Transforming the lives of nursing home residents through continuous attention to quality of care and quality of life

QAPI at a Glance:

A Step by Step Guide to Implementing Quality Assurance and Performance Improvement (QAPI) in Your Nursing Home

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

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Introduction: Why This Guide?

As you use this guide, please take note of the following:

- The term "Caregiver" refers to individuals who provide care in nursing homes.
- The tool icon:  indicates that there is a QAPI tool associated with that concept in Appendix A of this guide. Click the tool icon to access the corresponding QAPI tool.
- Words underlined in **bold blue** are defined in Appendix B. Click the underlined word icon to be automatically linked to the definitions listed in Appendix B.

Effective Quality Assurance and Performance Improvement (QAPI) is critical to our national goals to improve care for individuals and improve health for populations, while reducing per capita costs in our healthcare delivery system. We have the opportunity to accomplish these goals in each local nursing home with the aid of QAPI tools and the establishment of an effective QAPI foundation. Nursing homes are in the best position to assess, evaluate, and improve their care and services because each home has first-hand knowledge of their own organizational systems, culture, and history. Effective QAPI leverages this knowledge to maximize the return on investments made in care improvement. This *QAPI at a Glance* guide is a resource for nursing homes striving to embed QAPI principles into their day to day work of providing quality care and services.

Nursing homes in the United States will soon be required to develop QAPI plans. QAPI will take many nursing homes into a new realm in quality—a systematic, comprehensive, data-driven, proactive approach to performance management and improvement. This guide provides detailed information about the "nuts and bolts" of QAPI. We hope that *QAPI at a Glance* conveys a true sense of QAPI's exciting possibilities. Once launched, an effective QAPI plan creates a self-sustaining approach to improving safety and quality while involving all nursing home caregivers in practical and creative problem solving. Your QAPI results are generated from your own experiences, priority-setting, and team spirit.

The Affordable Care Act of 2010 requires nursing homes to have an acceptable QAPI plan within a year of the promulgation of a QAPI regulation. However, a more basic reason to build care systems based on a QAPI philosophy is to ensure a systematic, comprehensive, data-driven approach to care. When nursing home leaders promote such an approach, the results may prevent adverse events, promote safety and quality, and reduce risks to residents and caregivers. This effort is not only about meeting minimum standards—it is about continually aiming higher. Many nursing homes are already demonstrating leadership in developing and implementing effective QAPI plans.

We encourage nursing home leaders to use *QAPI at a Glance* as a reference as they examine their own activities in the context of the goals and expectations for QAPI and sustainable improvement. You can also visit the QAPI website at http://go.cms.gov/Nhqapi, which we will update regularly as new materials and resources become available.

WHAT IS QAPI?

QAPI is the merger of two complementary approaches to quality management, Quality Assurance **(QA)** and Performance Improvement **(PI)**. Both involve using information, but differ in key ways:

- QA is a process of meeting quality standards and assuring that care reaches an acceptable level. Nursing homes typically set QA thresholds to comply with regulations. They may also create standards that go beyond regulations. QA is a reactive, retrospective effort to examine why a facility failed to meet certain standards. QA activities do improve quality, but efforts frequently end once the standard is met.
- PI (also called Quality Improvement - QI) is a pro-active and continuous study of processes with the intent to prevent or decrease the likelihood of problems by identifying areas of opportunity and testing new approaches to fix underlying causes of persistent/systemic problems. PI in nursing homes aims to improve processes involved in health care delivery and resident quality of life. PI can make good quality even better.

The chart below was adapted from the Health Resources and Services Administration (HRSA)[1] and shows some key differences between QA and PI efforts.

	QUALITY ASSURANCE	PERFORMANCE IMPROVEMENT
Motivation	Measuring compliance with standards	Continuously improving processes to meet standards
Means	Inspection	Prevention
Attitude	Required, reactive	Chosen, proactive
Focus	Outliers: *"bad apples"* Individuals	Processes or Systems
Scope	Medical provider	Resident care
Responsibility	Few	All

QA + PI = QAPI

QA and PI combine to form QAPI, a comprehensive approach to ensuring high quality care.

QAPI is a data-driven, proactive approach to improving the quality of life, care, and services in nursing homes. The activities of QAPI involve members at all levels of the organization to: identify opportunities for improvement; address gaps in systems or processes; develop and implement an improvement or corrective plan; and continuously monitor effectiveness of interventions.

[1] U.S. Department of Health and Human Services, Health Resources and Services Administration. Quality Improvement adapted from http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/QualityImprovement/whatarediffbtwqinqa.html

WHY QAPI IS IMPORTANT

Once QAPI is launched and sustained, many people report that it is a rewarding and even an enjoyable way of working. The rewards of QAPI include:

- Competencies that equip you to solve quality problems and prevent their recurrence;
- Competencies that allow you to seize opportunities to achieve new goals;
- Fulfillment for caregivers, as they become active partners in performance improvement; and
- Above all, better care and better quality of life for your residents.

Being new at QAPI is like being a new driver…

A new driver must coordinate so many actions and pay attention to so many cues that driving feels awkward, confusing, and almost impossible at first. Yet when it suddenly comes together, it becomes automatic and ushers in new horizons for that driver. In the same way, once you get some QAPI experience, it will come together, seem automatic, and will take you to new places in your quality management.

In the following pages, we discuss QAPI and its inter-related components (QA and PI), and emphasize how it can readily fit into your nursing home. Launching QAPI is not necessarily easy or quick, but it has a compelling logic and it is feasible for all nursing homes, beginning wherever your nursing home is right now.

QAPI Builds on QA&A

QAPI is not entirely new. It uses the existing QA&A, or Quality Assessment and Assurance regulation and guidance as a foundation. Maybe you recognize some of the statements below as things you are already doing:

- You create systems to provide care and achieve compliance with nursing home regulations.
- You track, investigate, and try to prevent recurrence of adverse events.
- You compare the quality of your home to that of other homes in your state or company.
- You receive and investigate complaints.
- You seek feedback from residents and front-line caregivers.
- You set targets for quality.
- You strive to achieve improvement in specific goals related to pressure ulcers, falls, restraints, or permanent caregiver assignment; or other areas; (for example by joining the Advancing Excellence Campaign).
- You are committed to balancing a safe environment with resident choice.
- You strive for deficiency-free surveys.
- You assess residents' strengths and needs to design, implement, and modify person-centered, measurable and interdisciplinary care plans.

You are already partly there. All of this is part of QAPI.

QAPI Features

> *"Not all change is improvement, but all improvement is change."*
>
> *Donald Berwick, MD*
> *Former CMS Administrator*

QAPI includes components that may be new for many nursing homes. It emphasizes improvements that can not only elevate the care and experience of all residents, but also improve the work environment for caregivers. With QAPI, your organization will use a systems approach to actively pursue quality, not just respond to external requirements. Look at the following list of QAPI features. How many are you already using?

- Using data to not only identify your quality problems, but to also identify other opportunities for improvement, and then setting priorities for action
- Building on residents' own goals for health, quality of life, and daily activities
- Bringing meaningful resident and family voices into setting goals and evaluating progress
- Incorporating caregivers broadly in a shared QAPI mission
- Developing Performance Improvement Project **(PIP)** teams with specific "charters"
- Performing a **Root Cause Analysis** to get to the heart of the reason for a problem
- Undertaking systemic change to eliminate problems at the source
- Developing a feedback and monitoring system to sustain continuous improvement

Illustrating QAPI in Action

The scenario below illustrates how a QAA committee might develop a plan of correction in response to deficiencies identified during an annual survey. The example shows how facilities often react to regulatory non-compliance with a "band-aid" approach. The activities described are representative of the types of plans of corrections that are often submitted to Survey Agencies and accepted. It addresses the immediate problem, and then takes steps assumed to prevent recurrence of the problem.

Scenario 1

The Issue: Your nursing home, Whistling Pines, received deficiencies during their annual survey because residents had unexplained weight loss, and weights and food intake were not accurately and consistently documented.

What Whistling Pines did: The QA Committee developed a Plan of Correction, which contained the following components: Re-weighing all residents, and updating the weight records for the affected residents; in-servicing the Nursing Department on obtaining and documenting weights and intake. They stated they would conduct 3 monthly audits of weight and intake records, with results reported to the QA committee.

This plan of correction was accepted by the State Survey Agency.

The next case study shows a facility with effective QAPI systems in place to identify issues proactively, before trends become serious problems. A nursing home chooses a limited number of PIP projects in "high-risk, high volume, problem-prone" areas.

Scenario 2

The Issue: During the monthly QAPI meeting at Whistling Pines, staff discovered a trend of unexplained weight loss among several residents over the last two months. During the discussion, a representative from dining services noted that there had been an increase in the amount of food left on plates, as well as an increase in the amount of supplements being ordered. Although other issues and opportunities for improvement were identified at the meeting, the QAPI Steering Committee decided to launch a Performance Improvement Project (PIP) on the weight loss trend because unexplained weight loss posed a high-risk problem for residents.

What Whistling Pines did: The QAPI Steering Committee chartered a PIP team composed of a certified nursing assistant (CNA), charge nurse, social worker, dietary worker, registered dietitian, and a nurse practitioner. The team studied the issue, and then performed a root cause analysis (RCA) to help direct a plan of action. The RCA revealed several underlying factors, which included:

- No process existed for identifying and addressing risks for weight loss such as dental condition, diagnosis, or use of appetite suppressing medications;
- No system existed to ensure resident preferences are honored;
- Staff lacked an understanding of how to document food intake percentages; and
- Residents reported the food was not appetizing.

Based on the identified underlying causes, the PIP team recommended the following interventions:

- Development of a protocol for identifying residents at risk for weight loss to be done on admission and with each care plan. This protocol included a review of medications (appetite suppressants), new diagnoses, and resident assessments, including dental issues;
- Development of standing orders for residents identified as "at risk" for weight loss. These would include bi-weekly weights, referral to attending physician and dietitian for assessment, and documentation of meal percentages;
- Development of a new program for CNAs to be "Food Plan Leads" for at risk residents. The program would include identification of food preferences and accurate documentation of meals - laminated badge cards with pictures of meal percentages were distributed to all CNAs; and
- Revision of the menu to focus on favorite foods, adding finger foods and increasing choices outside of mealtimes.

The interventions were implemented in one area of the building that was home to 25 residents. The PIP team collected data from dietary (food wasted and supplement use), CNAs (observation of resident satisfaction and meal percentages), residents (satisfaction surveys), and weights.

After 3 months, they found that 5 residents gained weight, 15 remained stable, and 5 lost weight, but the weight loss was not unexpected and consistent with their clinical condition. Food costs did not increase and supplement costs decreased by 12%.

