff, patients, organization, etc.)
- ***Why*** is this project important. Why should leadership care about this project? How does it link to the organization's strategic plan, mission, vision? Is there a potential financial benefit?
  - This will help develop the business case to be presented to leadership for approval
- **How** often is the problem taking place?
- **How** much is this problem affecting the organization (e.g. cost, severity, safety, etc.)

Revised November 2025

2.) Define how you will perform process improvement

- There are many QI frameworks available.
- Prior to choosing a framework, consider the following:
  - What are you trying to accomplish?
  - How will you measure improvement?
  - What changes can you make that will result in an improvement?

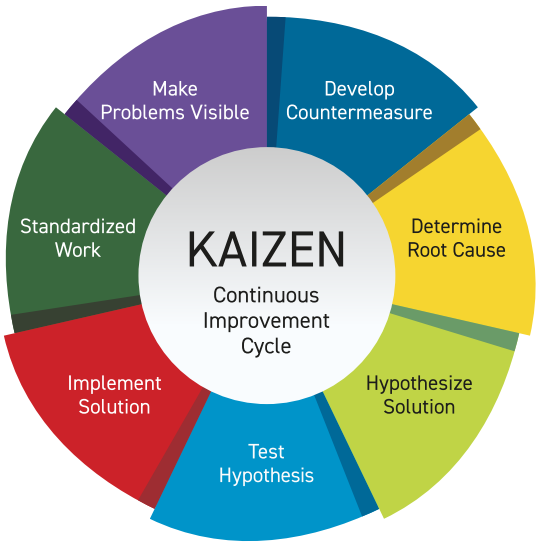
Examples of QI Framework Models include:

- **Lean Six Sigma:** Uses a collaborative team effort to improve performance by reducing variation and removing waste. This model is based on 5 principles: define, measure, analyze, improve, and control (See Graphic 1).

Graphic 1: Cycle of work followed by the Lean Six Sigma model

- **Kaizen:** A Japanese term that means "change for the better" or "continuous improvement", this method encourages employees at all levels to work together proactively to achieve regular, incremental changes in processes to improve an organization's efficiency and effectiveness (see Graphic 2).

Graphic 2: Cycle of work followed by the Kaizen model



Revised November 2025

EXPERT TIP

There is no wrong or right framework, so choose the one that best suits the project or team. Your organization may have a Quality Improvement specialist who can assist in the process.

Step 2: Identify key stakeholders

1. Get leadership support and build your team
   - Be ready with a proposal/report with actual data collected, the problem statement, the benefits expected for the project, and anything else you believe is needed
   - Keep it succinct
   - Answer questions honestly and thoroughly
   - Listen to opinions - Some may alert you to potential obstacles
   - Ask questions – communication preference, time limits, budget, etc.

2. Who are the key stakeholders?
   - Nurses
   - Doctors
   - Ancillary staff
   - Administration
   - Risk management
   - Compliance
   - Patients/residents

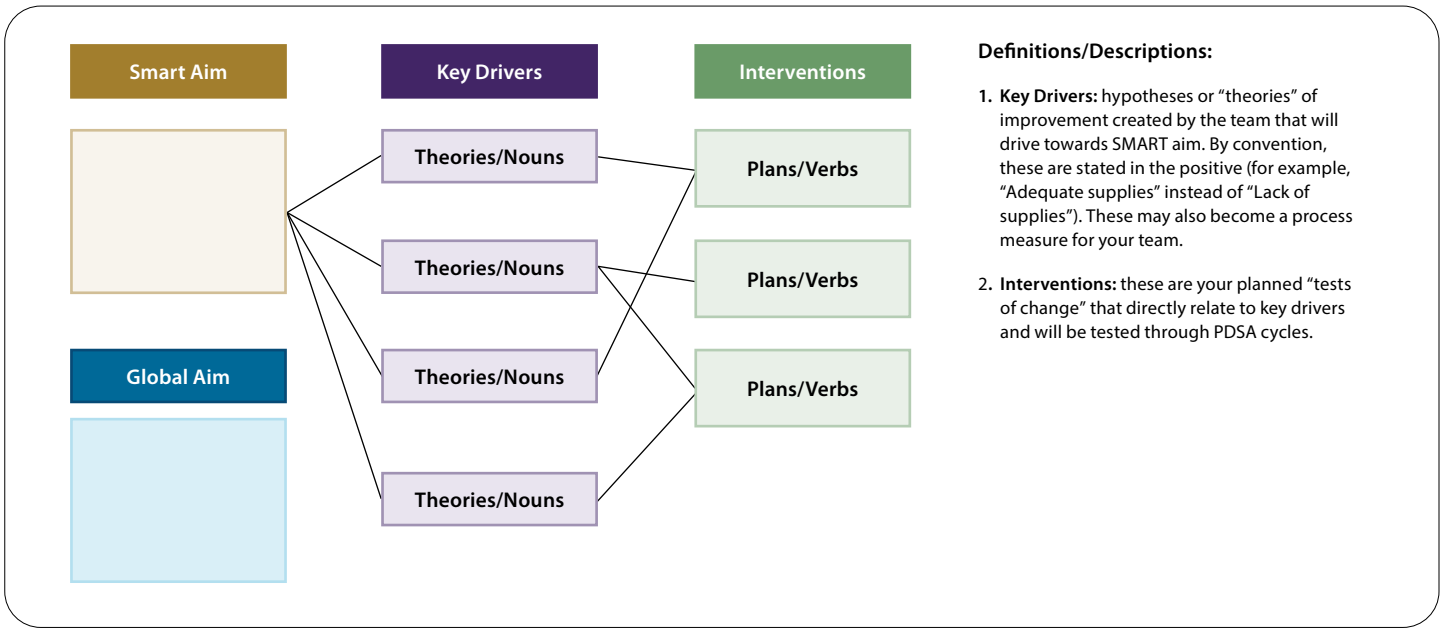
Step 3: Create the overall project objective and define the project

