Crucial QAPI Questions

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Session Objectives

Participants will state in their own words...

• Requirements for QAPI
• The value of repeated representative sampling
• Four key questions to guide root cause analysis
• An example of an initial PDSA cycle with appropriate scope and scale
QAPI F-Tag Highlights: F865 - Plan

Describes the process for identifying and correcting quality deficiencies... (Who, What, How, When)

• Tracking and measuring performance;
• Establishing goals and thresholds for performance measurement;
• Identifying and prioritizing quality deficiencies;
• Identifying underlying causes of systemic quality deficiencies;
• Developing and implementing corrective action or performance improvement activities; and
• Monitoring or evaluating the effectiveness of corrective action/performance improvement activities and revising as needed.
QAPI F-Tag Highlights:
F866 - Policies & Procedures

P&Ps for program feedback, data systems, monitoring ... (Who, What, How, When)

• Data collection from various sources related to high risk, high volume, and problem-prone issues

• Effective systems to obtain and use feedback and input from staff, residents, and resident representatives, including how such information will be used to identify problems that are high risk, high volume, or problem-prone, and opportunities for improvement

• Performance indicators from all departments*

• Methods to systematically identify adverse events and use data to prevent adverse events
QAPI F-Tag Highlights:
F867- Systematic Analysis and Action

Identify quality deficiencies - develop and implement plans of correction

• Must undertake performance improvement activities
• Must track performance improvement activities effectiveness over time
• P&P must indicate:
  • How and when root cause analysis of systemic problems will occur
  • How and when to develop corrective actions
  • How to know performance improvement activities are effective and sustained
QAPI F-Tag Highlights: F867- Systematic Analysis and Action

Identify quality deficiencies - develop and implement plans of correction

- Priorities for performance improvement activities must focus on high-volume, high-risk, problem prone areas taking into consideration incidence, prevalence, severity, resident safety and autonomy, and quality of care.
- Performance improvement activities must track medical errors and adverse resident events, analyze their causes, and implement preventive actions and mechanisms that include feedback and learning throughout the facility.
- As part of their performance improvement activities, the facility must conduct distinct performance improvement projects. Improvement projects must include at least annually a project that focuses on high risk or problem-prone areas identified through the data collection and analysis.
QAPI Plan is Comprehensive

Reflects the complexities and unique population served by each nursing home

• Clinical care
• Quality of life
• Resident choice
QAPI Plan is Data Driven

- Uses clinically sound indicators for performance goals and warning thresholds
- Uses performance data in prioritizing opportunities for improvement
- Uses data tracking to identify trends in adverse events
- Uses data to monitor intervention effectiveness
Crucial QAPI Questions

1. What should we monitor about quality of care and quality of life?

2. How will we monitor quality?

3. What will we do with the information?
“We Can’t Monitor Everything”
Some Ideas of Where to Start

- Previous state survey results
- Resident-family-staff satisfaction surveys
- Flagged Quality Measures

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Other Ideas from Appendix PP

• “high risk, high volume, and problem-prone issues”
• Consider the “incidence, prevalence, severity, resident safety and autonomy, and quality of care”
• “Potentially preventable adverse events”

...but what does that all mean?
Appendix PP Definitions & Examples

• “High-risk”: Refers to care or service areas associated with significant risk to the health or safety of residents, e.g., tracheostomy care; pressure injury prevention; administration of high-risk medications such as warfarin, insulin, and opioids.

• “High-volume”: Refers to care or service areas performed frequently or affecting a large population, thus increasing the scope of the problem, e.g., transcription of orders; medication administration; laboratory testing.

• “Problem-prone”: Refers to care or service areas that have historically had repeated problems, e.g., call bell response times; staff turnover; lost laundry.

• “Adverse Event”: An adverse event is defined as an untoward, undesirable, and usually unanticipated event that causes death or serious injury, or the risk thereof, which includes near misses.
The Components of “Risk”

- Probability of occurrence
- Severity of consequences

Common methods of risk assessment combine these components to arrive at a single metric of risk that helps organizations prioritize surveillance and prevention.
Combined Risk Score for Adverse Events

• Probability Score:
  • 1-10, how likely to happen?

• Severity Score:
  • 1-10, how severe are consequences?

\[ P \times S = \text{Risk Score} \]
Range 1-100
Two Ways to Estimate Probability of Adverse Events

1. Apply probability (or rate) from authoritative publications (academic or government sources) if applicable to your setting and population. Consider the range in the estimates and the strength of the evidence.