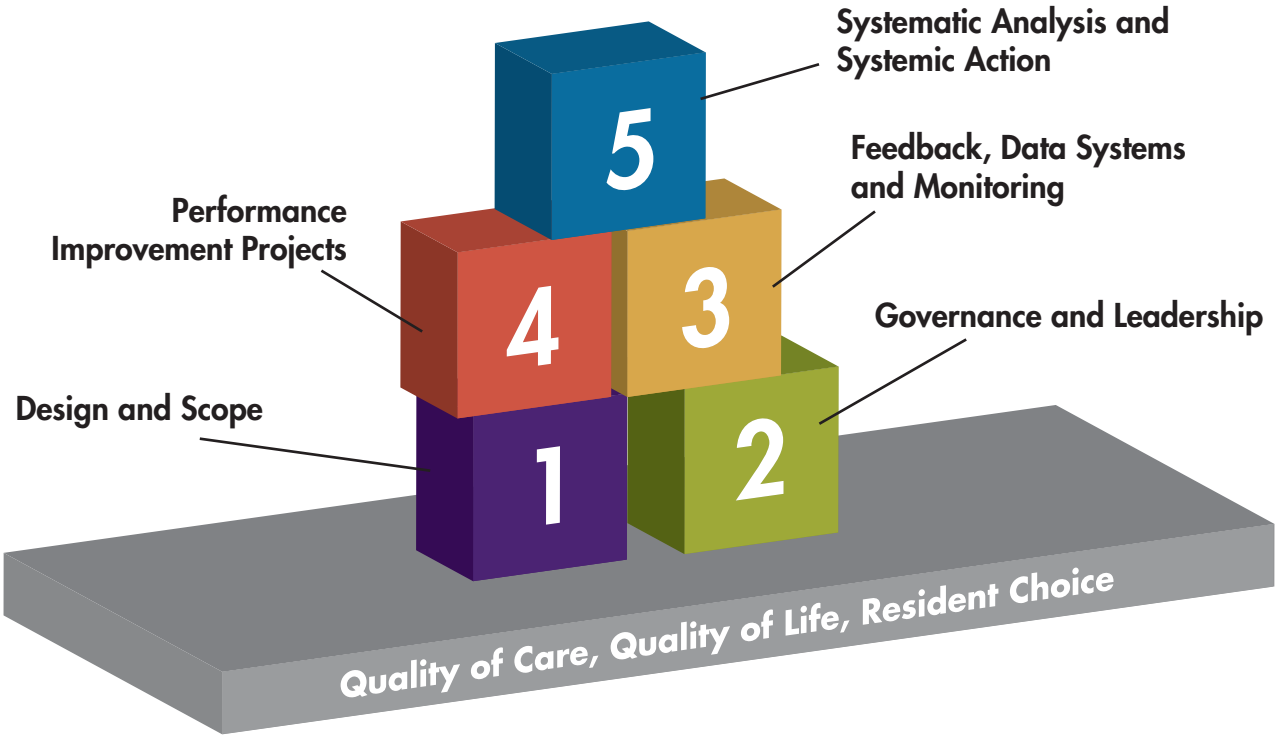
Whistling Pines decided to adopt and expand the changes to other areas of the facility. They received no deficiencies in the areas of nutrition on their annual survey. Using QAPI allowed them to identify and correct developing issues before they escalated to larger problems.

Many of the QAPI action steps discussed in this guide are found in the second scenario. Here are some of the key highlights:

- The facility had a structured Steering Committee for directing the QAPI activities (Step 1).
- The facility established performance measures and was conducting routine monitoring (Step 6).
- The facility used data to identify gaps or opportunities for improvement (Step 8).
- The QAPI Steering Committee used prioritization to decide when to conduct PIPs (Step 9).
- The QAPI Steering Committee created an interdisciplinary team, and as seen in this example, each discipline in the team brought a unique perspective that contributed to a balanced and comprehensive analysis (Step 2).
- The QAPI Steering Committee gave each team member real responsibility to study the issue, analyze the data, and recommend corrective actions (Step 2).
- The PIP team explored the issue, and designed interventions using a Plan-Do-Study-Act (PDSA) model (Steps 9 and 10).
- The PIP team's investigation revealed several underlying systemic issues and made recommendations that addressed those systems, rather than focusing on individual behavior (Step 12).

Five Elements for Framing QAPI in Nursing Homes

CMS has identified five strategic elements that are basic building blocks to effective QAPI. These provide a framework for QAPI development.



The 5 elements are your strategic framework for developing, implementing, and sustaining QAPI. In doing so, keep the following in mind:

- Your QAPI plan should address all five elements.
- The elements are all closely related. You are likely to be working on them all at once—they may all need attention at the same time because they will all apply to the improvement initiatives you choose.
- Your plan is based on your own center's programs and services, the needs of your particular residents, and your assessment of your current quality challenges and opportunities.

THE FIVE ELEMENTS ARE:

Element 1: Design and Scope

A QAPI program must be ongoing and comprehensive, dealing with the full range of services offered by the facility, including the full range of departments. When fully implemented, the QAPI program should address all systems of care and management practices, and should always include clinical care, quality of life, and resident choice. It aims for safety and high quality with all clinical interventions while emphasizing autonomy and choice in daily life for residents (or resident's agents). It utilizes the best available evidence to define and measure goals. Nursing homes will have in place a written QAPI plan adhering to these principles.

Element 2: Governance and Leadership

The governing body and/or administration of the nursing home develops a culture that involves leadership seeking input from facility staff, residents, and their families and/or representatives. The governing body assures adequate resources exist to conduct QAPI efforts. This includes designating one or more persons to be accountable for QAPI; developing leadership and facility-wide training on QAPI; and ensuring staff time, equipment, and technical training as needed. The Governing Body should foster a culture where QAPI is a priority by ensuring policies are developed to sustain QAPI despite changes in personnel and turnover. Their responsibilities include, setting expectations around safety, quality, rights, choice, and respect by balancing safety with resident-centered rights and choice. The governing body ensures staff accountability, while creating an atmosphere where staff are comfortable identifying and reporting quality problems as well as opportunities for improvement.

Element 3: Feedback, Data Systems and Monitoring

The facility puts in place systems to monitor care and services, drawing data from multiple sources. Feedback systems actively incorporate input from staff, residents, families, and others as appropriate. This element includes using Performance Indicators to monitor a wide range of care processes and outcomes, and reviewing findings against benchmarks and/or targets the facility has established for performance. It also includes tracking, investigating, and monitoring Adverse Events that must be investigated every time they occur, and action plans implemented to prevent recurrences.

Element 4: Performance Improvement Projects (PIPs)

A Performance Improvement Project (PIP) is a concentrated effort on a particular problem in one area of the facility or facility wide; it involves gathering information systematically to clarify issues or problems, and intervening for improvements. The facility conducts PIPs to examine and improve care or services in areas that the facility identifies as needing attention. Areas that need attention will vary depending on the type of facility and the unique scope of services they provide.

Element 5: Systematic Analysis and Systemic Action

The facility uses a systematic approach to determine when in-depth analysis is needed to fully understand the problem, its causes, and implications of a change. The facility uses a thorough and highly organized/ structured approach to determine whether and how identified problems may be caused or exacerbated by the way care and services are organized or delivered. Additionally, facilities will be expected to develop policies and procedures and demonstrate proficiency in the use of Root Cause Analysis. Systemic Actions look comprehensively across all involved systems to prevent future events and promote sustained improvement. This element includes a focus on continual learning and continuous improvement.

Action Steps to QAPI

The next few sections detail action steps that may help you on your road to implementing QAPI. They do not need to be achieved sequentially, but each step builds on other QAPI principles.

The most important aspect of QAPI is effective implementation. Learning and understanding the principles is just the first step.

STEP 1: Leadership Responsibility and Accountability

Creating a culture to support QAPI efforts begins with leadership. Support from the top is essential, and that support should foster the active participation of every caregiver. The administrator and senior leaders must create an environment that promotes QAPI and involves all caregivers.

Executive leadership sets the tone and provides resources. Their challenge is to help leadership flourish in each home.

Put a Personal Face on Quality Issues

Leadership should:

- give residents, family and staff the opportunity to meet board members and executive leaders to generate support for QAPI.
- tour the organization regularly, meeting with residents and caregivers where they live and work.
- choose the person or persons who will be the QAPI lead in conjunction with top management—QAPI needs champions.

Here are some ways leadership can take action:

- Develop a steering committee, a team that will provide QAPI leadership:
  - The steering committee has overall responsibility to develop and modify the plan, review information, and set priorities for PIPs. The steering committee charters teams to work on particular problems. It reviews results and determines the next steps. The steering committee must learn and use systems thinking—a nursing home has many competing interests and needs. Top leadership such as the Administrator and the Director of Nursing must be part of this structure.
  - It is also important to have a medical director who is actively engaged in QAPI. It is possible to adapt your Quality Assurance committee to become your "Steering committee" to oversee QAPI. For this to work, the QA Committee may need to meet more often, include more people, and establish permanent and time-limited workgroups that report to it.
- Provide resources for QAPI—including equipment and training:
  - Caregivers may need time to attend team meetings during working hours, requiring others to cover their clinical duties for a period of time.
  - Equipment might include anything from additional computers, to low-cost supplies like posters to create story boards, or multiple copies of resource books or CDs.
  - Leadership may want to consider sending one or more team members to a specialized training.

- Establish a climate of open communication and respect. Leadership may wish to consider:
  - Having an open-door policy to communicate with staff and caregivers.
  - Emphasizing communication across shifts and between department heads.
  - Creating an environment where caregivers feel free to bring quality concerns forward without fear of punishment.
  - Understand your home's current culture and how it will promote performance improvement:
  - Create the expectation that everyone in your nursing home is working on improving care and services.
  - Establish an environment where caregivers, residents, and families feel free to speak up to identify areas that need improvement.
  - Expect and build effective teamwork among departments and caregivers.

STEP 2: Develop a Deliberate Approach to Teamwork

Teamwork is a core component of QAPI and too often it is taken for granted. You will hear and read that you should discuss a situation with "your team," or that the opinion of "everyone on the team" is valued. The word "teamwork" may have different meanings. Many people work together without being a designated or formal "team."

Characteristics of an effective team include the following:

- Having a clear purpose
- Having defined roles for each team member to play
- Having commitment to active engagement from each member

The roles of team workers may grow out of their original discipline (e.g., nurse, social worker, physical therapist) or their defined job responsibilities.

QAPI relies on teamwork in several ways:

- Task-oriented teams may be specially formed to look into a particular problem and their work may be limited and focused.
- PIP teams are formed for longer-term work on an issue.
- When chartering a PIP, careful consideration must be given to the purpose of the PIP and type of members needed to achieve that purpose. Here are some examples:
  - A PIP team with the goal of helping residents go outside more often decided that grounds personnel needed to be on that team so that procedures for snow removal, sun protection, and outdoor seating could be considered.
  - Another PIP team working at simplifying medication regimens included a pharmacist, even though the time needed to be added to the consultant contract.
  - After a PIP team began working on the problem of anxiety among residents, the members realized that many of the affected residents reported reassurance from the pastor and asked the QA committee to add him to the team that was planning the approach.
  - A PIP team working on reducing falls asked that the housekeeping department be involved as it considered root causes of falls and realized that equipment in the corridors and clutter in the bathrooms contributed.

Note: Generally, each team should be composed of interdisciplinary members. For example, a concern with medication administration should include nursing and pharmacy team members. However, even other disciplines or family members may bring a different perspective to understanding this issue and should be considered for this type of team.

- Family members and residents may be team members, though for confidentiality reasons, they may not review certain data or information that identifies individuals.
- PIP teams need to plan for sufficient communication—including face-to-face meetings to get to know each other and plan the work. The team should also plan for the way each team member will review information that emerges from the PIP.
- Leadership needs to convey that being on a PIP team is an important part of the job—not something to put aside if other things come up. They must also support this idea through action and resources to enable staff to complete daily assignments, provide clinical care and also participate on QAPI teams.