1. Consider the following questions in your objectives:
   - What is your patient population?
   - What is the direction of change you desire (increase, decrease)?
   - What is the desired outcome or process?
   - Within what time frame would you like to meet the goal?

2. Develop Key Driver Diagram or Project Charter: for the purpose of this document, we will reference the use of a key driver diagram. This diagram is to serve as a visual representation of the SMART (Specific, Measurable, Achievable, Relevant, Time-bound) objective behind the quality initiative and potential interventions and can be a helpful tool to keep project on track). See Graphic 3 for an example of a Key Driver Diagram[3].

Revised November 2025

Graphic 3: Example of a Key Driver Diagram[3]



3. Finalize the project's definition and utilize your Key Driver Diagram: This is a living document and should be updated as the team works through the project and learns more about the processes.

Step 4: Define data collection and implementation plans

1. What is your desired Primary outcome?
   - Tip: QI testing should be practical, therefore choose a data sample size that is realistic for your organization to measure the primary outcome desired.
2. Can the data be collected over time?
3. What is the root cause of the problem?
   - The 5 Why's is a simple method to investigate the root cause of a problem. Once identified, the root cause is what should be addressed when looking at solutions. See graphic 4 for a step-by-step process to follow when looking at a root cause analysis.

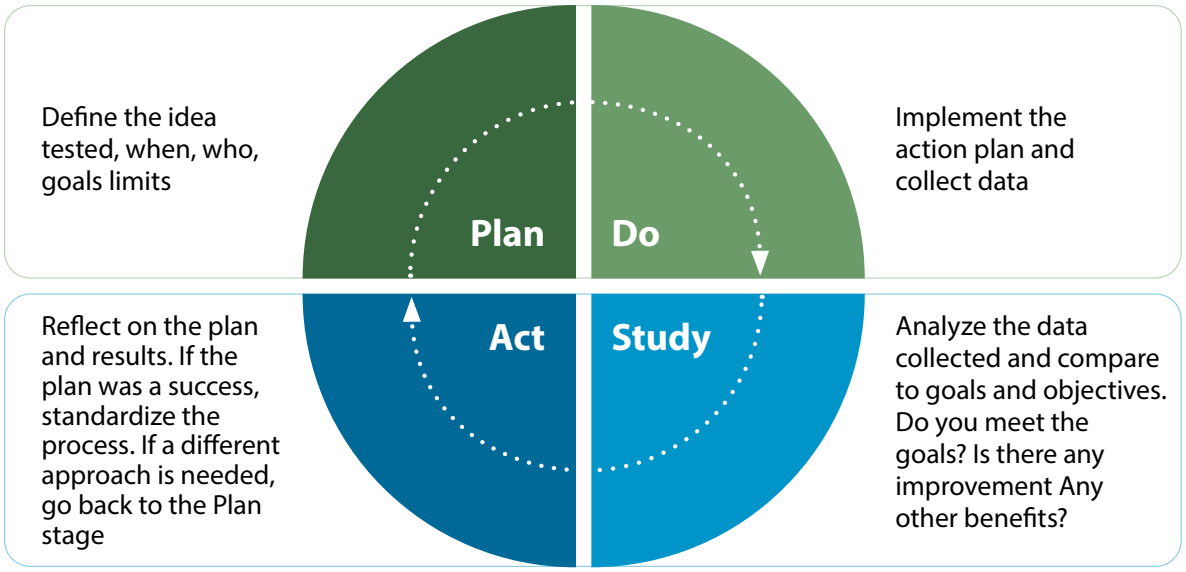
Graphic 4:

Process that can be used to define the 5W's of the process improvement project being proposed.

Revised November 2025

4. What is the process to test possible solutions to the problem?
    - **Plan Do Study Act (PDSA)**: This process develops a plan to test the change (Plan), carries out the test (Do), observes and learns from the consequences (Study), and determines what modifications should be made to the test (Act) (see Graphic 5).