2. Estimate based on your own historical data, using appropriate denominator and sample size

Probability expressed as a ratio or rate, for example, “falls per 10,000 resident days”
Combining Probability and Severity

- Consider range of typical outcomes from least severe to most severe
- Categorize outcomes:
  - no injury, minor injury, major injury
- Estimate probability of outcomes of varying severity

Example:
- fall with no injury = 34 per 10,000 resident days
- fall with serious injury = 6 per 10,000 resident days
- fall with fracture = 2 per 10,000 resident days
Examples of Potentially Avoidable Adverse Events r/t Meds

- Mental status changes
- Hypoglycemic events
- Ketoacidosis
- Bleeding or thromboembolic events
- Electrolyte imbalance
- Drug toxicities
- Altered cardiac output
Examples of Potentially Avoidable Adverse Events r/t Care

- Falls
- Skin tears
- Dehydration r/t insufficient fluids
- Thromboembolic events r/t insufficient monitoring
- Respiratory distress r/t insufficient monitoring and provision of care
- Feeding tube complications
- Facility acquired or worsened pressure injuries
- Elopement
Examples of Potentially Avoidable Adverse Events r/t Infections

- Pneumonia
- Influenza
- Skin and wound infections
- Urinary tract infections
- Clostridium difficile infections
- Norovirus infections
Where Do I Find Data for Facility Rates?

- Some is ready-made for reporting (CASPER, infection prevention and antibiotic stewardship logs, pharmacy reports)
- Some will need to be gathered through systematic sampling or routine data reporting

*Rates can only be calculated if you have numerator and denominator*
How to Conduct Systematic Sampling

- Define the population to be sampled
- Out of the total population of interest, randomly select 10 residents/month*
- Use a trigger tool to direct focused review of records or observation of care

*May need to adjust downward for smaller populations
Trigger Tools

- Trigger tools are lists of indicators of potential adverse outcomes worthy of further investigation
- Trigger tools accelerate and standardize the review process
- You can customize existing trigger tools or develop your own

Examples:
- IHI SNF Trigger tool
  [http://www.ihi.org/resources/Pages/Tools/SkilledNursingFacilityTriggerTool.aspx](http://www.ihi.org/resources/Pages/Tools/SkilledNursingFacilityTriggerTool.aspx)
- LTC Survey Pathways
  [https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html](https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes.html)
The Power of Repeated Sampling

- Most efficient way to establish facility rates (numerators and denominators)
- Creates “run” and “control” charts which can help determine when action or root cause analysis is required
- Critical evidence for your QAPI story
The Power of Repeated Sampling

Wet Checks for Prompted Voiding

Warning Threshold

Median
The Power of Repeated Sampling

Response to Pain Treatment Documentation

Annotations:
A  protocol pilot tested
B  Protocol Inservice
C  RCA on Protocol Implementation
Pros and Cons of Incident Reporting

Incident reports are NOT a good source for identifying facility rate of most adverse events*

Cons:
- Under-reports compared with active systematic surveillance, especially for near misses
- Numerator only, does not have a true denominator*

Pros
Extremely valuable for gathering information that can support root cause analysis

*Except for events leading to serious injury or death
Root Cause(s) Analysis

• There usually is not just ONE cause of any given process failure

• Understanding adverse outcomes:
  1. What was supposed to happen
  2. What actually happened (incident report)
The Q & A of RCA

1. Is there a standard process in place?
   • *If not, need to create one*

2. Is the standard process effective and efficient?
   • *If not, need to improve or replace*

3. Are the right people aware of their role in the process?
   • If not, need to improve *system* of communication

4. Did people involved *intend* to follow the standard process?
   • If so, what frustrated them?
   • If not, why not?
The Q & A of RCA

Is there a standard process in place?

- *If not, need to create one*

The question is about formal written P&Ps *and also* about all the unwritten day-to-day norms of how things get done.

If there is general disagreement about how to do something that should be standardized, *that’s an indication there is an opportunity for improvement.*
What is the Standard Process?

Constructing a process map with front-line staff helps identify whether there is a standard process or not, and where problems are likely to occur in that process.
Is the standard process effective and efficient?

• *If not, need to improve or replace*

Critically examining the process (mapping it out step by step, decision by decision) with front-line staff helps identify problems and generates ideas for improvement.
Are the right people aware of their role in the process?

- If not, need to improve *system* of communication

One reason for failure to implement standard process could be lack of awareness by those involved...if this is so, it should lead to critical examination of how staff are informed and how understanding is verified (e.g., Teach-Back, Team STEPPS®).
The Q & A of RCA

Did people involved *intend* to follow the standard process but could not?

- If so, what frustrated them?
- If not, why not?