STEP 3: Take your QAPI "Pulse" with a Self-Assessment

In order to establish QAPI in your organization, it is helpful to conduct a self-assessment in your organization. As you continue implementing the action steps outlined in this guide, you should periodically evaluate QAPI in your organization – see how far you've come.

To get you started, we've developed a self-assessment tool to take your QAPI "pulse." It will assist you in evaluating the extent to which components of QAPI are in place within your organization and identifying areas requiring further development. It will help you determine how you really know whether QAPI is taking hold.

You may use the self-assessment tool as you begin work on QAPI and then for annual or semiannual evaluation of your organization's progress. You should complete the tool with input from the entire QAPI team and organizational leadership. This is meant to be an honest reflection of your progress with QAPI. The results of this assessment will direct you to areas you need to work on in order to establish QAPI in your organization.

Click here to go to the QAPI Self-Assessment Tool in Appendix A

STEP 4: Identify Your Organization's Guiding Principles

It is important to lay a foundation that will help you think about what principles will guide your decision making and help you set priorities.

Nursing homes are complex organizations, with numerous departments performing different functions that interact with and depend on each other. Establishing a purpose and guiding principles will unify the facility by tying the work being done to a fundamental purpose or philosophy. These principles will help guide your facility in determining programmatic priorities.

Use the Guide for Developing Purpose, Guiding Principles, and Scope for QAPI to establish the principles that will give your organization direction. The team completing this assignment should include senior leadership. Taking time to articulate the purpose, develop guiding principles, and define the scope will help you to understand how QAPI will be used and integrated into your organization. This information will also help your organization to develop a written QAPI plan.

Click here to go to the Guide for Developing Purpose, Guiding Principles, and Scope for QAPI in Appendix A

STEP 5: Develop Your QAPI Plan

Your plan will assist you in achieving what you have identified as the purpose, guiding principles and scope for QAPI. This is a living document that you may revisit as your facility evolves.

A written QAPI plan guides the nursing home's quality efforts and serves as the main document to support implementation of QAPI. The plan describes guiding principles that will be used in QAPI as well as the scope QAPI will have based on the unique characteristics and services of the nursing home. The QAPI plan should be something that is actually used and not viewed as a task that must be completed. You should continually review and refine your QAPI plan.

- Tailor the plan to fit your nursing home including all units, programs, and resident groups (for example, your sub-acute care unit, your dementia care unit, or your palliative care program). Think also of the range of residents. Do you have some younger residents? You may need to consciously develop a distinct plan to create quality of life for those residents.
- Some large organizations or corporations may choose to develop a general plan for all nursing homes in the group—in fact many multi-home organizations already have a corporate quality plan. Flexibility must be built in because individual nursing homes must have a plan that works for them. Leaders at the facility level need flexibility to develop plans for the priorities that fit their needs.

You may use the Guide for Developing a QAPI Plan to help you create a comprehensive plan that addresses the full range and scope of care and services provided by your organization.

Click here to go to the Guide for Developing a QAPI Plan in Appendix A

STEP 6: Conduct a QAPI Awareness Campaign

COMMUNICATE WITH ALL CAREGIVERS

- Let everyone know about your QAPI plan—often and in multiple ways.
- Plan ongoing caregiver education beyond single exposures—the goal is widespread awareness of QAPI initiatives.
- Train through dialogue, examples, and exercises. Transform the material in this guide into smaller pieces and easily understood ideas. Use your home's own experiences with certain caregivers or residents as part of the learning materials.
- Convey the message that QAPI is about systems of care, management practices, and business practices—systems should support quality and/or acceptable business practices, or they must change. Use examples to get the message across, and ask caregivers to think of examples of their own.
- Be sure consultants, contractors, and collaborating agencies are also aware of your QAPI approach. Maybe you have several hospice organizations coming in and out of your home. You may work with a podiatrist who visits regularly. They each have a role in your system.
- Convey the message that any and every caregiver is expected to raise quality concerns, that it is safe to do so, and that everyone is encouraged to think about systems.

- Discuss the hard questions—what is meant by a culture of safety here in our nursing home? How does the nursing home try to balance issues of safety and resident choice/autonomy? These types of questions often do not have easy answers but QAPI opens up these types of issues for discussion and deeper thinking.

Try this:

An exercise where groups that cross disciplines and roles brainstorm the various ways their work influences the work of others. For example, activities personnel may find that their events are cut short because no one is available to help residents to and from activity areas. Also seek examples where resident choice did not prevail. For instance, evening caregivers may say residents cannot be up and out of their rooms after 9:30 pm because no one will be able to help them to bed after 10:00 pm. Brainstorm how to solve problems like these, even if jobs and routines would change.

If systems don't exist, they may need to be developed. If systems impede quality, they must be changed.

COMMUNICATE WITH RESIDENTS AND FAMILIES

- Make sure all residents and families know that their views are sought, valued, and considered in facility decision-making and process improvements by announcing and discussing QAPI in resident and family councils and other venues.
- Ask residents and family members to tell you about their quality concerns. Many facilities today are using some type of customer-satisfaction survey—results should be used to identify opportunities for improvement that will proactively have an impact on all residents and their families.
- Try to view concerns through residents' eyes. For example, getting back to a resident in 10 minutes may seem responsive, but may feel like an eternity to the resident. How would that feel to a resident waiting an answer to a call light or for help to the bathroom?
- Consider including QAPI information in routine communications to families.

Family and resident complaints are often underused, and yet they are a valuable way of identifying more general problems.

STEP 7: Develop a Strategy for Collecting and Using QAPI Data

Your team will decide what data to monitor routinely. Areas to consider may include:

- Clinical care areas, e.g., pressure ulcers, falls, infections
- Medications, e.g., those that require close monitoring, antipsychotics, narcotics
- Complaints from residents and families
- Hospitalizations and other service use
- Resident satisfaction
- Caregiver satisfaction
- Care plans, including ensuring implementation and evaluation of measurable interventions
- State survey results and deficiencies
- Results from MDS resident assessments
- Business and administrative processes—for example, financial information, caregiver turnover, caregiver competencies, and staffing patterns, such as permanent caregiver assignment. Data related to caregivers who call out sick or are unable to report to work on short notice, caregiver injuries, and compensation claims may also be useful.

This data will require systematic organization and interpretation in order to achieve meaningful reporting and action. Otherwise, it would only be a collection of unrelated, diverse data and may not be useful.

Compare this to an individual resident's health—you must connect many pieces of information to reach a diagnosis. You also need to connect many pieces of information to learn your nursing home's quality baseline, goals, and capabilities.

- Your team should set targets for performance in the areas you are monitoring. A target is a goal, usually stated as a percentage. Your goal may be to reduce restraints to zero; if so, even one instance will be too many. In other cases, you may have both short and longer-term goals. For example, your immediate goal may be reducing unplanned rehospitalizations by 15 percent, and then subsequently by an additional 10 percent. Think of your facility or organization as an athlete who keeps beating his or her own record.
- Identifying benchmarks for performance is an essential component of using data effectively with QAPI. A benchmark is a standard of comparison. You may wish to look at your performance compared to nursing homes in your state and nationally using Nursing Home Compare (www.medicare.gov/nhcompare); some states also have state report cards. You may compare your nursing home to other facilities in your corporation, if applicable. But generally, because every facility is unique, the most important benchmarks are often based on your own performance. For example, seeking to improve hand-washing compliance to 90 percent in 3 months based on a finding of 66 percent in the prior quarter. After achieving 90 percent for some period of time, the benchmark can be raised higher as part of ongoing, continuous improvement.
- It may be helpful to monitor what happens when residents leave the nursing home or come back, including discharges to the hospital or home. You may examine discharge rates from your post-acute care area, preventable hospitalizations (i.e., hospitalizations that can be avoided through good clinical care), and what happens after the resident returns from the hospital.

- You'll want to develop a plan for the data you collect. Determine who reviews certain data, and how often. Collecting information is not helpful unless it is actually used. Be purposeful about who should review certain data, and how often—and about the next steps in interpreting the information.

STEP 8: Identify Your Gaps and Opportunities

This step involves reviewing your sources of information to determine if gaps or patterns exist in your systems of care that could result in quality problems. Or, are there opportunities to make improvements?

Potential areas to consider when reviewing your data:

- MDS data for problem patterns.
- Nursing Home Compare (provides quality information about every certified nursing home in the country).
- State survey results and plans of correction.
- Resident care plans for documented progress towards specified goals.
- Trends in complaints.
- Resident and family satisfaction for trends.
- Patterns of caregiver turnover or absences.
- Patterns of ER and/or hospital use.

During this step, you may decide to spend more time discussing the quality themes you have identified with residents and caregivers. They may pick up patterns you have not yet identified, and they may have ideas about what is at the root of the problem. Consider hosting a series of small group meetings with your caregivers, and arrange to meet with your Resident Council. You may wish to provide refreshments and have an informal discussion.

This step should lead to the next steps involving PIPs. Such projects are expected to be chosen to deal with "high risk, high volume, problem-prone areas" related to quality of care or quality of life. Take time to notice the things you are doing well—that's important too, and deserves recognition.

But while you are celebrating accomplishments, you can also begin to set priorities for improvement around issues that the team identifies.

STEP 9: Prioritize Quality Opportunities and Charter PIPs

Prioritizing opportunities for improvement is a key step in the process of translating data into action.

As you continue to implement QAPI, you and your team will:

- Prioritize opportunities for more intensive improvement work. Problems versus opportunities are a matter of perspective and often require discussion.
- Choose problems or issues that you consider important (consider if the issue is high risk, high frequency, and/or problem prone). Remember that problems affecting psychosocial well-being and the ability of residents to exercise choice should also be considered as they may lead to resident suffering.
- Consider which problems will become the focus for a PIP.

- All identified problems need attention—and usually from more than one person, but they do not all require PIPs.
- Begin some PIPs with problems you think you can solve relatively easily. A quick win is worthwhile.

Charter PIP teams:

We use the word "charter" on purpose. A PIP is more than a casual effort - it entails a specific written mission to look into a problem area. The PIP team should include people in a position to explore the problem (usually direct caregivers, such as nursing assistants, are needed). If the problem being addressed involves, for example, dietary choices, then someone from the dietary department should also be on the PIP team.

Chartering implies that the team has been entrusted with a mission, and that it reports back to the Steering Committee at intervals. Being part of a formally chartered PIP team must be interpreted as an important assignment that team members and their supervisors must take seriously. The development of a charter adds strength, importance, and formality to the PIP process. The team typically has a leader—either chosen in the charter or by the team itself. Soon after it begins its work, the PIP should develop a proposed time line, and indicate the budget that is needed.

Use the Goal Setting Worksheet to help your PIP team establish appropriate goals for organizational quality measures, informal improvement initiatives, and PIPs.