Graphic 5: Plan, Do, Study, Act model for testing a possible solution



5. How/when will you know you met your goal?

Step 5: Analyze Data

1. Analyze the data and adjust the interventions, as necessary, if the goal or objective was not met.
2. After a set period of time, reanalyze the data and determine if adjustments to interventions met desired goal or objective
3. Compare to data prior to the QI initiative. Be flexible and prepared to pivot and make necessary changes to continue to work toward your goal, if necessary.

Step 6: Present findings to key stakeholders

- Organizational leadership
- Department or team
- Relevant committees or groups
- Professional organizations with members that could benefit from findings

Revised November 2025

IV. Tips on QI Implementation:

- Start Small.
  - You can expand your QI project as you gain more confidence
- Partner with other teams that have an interest in solving the problem (i.e., quality management team, supervisor, etc.)
- Choose an area you are interested in and passionate about
- Expect the unexpected. Your data may not be what you expected, and that is okay.
  - What is the data telling you?
  - Are you collecting the correct data?
  - Are there unexpected variables affecting your results?

V. Quality Improvement Resources and Tools

Resource/Tool	Source
Academy of Nutrition and Dietetics Evidence Analysis Library (EAL) Implementation Science Manual	EAL (https://www.andeal.org/guideline-implementation)
Quality Management	https://www.eatrightpro.org/practice/quality-care/quality-management
Free CPEU Resources	https://www.cdrnet.org/cpeu-offerings-and-resources
Mentorship for Quality in Nutrition and Dietetics	https://community.eatrightpro.org/mentoring
Quality Initiatives for Skilled Nursing Facilities	Source: Arensbert, M.B.; Brunton, C.; Richardson, B.; Bolhack, S. The Case for Malnutrition Quality Measures and Nutrition-Focused Quality Improvement Programs (QIPs) in US Skilled Nursing Facilities. *Healthcare* 2022, 10, 549.
Quality Improvement and Related Tools	www.eatrightpro.org/practice/quality-care/quality-management/quality-improvement
QI Tools and Framework Options • IHI QI Essentials Toolkit • NLM QI Methods • ASQ: Seven Basic Quality Tools	• Quality Improvement Essentials Toolkit | Institute for Healthcare Improvement • Quality Improvement Methods (LEAN, PDSA, SIX SIGMA) - StatPearls - NCBI Bookshelf • 7 Basic Quality Tools: Quality Management Tools | ASQ
U.S. National Quality Strategy and the evolving role of RDNs and NDTRs in QI	CMS National Quality Strategy | CMS
2025 Virtual Quality Symposium	Enduring Activity: 2025 Virtual Quality Symposium | Commission on Dietetic Registration

Revised November 2025

VI. Definition of Terms List

The Definition of Terms List is a cumulative anthology of definitions used by credentialed nutrition and dietetics practitioners. For references and Key Considerations regarding the following terms and definitions, click here[4].

VII. Acronyms

- CMS: Centers for Medicare and Medicaid Services
- CP: Credentialed Practitioner
- DTR/NDTR: Dietetic Technician, Registered or Nutrition and Dietetics Technician, Registered
- EAL: Evidence Analysis Library
- PI: Process Improvement
- QI: Quality Improvement
- QM: Quality Management
- RD/RDN: Registered Dietitian or Registered Dietitian Nutritionist

VIII. References

1. Centers for Medicare & Medicaid Services (CMS). Quality Measurement and Quality Improvement. Accessed December 20, 2024. https://www.cms.gov

2. The Academy of Nutrition and Dietetics Quality, Standards and Interoperability Team. Process Improvement Action Plan Worksheet. Published 2025. Accessed December 20, 2024. https://www.eatrightpro.org/-/media/files/eatrightpro/practice/quality-care/quality-standards-and-interoperability-team-process-improvement-action-plan-worksheet.pdf?rev=20bc92d98b2f4afa880e5e927c0bccdb&hash=214BF912F81BCB74ED99BC6FA422C009.

3. Institute for Healthcare Improvement. How to Improve. Accessed July 13, 2023. http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx

4. Commission on Dietetic Registration. Definition of Terms. Accessed December 20, 2024. http://www.cdrnet.org/definitions

5. Peregrin T**.** What are standardized clinical assessment and management plans? *J Acad Nutr Diet.* 2013;113(11):1436-1439. Accessed July 13, 2023. https://jandonline.org/article/S2212-2672(13)01411-1/pdf

6. Rathod RH, Farias M, Friedman KG, et al. A novel approach to gathering and acting on relevant clinical information: SCAMPs. *Congenit Heart Dis.* 2010;5(4):343-353. Accessed July 13, 2023. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3376528/

7. Tallyfy. Value stream mapping: definition, steps, and examples. Accessed July 13, 2023. https://tallyfy.com/value-stream-mapping/

8. Pyzdek T, Keller P. *The Six Sigma Handbook*. 4th ed. McGraw-Hill Education; 2014.