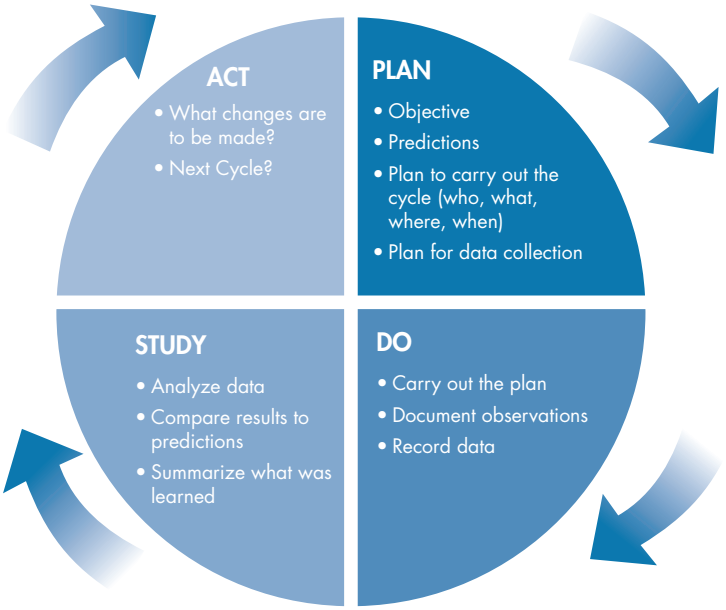
Click here to go to the Goal Setting Worksheet in Appendix A

STEP 10: Plan, Conduct and Document PIPs

Careful planning of PIPs includes identifying areas to work on through your comprehensive data review which are meaningful and important to your residents. It is important to focus your PIPs by defining the scope, so they do not become overwhelming.

You and your team may:

- consider each PIP a learning process.
- determine what information you need for the PIP.
- determine a timeline and communicate it to the Steering Committee.
- identify and request any needed supplies or equipment.
- select or create measurement tools as needed;
- prepare and present results.
- use a problem solving model like PDSA (Plan-Do-Study-Act).
- report results to the Steering Committee.



PDSA MODEL

PLAN-DO-STUDY-ACT (PDSA) CYCLE

During a PIP you will try out some changes and then see whether or not they made a difference in the area you were trying to improve. In the PLAN stage, the team learns more about the problem, plans for how improvement would be measured, and plans for any changes that might be implemented. In the DO stage, the plan is carried out, including the measures that are selected. In the STUDY phase, the team summarizes what was learned. In the ACT phase, the team and leadership determine what should be done next. The change can be adapted (and re-studied), adopted (perhaps expanded to other areas), or abandoned. That decision determines the next steps in the cycle.

STEP 11: Getting to the "Root" of the Problem

A major challenge in process improvement is getting to the heart of the problem or opportunity.

There is danger in starting with a solution without thoroughly exploring the problem. Multiple factors may have contributed, and/or the problem may be a symptom of a larger issue. What seems like a simple issue may involve a number of departments.

Root Cause Analysis (RCA) is a term used to describe a systematic process for identifying contributing causal factors that underlie variations in performance. This structured method of analysis is designed to get to the underlying cause of a problem –which then leads to identification of effective interventions that can be implemented in order to make improvements.

RCA helps teams understand that the most immediate or seemingly obvious reason for the problem or an event may not be the real reason that an event occurred. The RCA process leads to digging deeper and deeper—looking for the reasons behind the reasons. This process will generally lead to the identification of more than one root cause. The root cause(s) and any contributing factors can then be sorted into categories to facilitate the identification of various actions that can be taken to make improvements.

RCA focuses primarily on systems and processes, not individual performance.

The RCA process takes practice, but can be a valuable tool for performance improvement. In order to get familiar with RCA you and your team may consider:

- studying case examples of RCA.
- applying RCA to an adverse event and discussing this technique with the team.
- building RCA examples into training opportunities.

STEP 12: Take Systemic Action

Identifying root causes is only the first step in improving performance. Next you will want to implement changes or corrective actions that will result in improvement or reduce the chance of the event recurring. This is often the most challenging step in the process. Common solutions such as providing more training/education or asking clinicians to "be more careful" do not change the process or system. These proposed solutions are based on two assumptions: lack of knowledge contributed to the event, and if a person is educated or trained, the mistake won't happen again.

Choosing actions that are tightly linked to the root causes and that lead to a system or process change are considered to have a higher likelihood of being effective. Actions that simply support the current process are considered "weaker" and should not be selected as the sole intervention. The goal is to make changes that will result in lasting improvement. Avoiding quick fixes and weak actions is vital to achieving that goal.

To be effective, interventions or corrective actions should target the elimination of root causes, offer long term solutions to the problem, and have a greater positive than negative impact on other processes. In addition, interventions must be achievable, objective, and measurable.

Pilot Test:

Think about testing or "piloting" changes in one area of your facility before launching throughout. Some changes have unintended consequences.

The Department of Veterans Affairs National Center for Patient Safety's Hierarchy of Actions[2] classifies corrective actions as:

Weak: Actions that depend on staff to remember their training or what is written in the policy. Weak actions enhance or enforce existing processes.

Examples of weak actions:

- double checks
- warnings/labels
- new policies/procedures/memoranda
- training/education
- additional study

Intermediate: Actions are somewhat dependent on staff remembering to do the right thing, but they provide tools to help staff to remember or to promote clear communication. Intermediate actions modify existing processes.

Examples of intermediate actions:

- decrease workload
- software enhancements/modifications
- eliminate/reduce distraction
- checklists/cognitive aids/triggers/prompts
- eliminate look alike and sound alike
- read back
- enhanced documentation/communication
- build in redundancy

[2]U.S. Department of Veterans Affairs. National Center for Patient Safety Root Cause Analysis Tools. Retrieved from http://www.patientsafety.gov/CogAids/RCA/index.html#page+page-1.

Strong: Actions that do not depend on staff to remember to do the right thing. The action may not totally eliminate the vulnerability but provides strong controls. Strong actions change or re-design the process. They help detect and warn so there is an opportunity to correct before the error reaches the patient. They may involve hard stops which won't allow the process to continue unless something is corrected or gives the chance to intervene to prevent significant harm.

Examples of strong actions:

- physical changes: grab bars, non slip strips on tubs/showers
- forcing functions or constraints: design of gas lines so that only oxygen can be connected to oxygen lines; electronic medical records – cannot continue charting unless all fields are filled in
- simplifying: unit dose

Prevent future problems by developing and testing strong actions.

QAPI Principles Summarized

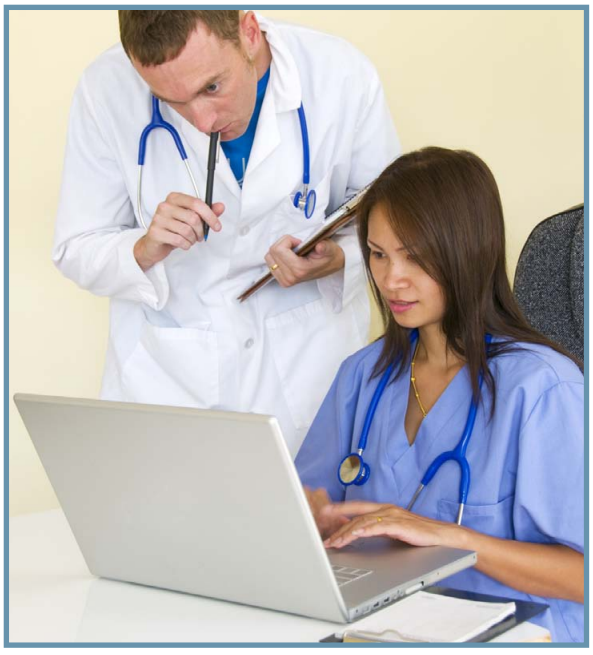
- All of QAPI may not be new to your facility. You already have a Quality Assessment and Assurance program—consider beginning by evaluating or re-evaluating that program and then conducting a self evaluation using the QAPI Self Assessment Tool.
- QAPI leadership starts at the top with executive management and the Board of Directors, Owners, or Trustees, and includes top management in each home.
- Three important principles of QAPI are Systems, Systems, and Systems. Start using systems thinking as you assess your own QAPI efforts, and develop a QAPI plan moving forward. Think of your entire center or community as you plan for monitoring, as you conduct PIPs, and particularly as you think about the way problems might be caused and how care is organized.
- Involve the people directly working in a process in order to improve that process. These are the people who really know what happens at any point in the process. It is crucial to focus on organization-wide inclusion, not for the sake of inclusion, but to truly understand what is going on in any given process.
- Communication about QAPI should be continuous throughout the whole organization. QAPI principles and ongoing training should be built into a facility-wide educational effort that involves all caregivers, residents, and families.
- Residents' perspectives need to be considered in setting QAPI priorities. Solicit residents' viewpoints and talk to residents and families about quality as they experience it.
- Two important components of your QAPI plan will be setting priorities and chartering PIP teams. Everyone should have an opportunity to participate in these activities.
- Create a record of QAPI activities. Consider using past experience as a resource as you move ahead. Keeping an ongoing record of QAPI achievements may help to sustain the improvements regardless of crises or changes in leadership. Build it into your plan.
- Celebrate and reward successes.

How to Learn More

Our QAPI website: http://go.cms.gov/Nhqapi

An excellent resource on QAPI in Nursing Homes is CMS' QAPI website. It contains a number of tools and resources including:

- Learning modules complete with videos, QAPI Process Tools and how to use them, case study examples, best practices information, sections to help engage consumers, and much more
- Downloadable QAPI process tools with instructions for their use
- Best practice examples organized by topic
- QAPI tools for specific topics and purposes with links to many related resources
- Special resources for you in your particular practice role in the "Communities of Practice" section
- News Briefs on QAPI implementation



QAPI Tools and Related Resources

QAPI PROCESS TOOLS

These are tools that help make QAPI processes work. They may include:

- checklists
- templates
- flow charts
- reporting forms or outlines
- worksheets

QAPI process tools are important to:

- organize multiple tasks.
- enhance communication within and across teams.
- help generate ideas and reach decisions.
- keep information organized and accessible.
- track successes and challenges using data.

QAPI is largely about well-functioning and tightly coordinated systems that can identify, solve, and prevent problems effectively. Using QAPI can improve diverse aspects of care and services as well as resident, family, caregiver, and staff experience and satisfaction. **TOOLS CAN HELP.**

QAPI TOPIC TOOLS

QAPI Topic Tools are used to study and improve particular topic areas. Many tools are available to assess care processes and outcomes and to allow you to follow progress in areas you want to track and/or improve. Topic tools can take many forms, ranging from simple to complex, and they use multiple sources of information.

- Checklists or audits completed by caregivers and practitioners. Checklists can be used to review records of various kinds to determine that all steps have been taken. For example, an admission or fall prevention checklist.
- Rating forms completed by caregivers. For example,residents' mood states are rated when residents cannot respond to direct questions.
- Structured observation (e.g., observations of interactions among residents and caregivers or of physical environments). Observations are objective and made at specific times and places; later they may be summarized into a score.
- Direct interviews with residents and family. Such tools, sometimes called resident self-report tools, may be related to single areas of functioning.
- Protocols to guide caregivers' behavior to improve quality in a particular area. Such protocols may include procedures and forms meant to shape caregiver behavior around pressure ulcer prevention, respecting residents' rights, etc. This comprehensive set of tools could be considered a QAPI process toolkit as well.

Nursing homes may wish to select established tools that have been tested and use them consistently.

QAPI RESOURCES FOR PROVIDERS

Each state is served by a Quality Improvement Organization that offers resources and tools for nursing homes. To find your Quality Improvement Organization, visit http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1144767874793

RESOURCES AND TOOLS AVAILABLE THROUGH QIOS

Oklahoma Foundation for Medical Quality
Provides tools and resources for nursing homes.
http://www.ofmq.com/nhtoolsandresources Improvement basics for nursing homes, Change management, and Facilitating group agreement.

Stratis Health
The following recorded webinars cover some basic principles of QI and can be used for caregiver education: http://www.stratishealth.org/events/recorded.html

WEBSITES ON SELECTED QUALITY TOPICS

Advancing Excellence in America's Nursing Homes
Supported by CMS, the Commonwealth Fund, and others, The Advancing Excellence Campaign provides tools and resources to improve nursing home care in clinical and organizational areas.
http://www.nhqualitycampaign.org/

Agency for Healthcare Research and Quality
The Department of Defense and the Agency for Healthcare Research and Quality developed the Team STEPPS program to optimize performance among teams of healthcare professionals and improve collaboration and communication. The Long-Term Care version addresses issues specific to nursing homes: http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/ltc/index.html.

Department of Veterans Affairs
National Center for Patient Safety supports and leads the patient safety activities for all VA medical centers and has developed tools including Root Cause Analysis investigations: http://www.patientsafety.gov/CogAids/RCA/.

Getting Better All the Time: Working Together for Continuous Improvement
The Isabella Geriatric Center and Cobble Hill Health Center have developed a web manual on quality improvement approaches as a guide for nursing home caregivers. This is a particularly practical and lively resource that explains and illustrates performance monitoring and improvement approaches in ways that are understandable to most nursing home caregivers. *Getting Better All the Time* was written by Ann Wyatt, a social worker and nursing home administrator; it aims to present a model of quality improvement that integrates quality of care and quality life.
http://www.susanwehrymd.com/files/gettingbetterall-the-time.pdf

Interact II
An example of a more extensive set of tools, INTERACT II is a system of tools to improve how nursing home caregivers communicate around change in resident condition. This comprehensive set of tools could be considered a QAPI process toolkit as well. www.interact2.net

Institute for Health Care Improvement (IHI)
IHI uses the Model for Improvement as the framework to guide improvement work. The Model for Improvement, developed by Associates in Process Improvement, is a simple, yet powerful tool for accelerating improvement. Learn about the fundamentals of the Model for Improvement and testing changes on a small scale using Plan-Do-Study-Act (PDSA) cycles.
http://www.ihi.org/knowledge/Pages/HowtoImprove/default.aspx

WEBSITES ON PERSON-CENTERED CARE

Implementing Change in Long-Term Care: A Practical Guide to Transformation
This resource was prepared by Barbara Bowers and others with a grant from the Commonwealth Fund to the Pioneer Network. Although it deals with implementing culture change (not QAPI), it is a good resource on the change process.
http://www.pioneernetwork.net/Data/Documents/Implementation_Manual_ChangeInLongTermCare%5B1%5D.pdf

Picker Institute Publications
These include a *Long-Term Care Improvement Guide*, commissioned in 2010 and a *Patient-Centered Care Improvement Guide*, commissioned in 2008, both by Susan Frampton and others. The website also carries information on current books related to person centered care that Picker Institute recommends.
http://pickerinstitute.org/publications-and-resources/

Appendix A: QAPI Tools

Disclaimer: Use of these tools is not mandated by CMS for regulatory compliance nor does their completion ensure regulatory compliance.

QAPI Self-Assessment Tool

Directions: Use this tool as you begin work on QAPI and then for annual or semiannual evaluation of your organization's progress with QAPI. This tool should be completed with input from the entire QAPI team and organizational leadership. This is meant to be an honest reflection of your progress with QAPI. The results of this assessment will direct you to areas you need to work on in order to establish QAPI in your organization. You may find it helpful to add notes under each item as to why you rated yourself a certain way.

Date of Review:_____ Next review scheduled for:_____

Rate how closely each statement fits your organization	Not started	Just starting	On our way	Almost there	Doing great
Our organization has developed principles guiding how QAPI will be incorporated into our culture and built into how we do our work. For example, we can say that QAPI is a method for approaching decision making and problem solving rather than considered as a separate program. Notes:					
Our organization has identified how all service lines and departments will utilize and be engaged in QAPI to plan and do their work. For example, we can say that all service lines and departments use data to make decisions and drive improvements, and use measurement to determine if improvement efforts were successful. Notes:					
Our organization has developed a written QAPI plan that contains the steps that the organization takes to identify, implement and sustain continuous improvements in all departments; and is revised on an ongoing basis. For example, a written plan that is done purely for compliance and not referenced would not meet the intent of a QAPI plan. Notes:					
Our board of directors and trustees (if applicable) are engaged in and supportive of the performance improvement work being done in our organization. For example, it would be evident from meeting minutes of the board or other leadership meetings that they are informed of what is being learned from the data, and they provide input on what initiatives should be considered. Other examples would be having leadership (board or executive leadership) representation on performance improvement projects or teams, and providing resources to support QAPI. Notes:					

Rate how closely each statement fits your organization	Not started	Just starting	On our way	Almost there	Doing great
QAPI is considered a priority in our organization. For example, there is a process for covering caregivers who are asked to spend time on improvement teams. Notes:					
QAPI is an integral component of new caregiver orientation and training. For example, new caregivers understand and can describe their role in identifying opportunities for improvement. Another example is that new caregivers expect that they will be active participants on improvement teams. Notes:					
Training is available to all caregivers on performance improvement strategies and tools. Notes:					
When conducting performance improvement projects, we make a small change and measure the effect of that change before implementing more broadly. An example of a small change is pilot testing and measuring with one nurse, one resident, on one day, or one unit, and then expanding the testing based on the results. Notes:					
When addressing performance improvement opportunities, our organization focuses on making changes to systems and processes rather than focusing on addressing individual behaviors. For example, we avoid assuming that education or training of an individual is the problem, instead, we focus on what was going on at the time that allowed a problem to occur and look for opportunities to change the process in order to minimize the chance of the problem recurring. Notes:					
Our organization has established a culture in which caregivers are held accountable for their performance, but not punished for errors and do not fear retaliation for reporting quality concerns. For example, we have a process in place to distinguish between unintentional errors and intentional reckless behavior and only the latter is addressed through disciplinary actions. Notes:					

Rate how closely each statement fits your organization	Not started	Just starting	On our way	Almost there	Doing great
Leadership can clearly describe, to someone unfamiliar with the organization, our approach to QAPI and give accurate and up-to-date examples of how the facility is using QAPI to improve quality and safety of resident care. For example, the administrator can clearly describe the current performance improvement initiatives, or projects, and how the work is guided by caregivers involved in the topic as well as input from residents and families. Notes:					
Our organization has identified all of our sources of data and information relevant to our organization to use for QAPI. This includes data that reflects measures of clinical care; input from caregivers, residents, families, and stakeholders, and other data that reflects the services provided by our organization. For example, we have listed all available measures, indicators or sources of data and carefully selected those that are relevant to our organization that we will use for decision making. Likewise, we have excluded measures that are not currently relevant and that we are not actively using in our decision making process. Notes:					
For the relevant sources of data we identify, our organization sets targets or goals for desired performance, as well as thresholds for minimum performance. For example, our goal for resident ratings for recommending our facility to family and friends is 100% and our threshold is 85% (meaning we will revise the strategy we are using to reach our goal if we fall below this level). Notes:					
We have a system to effectively collect, analyze, and display our data to identify opportunities for our organization to make improvements. This includes comparing the results of the data to benchmarks or to our internal performance targets or goals. For example, performance improvement projects or initiatives are selected based on facility performance as compared to national benchmarks, identified best practice, or applicable clinical guidelines. Notes:					
Our organization has, or supports the development of, employees who have skill in analyzing and interpreting data to assess our performance and support our improvement initiatives. For example, our organization provides opportunities for training and education on data collection and measurement methodology to caregivers involved in QAPI. Notes:					

Rate how closely each statement fits your organization	Not started	Just starting	On our way	Almost there	Doing great
From our identified opportunities for improvement, we have a systematic and objective way to prioritize the opportunities in order to determine what we will work on. This process takes into consideration input from multiple disciplines, residents and families. This process identifies problems that pose a high risk to residents or caregivers, is frequent in nature, or otherwise impact the safety and quality of life of the residents. Notes:					
When a performance improvement opportunity is identified as a priority, we have a process in place to charter a project. This charter describes the scope and objectives of the project so the team working on it has a clear understanding of what they are being asked to accomplish. Notes:					
For our Performance Improvement Projects, we have a process in place for documenting what we have done, including highlights, progress, and lessons learned. For example, we have project documentation templates that are consistently used and filed electronically in a standardized fashion for future reference. Notes:					
For every Performance Improvement Project, we use measurement to determine if changes to systems and process have been effective. We utilize both process measures and outcome measures to assess impact on resident care and quality of life. For example, if making a change, we measure whether the change has actually occurred and also whether it has had the desired impact on the residents. Notes:					
Our organization uses a structured process for identifying underlying causes of problems, such as Root Cause Analysis. Notes:					

Rate how closely each statement fits your organization	Not started	Just starting	On our way	Almost there	Doing great
When using Root Cause Analysis to investigate an event or problem, our organization identifies system and process breakdowns and avoids focus on individual performance. For example, if an error occurs, we focus on the process and look for what allowed the error to occur in order to prevent the same situation from happening with another caregiver and another resident. Notes:					
When systems and process breakdowns have been identified, we consistently link corrective actions with the system and process breakdown, rather than having our default action focus on training education, or asking caregivers to be more careful, or remember a step. We look for ways to assure that change can be sustained. For example, if a policy or procedure was not followed due to distraction or lack of caregivers, the corrective action focuses on eliminating distraction or making changes to staffing levels. Notes:					
When corrective actions have been identified, our organization puts both process and outcome measures in place in order to determine if the change is happening as expected and that the change has resulted in the desired impact to resident care. For example, when making a change to care practices around fall prevention there is a measure looking at whether the change is being carried out and a measure looking at the impact on fall rate. Notes:					
When an intervention has been put in place and determined to be successful, our organization measures whether the change has been sustained. For example, if a change is made to the process of medication administration, there is a plan to measure both whether the change is in place, and having the desired impact (this is commonly done at 6 or 12 months). Notes:					

Guide for Developing Purpose, Guiding Principles, and Scope for QAPI

Directions: Use this tool to establish the purpose, guiding principles and scope for QAPI in your organization. The team completing this worksheet should include senior leadership. Taking time to articulate the purpose, develop guiding principles, and define the scope will help you to understand how QAPI will be used and integrated into your organization. This information will also help your organization to develop a written QAPI plan. Use these step-by-step instructions to create a separate document that may be used as a preamble to your QAPI plan.

STEP 1. LOCATE OR DEVELOP YOUR ORGANIZATION'S VISION STATEMENT

A **vision statement** is sometimes called a picture of your organization in the future; it is your inspiration and the framework for your strategic planning. Consider involving staff in the development of your vision statement. Post it for everyone to view.

For example, the vision of the Good Samaritan Society is to create an environment where people are loved, valued and at peace.

STEP 2. LOCATE OR DEVELOP YOUR ORGANIZATION'S MISSION STATEMENT

A **mission statement** describes the purpose of your organization. The mission statement should guide the actions of the organization, spell out its overall goal, provide a path, and guide decision-making. It provides the framework or context within which the company's strategies are formulated. As above, get caregivers involved in establishing your organizations mission.

For example, Meadowlark Hills is each resident's home. We are committed to enhancing quality of life by nurturing individuality and independence. We are growing a value-driven community while leading the way in honoring inherent senior rights and building strong and meaningful relationships with all whose lives we touch.

STEP 3. DEVELOP A PURPOSE STATEMENT FOR QAPI

A **purpose statement** describes how QAPI will support the overall vision and mission of the organization. If your organization does not have a vision or mission statement, the purpose statement can still be written and would state what your organization intends to accomplish through QAPI.

For example, the purpose of QAPI in our organization is to take a proactive approach to continually improving the way we care for and engage with our residents, caregivers and other partners so that we may realize our vision to [reference aspects of vision statement here]. To do this, all employees will participate in ongoing QAPI efforts which support our mission by [reference aspects of mission statement here].

STEP 4. ESTABLISH GUIDING PRINCIPLES

Guiding Principles describe the organization's beliefs and philosophy pertaining to quality assurance and performance improvement. The principles should guide what the organization does, why it does it and how.

For example:

- Guiding Principle #1: QAPI has a prominent role in our management and Board functions, on par with monitoring reimbursement and maximizing revenue.
- Guiding Principle #2: Our organization uses quality assurance and performance improvement to make decisions and guide our day-to-day operations.
- Guiding Principle #3: The outcome of QAPI in our organization is the quality of care and the quality of life of our residents.
- Guiding Principle #4: In our organization, QAPI includes all employees, all departments and all services provided.
- Guiding Principle #5: QAPI focuses on systems and processes, rather than individuals. The emphasis is on identifying system gaps rather than on blaming individuals.
- Guiding Principle #6: Our organization makes decisions based on data, which includes the input and experience of caregivers, residents, health care practitioners, families, and other stakeholders.
- Guiding Principle #7: Our organization sets goals for performance and measures progress toward those goals.
- Guiding Principle #8: Our organization supports performance improvement by encouraging our employees to support each other as well as be accountable for their own professional performance and practice.
- Guiding Principle #9: Our organization has a culture that encourages, rather than punishes, employees who identify errors or system breakdowns.

Add any additional Guiding Principles that may be important to your nursing home. Review the five QAPI elements to ensure you identify and capture guiding principles for your organization.

STEP 5. DEFINE THE SCOPE OF QAPI IN YOUR ORGANIZATION

The **Scope** outlines what types of care and services are provided by the organization that impact clinical care, quality of life, resident choice, and care transitions. Be sure to incorporate the care and services delivered by all departments.

For example:

Post-acute care
Dementia care and services
Dietary
Dining

Once the list of care and service area has been identified, you can determine how each will use QAPI to assess, monitor and improve performance on an ongoing basis.

STEP 6. ASSEMBLE DOCUMENT

Once you've completed steps 1-5, assemble the vision and mission statements, guiding principles, and scope of QAPI into a separate document that may be used as a preamble to your QAPI plan. This document will help you articulate the goals and objectives of your organization; QAPI will help you get there. Consider posting for all to see.

The next step is to develop a written QAPI plan that will meet your purpose, guiding principles and comprehensive scope described above. See *"Guide for Developing a QAPI Plan."*

Guide for Developing a QAPI Plan

DIRECTIONS:

The QAPI plan will guide your organization's performance improvement efforts. Prior to developing your plan, complete the *Guide to Develop Purpose, Guiding Principles, and Scope for QAPI.* Your QAPI plan is intended to assist you in achieving what you have identified as the purpose, guiding principles and scope for QAPI, therefore this information is needed before you begin working on your plan. This is a living document that you will continue to refine and revisit. Use these step-by-step instructions to create your QAPI plan. This plan should reflect input from caregivers representing all roles and disciplines within your organization.

I. QAPI Goals

Based on the *Guide to Develop Purpose, Guiding Principles, and Scope for QAPI*, indicate the QAPI goals that your plan will strive to meet. Goals should be specific, measurable, actionable, relevant, and have a time line for completion. (See *Goal Setting Worksheet*).

II. Scope

a. Describe how QAPI is integrated into all care and service areas of your organization.

b. Describe how the QAPI plan will address:

   i. Clinical care

   ii. Quality of life

   iii. Resident choice (i.e., individualized goals for care)

c. Describe how QAPI will aim for safety and high quality with all clinical interventions while emphasizing autonomy and choice in daily life for residents (or resident's agents).

d. Describe how QAPI will utilize the best available evidence (e.g., data, national benchmarks, published best practices, clinical guidelines) to define and measure goals.

III. Guidelines for Governance and Leadership

a. Describe how QAPI is integrated into the responsibilities and accountabilities of top-level management and the Board of Directors (if applicable).

b. Describe how QAPI will be adequately resourced.

   i. Designate one or more persons to be accountable for QAPI leadership and for coordination.

   ii. Indicate the plan for developing leadership and facility-wide training on QAPI.

   iii. Describe the plan to provide caregivers time, equipment, and technical training as needed for QAPI.

   iv. Indicate how you will determine if resources are adequate for QAPI.

   v. Describe how your caregivers will become and remain proficient with process improvement tools and techniques. How will you assess their level of proficiency?

c. QAPI Leadership

i. While everyone in the organization is involved in QAPI, you will likely have a small group of individuals who will provide the backbone or structure for QAPI in your organization. Who will be part of this group? Many of these individuals may be on your current QAA committee.

ii. Describe how this group of people will work together, communicate, and coordinate QAPI activities. This could include but is not limited to:

- Establishing a format and frequency for meetings
- Establishing a method for communication between meetings
- Establishing a designated way to document and track plans and discussions addressing QAPI.

iii. Describe how the QAPI activities will be reported to the governing body; i.e., Board of Directors, owner.

IV. Feedback, Data Systems, and Monitoring

a. Describe the overall system that will be put in place to monitor care and services, drawing data from multiple sources.

b. Identify the sources of data that you will monitor through QAPI

i. Input from caregivers, residents, families, and others

ii. Adverse events

iii. Performance indicators

iv. Survey findings

v. Complaints

c. Describe the process for collecting the above information.

d. Describe the process for analyzing the above information, including how findings will be reviewed against benchmarks and/or targets established by the facility.

e. Describe the process to communicate the above information. What types of reports will be used? One way to accomplish this is to use a dashboard or dashboards for individual performance improvement projects.

f. Identify who will receive this information (i.e., executive leadership, QAPI leadership, resident/family council, and a center's caregivers), in what format, and how frequently information will be disseminated.

V. Guidelines for Performance Improvement Projects (PIPs)

a. Describe the overall plan for conducting PIPs to improve care or services.

i. Indicate how potential topics for PIPs will be identified.

ii. Describe criteria for prioritizing and selecting PIPs: areas important and meaningful for the specific type and scope of services unique to the facility, requires a concentrated effort on a particular problem in one area of the facility or facility wide.

iii. Indicate how and when PIP charters will be developed.

iv. Describe the process for reporting the results of PIPs. Identify who will receive this information (i.e., quality committee, resident/family council, and a center's caregivers), in what format, and how frequently information will be disseminated.

b. Describe how to designate PIP teams and establish and describe a process for assembling teams to work on specific PIPs.

c. Define the required characteristics for any PIP team. This may include that the team be interdisciplinary (i.e., representing each of the job roles affected by the project), that it include resident representation (as appropriate), and that a qualified team leader is selected (i.e., ability to coordinate, organize and direct all activities of the project team). Describe how PIP teams should document and report their work.

d. Describe your process for documenting PIPs, including highlights, progress, and lessons learned. For example, what project documentation templates will you use consistently and file electronically in a standardized fashion for future reference.

VI. Systematic Analysis and Systemic Action

a. Any change that is made has the potential to have broader impact than intended. If you are trying to make a change to a specific system or process, it is important to recognize any "unintended" consequences of your actions. Describe how your organization will identify these consequences which may be either positive or negative.

b. Describe the process you will use to ensure you are getting at the underlying causes of issues, rather than applying quick fixes that address symptoms only.

c. Describe how you will monitor to ensure that interventions or actions are implemented and effective in making and sustaining improvements.

VII. Communications

Outline the audiences for QAPI communications and the frequency and format of these communications.

VIII. Evaluation

a. Describe the process for assessing QAPI in your organization on an ongoing basis. (See *QAPI Self-Assessment Tool*.)

b. Describe the purpose of this evaluation – to help your organization to expand your skills in QAPI and increase the impact of QAPI in your organization.

IX. Establishment of Plan

a. Date your plan.

b. Determine when you will revisit the plan (i.e., at least annually).

c. Determine how you will track revisions or updates to the plan.

Goal Setting Worksheet

Directions: Goal setting is important for any measurement related to performance improvement. This worksheet is intended to help QAPI teams establish appropriate goals for individual measures and also for performance improvement projects. Goals should be clearly stated and describe what the organization or team intends to accomplish. Use this worksheet to establish a goal by following the SMART formula outlined below. Note that setting a goal does **not** involve describing what steps will be taken to achieve the goal.

Describe the business problem to be solved:

Use the SMART formula to develop a goal:

SPECIFIC

Describe the goal in terms of 3 'W' questions:

What do we want to accomplish?
Who will be involved/affected?
Where will it take place?

MEASURABLE

Describe how you will know if the goal is reached:

What is the measure you will use?
What is the current data figure (i.e., count, percent, rate) for that measure?
What do you want to increase/decrease that number to?

ATTAINABLE

Defend the rationale for setting the goal measure above:

Did you base the measure or figure you want to attain on a particular best practice/average score/ benchmark?
Is the goal measure set too low that it is not challenging enough?
Does the goal measure require a stretch without being too unreasonable?

RELEVANT

Briefly describe how the goal will address the business problem stated above.

TIME-BOUND

Define the timeline for achieving the goal:

What is the target date for achieving this goal?

Write a goal statement, based on the SMART elements above. The goal should be descriptive, yet concise enough that it can be easily communicated and remembered.

[*Example:* Increase the number of long-term residents with a vaccination against both influenza and pneumococcal disease documented in their medical record from 61 percent to 90 percent by December 31, 2011.]

Tip: It's a good idea to post the written goal somewhere visible and regularly communicate the goal during meetings in order to stay focused and remind caregivers that everyone is working toward the same aim.

Appendix B: QAPI Definitions

Performance Improvement (PI)

PI (also called Quality Improvement - QI) is a pro-active and continuous study of processes with the intent to prevent or decrease the likelihood of problems by identifying areas of opportunity and testing new approaches to fix underlying causes of persistent/systemic problems. PI in nursing homes aims to improve processes involved in health care delivery and resident quality of life. PI can make good quality even better.

Performance Improvement Project (PIP)

A PIP project typically is a concentrated effort on a particular problem in one area of the facility or facility wide; it involves gathering information systematically to clarify issues or problems, and intervening for improvements. PIPs are selected in areas important and meaningful for the specific type and scope of services unique to each facility.

Quality Assurance and Performance Improvement (QAPI)

QAPI is a data-driven, proactive approach to improving the quality of life, care, and services in nursing homes. The activities of QAPI involve members at all levels of the organization to: identify opportunities for improvement; address gaps in systems or processes; develop and implement an improvement or corrective plan; and continuously monitor effectiveness of interventions.

Quality Assurance (QA)

QA is a process of meeting quality standards and assuring that care reaches an acceptable level. Nursing homes typically set QA thresholds to comply with regulations. They may also create standards that go beyond regulations. QA is a reactive, retrospective effort to examine why a facility failed to meet certain standards. QA activities do improve quality, but efforts frequently end once the standard is met.

Root Cause Analysis (RCA)

Root cause analysis is a term to describe a systematic process to get to the underlying cause of a problem.

Systems Thinking

Systems thinking is a perspective that considers how things influence one another as a whole, rather than individual elements, or static "snapshots."

Guidance for Performing Root Cause Analysis (RCA) with Performance Improvement Projects (PIPs)

Overview: RCA is a structured facilitated team process to identify root causes of an event that resulted in an undesired outcome and develop corrective actions. The RCA process provides you with a way to identify breakdowns in processes and systems that contributed to the event and how to prevent future events. The purpose of an RCA is to find out what happened, why it happened, and determine what changes need to be made. It can be an early step in a PIP, helping to identify what needs to be changed to improve performance. Once you have identified what changes need to be made, the steps you will follow are those you would use in any type of PIP. Note there are a number of tools you can use to perform RCA, described below.

Directions: Use this guide to walk through a Root Cause Analysis (RCA) to investigate events in your facility (e.g., adverse event, incident, near miss, complaint). Facilities accredited by the Joint Commission or in states with regulations governing completion of RCAs should refer to those requirements to be sure all necessary steps are followed.

Below is a quick overview of the steps a PIP team might use to conduct RCA.

Steps	Explanation
1. Identify the event to be investigated and gather preliminary information	Events and issues can come from many sources (e.g., incident report, risk management referral, resident or family complaint, health department citation). The facility should have a process for selecting events that will undergo an RCA.
2. Charter and select team facilitator and team members	Leadership should provide a project charter to launch the team. The facilitator is appointed by leadership. Team members are people with personal knowledge of the processes and systems involved in the event to be investigated.
3. Describe what happened	Collect and organize the facts surrounding the event to understand what happened.
4. Identify the contributing factors	The situations, circumstances or conditions that increased the likelihood of the event are identified.
5. Identify the root causes	A thorough analysis of contributing factors leads to identification of the underlying process and system issues (root causes) of the event.
6. Design and implement changes to eliminate the root causes	The team determines how best to change processes and systems to reduce the likelihood of another similar event.
7. Measure the success of changes	Like all improvement projects, the success of improvement actions is evaluated.

Steps two through six should be completed as quickly as possible. For facilities accredited by the Joint Commission, these steps must be completed within 45 days of occurrence of the event.

Step 1: Select the event to be investigated and gather preliminary information

Events that may be investigated using the RCA process can be identified from many sources (e.g., incident report, risk management referral, staff, resident, or family feedback, health department citation). High priority should be given to events that resulted in significant resident harm or death and other events the facility is required by regulation to investigate. Also consider doing an RCA for "near miss" or "close call" events that could have resulted in harm to the resident, but did not, either by chance or timely intervention. The latter types of events represent high risk situations that could, in the future, cause a resident to be harmed.

Once an event is selected for a Performance Improvement Project (PIP) involving RCA, someone involved in the facility QAPI program can begin gathering preliminary information, including the incident report and any documentation from the preliminary investigation, for later discussion by the team. This may include interviews with those involved including the resident or family members, collection of pertinent documentation or photographs, review of relevant policies and procedures, quarantine of defective equipment, etc. This preliminary information is also useful for deciding which individuals should be invited to serve as members of the team as described in Step 2.

- ✓ Helpful Tips:
  - Involve facility leaders in the prioritization and decision to proceed with an RCA. There will be greater cooperation in completing RCAs when the process is viewed as leadership-driven.
  - Be sure to start with a problem and not the solution. It is tempting to assume we know what will fix the problem before we've thoroughly examined it. Assumptions are often wrong and may hinder complete analysis of the underlying causes.
  - Don't define the problem as a need for something. The problem statement should objectively state what went wrong, not why, or how. An example of an effective problem statement is, "Resident X continued to receive a medication one week after the order was given for discontinuation." A good problem statement will facilitate a more thorough examination of the problem.
  - If the event represents a liability concern or questionable practices by an employee, the leadership team can initiate a risk management review or an employee performance review to start simultaneous with, but separate, from the RCA process. The RCA process should focus on systems rather than individual performance.

Step 2: Select the event to be investigated and gather preliminary information

Next, leadership designates a facilitator for the PIP team, and works with the facilitator to create a charter that will help guide the team in managing the scope of the project and making changes that are ultimately linked to the root causes identified in the RCA process. Together, leadership and the facilitator select staff to participate on the PIP team.

As managers and supervisors gain experience in doing RCAs, more people in the facility can be trained to serve as team facilitators. The facilitator is responsible for assembling and managing the team, guiding the analysis, documenting findings and reporting to the appropriate persons.

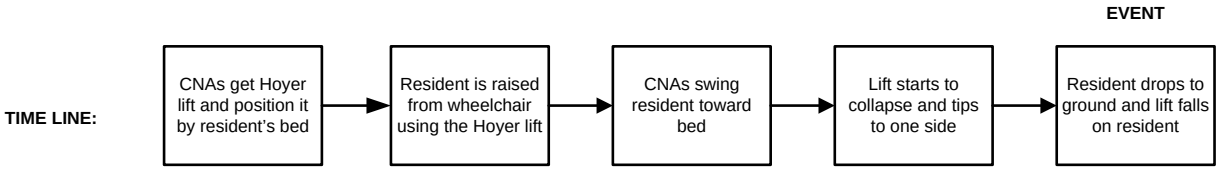
The number of team members depends on the scope of the investigation. Individuals selected to serve as team members must be familiar with the processes and systems associated with the event. People who have personal knowledge of what actually happened should be included as team members or given an opportunity to contribute to the investigation through interviews.

- ✓ Helpful Tips:
  - o Team members should be selected for their ability to discuss and review what happened during the event in an objective and unbiased manner. In some situations, staff members personally involved in the event are the best people to serve as team members. In other situations, staff members not personally involved in the event are the best people to serve as team members with the people personally involved asked to share their experience during interviews. This may be appropriate if the people directly involved in the event are dealing with emotions and are not able to be objective. However, if this is the case, it is a good idea to provide those staff persons directly involved with counseling and support so that they are able to participate in the RCA process. Participating in the RCA process and hearing other's objective viewpoints can help them to deal with the situation in a positive manner.
  - o Keep the number of management or supervisory level individuals on the team to a minimum. Staff members may be inhibited from speaking up or being completely candid during discussions about what happened if their direct supervisor is in the room. If this is not possible, the facilitator should explain the need for members to be free to discuss the process honestly, as it is actually carried out in the facility.
  - o Make it clear to everyone involved that the RCA process is confidential. This reassurance helps people feel safer discussing the process and system breakdowns that may have caused an inadvertent mistake.

Step 3: Describe what happened

At the first meeting of the team, a time line of the event under review is created. The preliminary information gathered in step 1 is shared with the team and other details about the event are elicited from team members. If the people personally involved in the event are not part of the team, their comments about what happened are shared with team members. All of this information is used to create a time line of the event – the sequence of steps leading up to the harmful event.

Below is a time line for a situation involving a resident that suffered a serious injury during his transfer from a wheelchair back to his bed. This tall and larger man (300-pound) was placed in a Hoyer lift and elevated into the air above his wheelchair. As the CNAs turned the lift toward the bed it began to sink because the lift arm couldn't handle the resident's weight. In an attempt to complete the transfer before the patient was below the level of the bed, the CNAs swung the lift quickly toward the bed. The lift tilted dangerously to the side and the legs started to move together, narrowing the base of support. The resident dropped to the ground and the lift fell on top of him.



Use a flipchart or sticky notes to draw a preliminary time line. Before proceeding to Step 4 of the RCA, be sure that everyone agrees that the time line represents what actually happened. Now is the time for the team to add missing steps or clarify "factual" inconsistencies about the event.

- ✓ Helpful Tips:
  - The time line of the event should describe just the facts – not what caused the facts to happen. For instance, the CNAs may have mistakenly used a Hoyer lift that was not strong enough to move a tall resident weighing 300 lbs. This factor may have contributed to the event, but it is not documented in the time line. Only the facts of what happened should be included in the time line, the causal factors are added in a later step.
  - Once the preliminary time line has been created, the facilitator finalizes the time line by asking the team:
    - Does the time line adequately tell the "story" of the incident? If not, the scope of the timeline may need to be extended further back in time or expanded to include what happened after the event.
    - Does each step in the time line derive directly from the step it precedes? If each step is not derived logically from the one preceding it, it usually indicates that one or more steps in the sequence have been left out. Add missing steps to the time line.
    - Is each step in the timeline pertinent to the incident under investigation? The answer may be "yes", "no," or "not sure." Include only the "yes" and "not sure" steps in the final event line.
  - In rare situations the team cannot identify a sequence of steps leading up to the harmful event. For instance, when a resident develops an intravenous (IV) catheter–related infection it may not be possible to pinpoint the exact steps preceding the infection event. The infection appears to have occurred despite staff members apparently doing all the right things (e.g., following good hygiene when inserting catheters and caring for catheterized residents). In these situations, a time line is not created – however don't jump to this conclusion too quickly. It is harder to find all the root causes of an undesirable event if the team does not have a time line to guide their decisions.
  - Resist the temptation to skip right to step 5 of the RCA process, which is "Identify the root causes." Team members may insist the root causes of the event are already understood and it is not necessary to go through steps 2 through 4. Jumping to conclusions about root causes increases the likelihood the team will end up with "quick-fix" solutions that do not address the underlying systems gaps, or contributing factors, and fail to prevent similar events in the future.

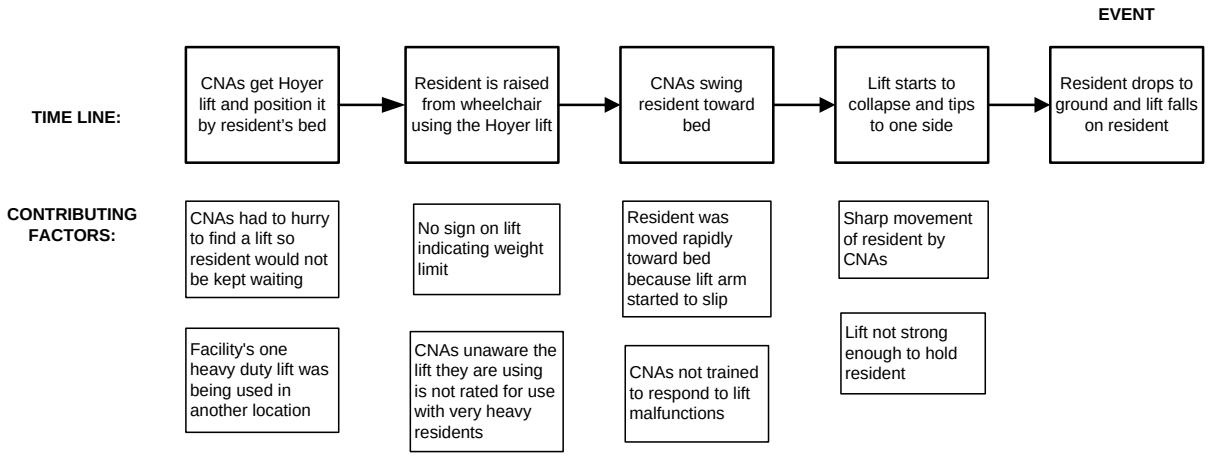
Step 4: Identify the contributing factors

Here is where the knowledge gained during step 3 is used by the team to dig deeper into what happened to discover why it happened.

Step 4 involves the team looking at each step of time line and asking, "What was going on at this point in time that increased the likelihood the event would occur?" These are the contributing factors – situations, circumstances or conditions that collectively increased the likelihood of an incident. By itself a contributing factor may not have caused the incident, but when they occur at the same time, the probability an incident will occur increases.

As mentioned in Step 2, it is important to get the perspective of people personally involved in the event when identifying the contributing factors at each step. These may be the only individuals aware of the actual circumstances affecting what happened. For instance, the CNA who chose the wrong type of lift might have felt pressured by her supervisor to find a lift as quickly as possible so the resident would not be kept waiting. Team members not personally involved in the event might be unaware this contributing factor existed.

Below are examples of contributing factors that might be identified for each step of the time line for the event involving a resident injury during transfer from wheelchair to bed.



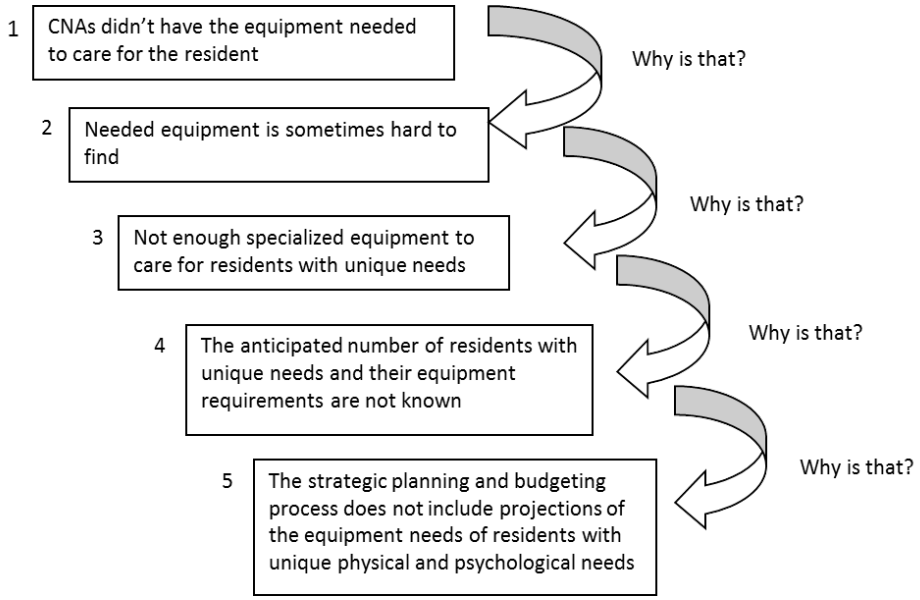
- ✓ Helpful Tips:
  - o Consider what was happening at each step in the time line to ensure the team does not overlook some important factors. Whenever possible, use a time line as the basis for identifying contributing factors.
  - o Brainstorming can be an effective tool to identify contributing factors by asking, "What might have happened that would increase the likelihood the event would occur?" Consider what recommended practices might not have been followed, e.g. sterile dressing changes not done for IV-catheter sites. Consider what procedure "work-arounds" might have occurred. Consider how staffing at the time of the event might have impacted the eventual outcome.
  - o When identifying contributing factors be careful to avoid "hindsight bias." Knowing the eventual outcome of a time line can influence how team members view activities leading up to the event. Remember to consider only those factors that were actually present and known to those involved at the time – not what was only realized after-the-fact.

Step 5: Identify the root causes

All incidents have a direct cause. This is the occurrence or condition that directly produced the incident. In the resident incident described in Step 3, the tilting and collapsing Hoyer lift is the direct cause of the accident. However, the direct cause is not the root cause.

Root causes are underlying faulty process or system issues that lead to the harmful event. Often there are several root causes for an event.

Contributing factors are not root causes. The team needs to examine the contributing factors to find the root causes. This can be done by digging deeper – asking repeated "why" questions of the contributing factors. This is called the "five why's" technique, which is illustrated below.



This questioning process is continued until all the root causes are found. It is common to find the same root cause for two or more contributing factors.

- ✓ Helpful Tips:
  - The team must determine if they've truly identified a root cause, versus a contributing factor which requires the team to do more digging. Ask the questions below about each potential root cause identified by the team. If the answers are NO, then the team has identified root causes and they can stop the questioning process. If the answer to any question is YES, then the team may not have identified true root causes and needs to ask more "why" questions to get to the root causes. Keep asking these until you get to root causes.
    - Would the event have occurred if this cause had not been present?
    - Will the problem recur if this cause is corrected or eliminated?
  - The team should not make judgments about whether an individual did the right thing. This judgment is to be made by the manager responsible for evaluating the employee's performance. The facilitator may need to remind team members that the RCA process is not where these judgments are to be made.

- The team facilitator should watch out for discussion "manipulation" during this stage. Some team members may try to divert attention from root causes originating in their department or direct the discussion away from root causes that will require additional resources or necessitate significant changes to how work is now being done. A successful RCA process requires frank and open discussions of the causes of the event.
- A fishbone diagram can also be used to determine root causes; see the CMS QAPI website for more information on this tool.

Step 6: Design and implement changes to eliminate the root causes

In this step the team evaluates each root cause to determine how best to reduce or prevent it from triggering another harmful event. The key is to choose actions that address each root cause. These actions will generally require creating a new process or making a change to a current process. The steps to accomplish this are the same as those used in any type of PIP. Note that at this point, you may want to reevaluate the composition of your team to make sure you have included people who are part of the process being changed. It is a good idea throughout a project to make sure you have the right people on the team and to adjust membership as needed.

At least one corrective action should be developed to reduce or eliminate each root cause. Some action plans will be short-term solutions to fix a contributing factor, e.g. purchase an additional Hoyer lift rated for use by residents weighing over 250 lbs. But short-term solutions rarely fix root causes. For instance, in the example event the team also needs to recommend that a formal evaluation of future specialized equipment needs for residents be regularly incorporated into the facility strategic planning and budgeting process.

When developing corrective actions consider questions such as:

- What safeguards are needed to prevent this root cause from happening again?
- What contributing factors might trigger this root cause to reoccur? How can we prevent this from happening?
- How could we change the way we do things to make sure that this root cause never happens?
- If an event like this happened again, how could we stop the accident trajectory (quickly catch and correct the problem) before a resident was harmed?
- If a resident were harmed by this root cause, how could we minimize the effect of the failure on the resident?

Aim for corrective actions with a stronger or intermediate rating, based on the categories of actions below. Corrective actions that change the system and do not allow the errors to occur are the strongest.

Stronger Actions

- Change physical surroundings
- Usability testing of devices before purchasing
- Engineering controls into system (forcing functions which force the user to complete an action)
- Simplify process and remove unnecessary steps
- Standardize equipment or process

- Tangible involvement and action by leadership in support of resident safety; i.e., leaders are seen and heard making or supporting the change

Intermediate Actions

- Increase staffing/decrease in workload
- Software enhancements/modifications
- Eliminate/reduce distractions
- Checklist/cognitive aid
- Eliminate look alike and sound alike terms
- "Read back" to assure clear communication
- Enhanced documentation/communication

Weaker Actions

- Double checks
- Warnings and labels
- New procedure/memorandum/policy
- Training
- Additional study/analysis

For example, suppose staff members cannot locate the equipment to use when lifting larger residents, because the specialty equipment is not kept in the same location. The strongest action to prevent another accident would be to keep all equipment designed for special needs residents in just one storage area (change physical surroundings). Staff members will no longer need to differentiate "usual" equipment from "specialized" equipment. If this action is not feasible, consider placing a sign on the lift equipment – "*DO NOT USE FOR RESIDENTS OVER 250 LBS.*" This is an example of a warning or label (sometimes called a visual cue). It is a weak action because staff members might overlook the warning, but if no other stronger action is available, a weak action is better than none at all.

When designing corrective actions, clearly state what is to be done, by whom, and when. Satisfactory implementation of the corrective actions will be monitored so it is important to have clearly defined plans.

- ✓ Helpful Tips:
  - The team leader should encourage team members to come up with as many intermediate and strong actions as possible. It is helpful to involve supervisory and management staff in the action planning discussions. Designing intermediate and strong actions often requires an understanding of various resident care systems and the facility's resource allocation priorities. Staff members on the team may not possess this knowledge.
  - Because the feasibility and costs associated with corrective actions must also be considered it is helpful to include facility management in the corrective action discussions, if they are not already members of the team.
  - If a particular action cannot be accomplished due to current constraints (e.g. lack of resources), the team should look for other ways of changing the process to prevent a similar event from occurring in the future. Doing nothing should not be an option.

Step 7: Measure the success of changes

Concurrent with implementation of action plans, mechanisms are established to gather data that will be used to measure the success of the corrective action. The RCA should reduce the risk of future harmful events by minimizing or eliminating the root causes. What you measure should provide answers to three questions:

1. Did the recommended corrective actions actually get done? (e.g., Did the warning signs get put on the Hoyer lifts? Did a formal equipment evaluation step get added to the annual budgeting process?)
2. Are people complying with the recommended changes (e.g., How often is the wrong type of Hoyer lift used for residents weighing over a predetermined weight? Is staff provided an opportunity to participate in an equipment needs assessment during the budgeting process?)
3. Have the changes made a difference? (Has another resident been harmed by equipment unsuited for their physical condition?)

Evaluating the success of the PIP usually occurs after the team has been disbanded, and will become the responsibility of the person designated to monitor the corrective action/s. The QAA committee is responsible for overseeing all QAPI activities, which includes reviewing data on the effectiveness of all improvement projects. Ideally, all of the following criteria should be met to conclude a PIP has been successful:

- Measures of success were monitored over time.
- The goal was attained (process changes were made and sustained, no recurrent events).
- You are confident that the change is permanent.

RCA PIP Template

This template can be used to document the completed RCA PIP process, including follow-up actions and measures. Revise it as necessary to meet your needs.

Team Facilitator: **Date RCA Started**: _____ **Date Ended**: _____

Team Members:

Name	Position	Name	Position

Brief Narrative Description of Event (include time line if available):

Root Causes and Contributing Factors

Conduct your systematic analyses to determine your contributing factors and root causes. Use techniques such as the five whys, flowcharting, or the fishbone diagram to assist in identifying the root causes. Additional tools are available that guide the use of each of these techniques. It is helpful to keep any of these analyses with your PIP documentation for future reference. Describe each root cause as identified by the team. Enter these in the table below.

Corrective Action Plans

For each root cause identified, enter the corrective action plans intended to prevent the root cause from causing another harmful event. There can be more than one action plan for each root cause. Some action plans may be short-term interventions which can be accomplished quickly and some action plans require more long-term implementation steps. For each action plan designate the individual or group responsible for completing the action and the time frame for completion.

Root Cause	Corrective Action	Responsible Individual/Group	Completion Deadline

Measures of Success

Corrective Action	**Measures of Success** **(How we will know if this action is successful)** Consider measures of how often recommended processes are not followed and the incidence of similar adverse events.	**Reporting Schedule and Individual or Group Responsible for Reviewing Results**

Signature of RCA team leader_____ Date _____

Acknowledgement: This guide draws on information from the *VHA National Patient Safety Improvement Handbook* (March 2011), *Error Reduction in Health Care: A Systems Approach to Improving Patient Safety, 2nd ed*. (Jossey-Bass, 2011) and the *Minnesota Adverse Health Events Measurement Guide* (Minnesota Department of Health, 2010).