- If a process is fragile and prone to human failure, it needs to be improved. Process mapping and incident reporting can help identify process weakness.
- There are often very good reasons staff violate standard processes and use work-arounds...finding out why could lead to crucial process improvements.
Hierarchy of Corrective Actions

- Stronger actions:
  - The best at removing the dependence on the human to “get it right” (they are physical and permanent, rather than procedural and temporary).
  - Questions to ask in evaluating if the action is stronger in preventing the event/cause:
    - Does the action force the person to get it right?
    - Does it eliminate the chance to choose the wrong option?
    - Is it designed for the environment or system to operate without additional issues/concerns for the person taking the action?
    - Can this be replicated successfully under any circumstance or by a different person?
    - Does it require minimal supervision or measurement of compliance?
    - Does it involve standardized forcing functions to remove human error and variation through technology and/or design?

https://www.patientsafety.va.gov/docs/joe/rca_tools_2_15.pdf
Hierarchy of Corrective Actions

- **Intermediate actions**
  - Reduce the reliance on the human to get it right, but do not fully control for human error.
  - Questions to ask in evaluating if the action is intermediate in preventing the event/cause:
    - Does the action help the person to remember the process?
    - Does it improve upon the information needed to do the process?
    - Does it serve as a guide tool used during the process?
    - Does this action reduce variation of the outcome (most people do it successfully)?
    - Does this action account for human limitations: time, workload, tasks?

- **Weaker actions**
  - Support/clarify the process, but rely solely on the human. These actions do not necessarily prevent the event/cause from occurring.
  - Questions to ask in evaluating if the action is weaker:
    - Is this action focused on informing the person?
    - Is this action establishing rules that do not already exist?
    - Does this action prompt, warn or alert a person (capture their attention)?
    - Does this action examine if the process could be improved/made better?
    - Is the outcome of the action left up to personal interpretation?
What Changes Can We Make that Will Result in Improvement?

Plan

Do

Study

Act

Plan

Do

Study

Act
PDSAs

People
Detest
Senseless
Activity

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PDSA Overview

• Plan = Making a prediction that a change will result in a measurable improvement
• Do = Testing the prediction and gathering the results
• Study = Comparing test results to prediction and drawing a conclusion
• Act = Decide if tested change should be
  • Adopted as is (and scaled up)?
  • Adapted in some way (and retested)?
  • Abandoned (to make room for other tests)?
PDSAs Are Usability Tests

- PDSAs test if a change will work in a specific setting with current resources
- PDSAs are useful when
  - Outcomes of a change is uncertain
  - Resistance to improvement efforts needs to be overcome
  - Change involves or affects a wide range of people and conditions (different shifts, days of the week, types of residents, etc.)
What to PDSA?

- Start by understanding your current process, especially examples of process failures
- Start with a hunch of how failure could be avoided
- Refer to scientific evidence or other best-practice ideas, and *suggestions from involved staff and residents/families*
Questions to Ask Prior to PDSA

Does process failure occur because...

1. No (standard) process exists
2. The process exists, but doesn’t work even if followed ... *why?*
3. The right people are not aware of the process (or their role in it)... *why?*
4. Staff fail to follow process because
   - process too difficult or
   - conflicts with competing priorities or incentives
Planning a Test

• The **What** is the idea to be tested, but you also need to plan for...
• **When** will the test be done
• **Who** will do the test and record results
• **Data** to be used to evaluate the test results

*It improves the test if you can state explicitly why you think the idea is a good one.*
Scale and Frequency of Tests

Choose the smallest scale feasible to conduct initial tests and plan to repeat rapidly with adaptations as you learn and scale up.
PDSA Scale

• “Scale” refers to the number of duplicate tests in a PDSA...number of residents, staff members, or procedures...
• Smallest scale is 1 (resident, staff, procedure, etc.)
PDSA Scope

• “Scope” refers to the variety of conditions under which the test is performed...different workgroups, shifts, days of the week, types of staff, types of residents, etc.

• Smallest scope is one test condition
Adjusting PDSA Scale and Scope

- Adjust scale and scope upwards only after you are satisfied at the lowest level of testing first (1 instance under 1 set of conditions)
- Adjust scale and scope separately
Avoid Getting Bogged Down

• Use willing volunteers for testing
• Steal shamelessly from others
• Don’t wait for technical solutions
• Don’t wait for political consensus
• Look for easy wins to start
• Anticipate what to test next and how to scale up
Process Improvement Project (PIP)
(Required in Phase 3 - November 28, 2019)

- §483.75(e)(3) As part of their performance improvement activities, the facility must conduct distinct performance improvement projects.

- The number and frequency of improvement projects conducted by the facility must reflect the scope and complexity of the facility's services and available resources, as reflected in the facility assessment required at §483.70(e).

- Improvement projects must include at least annually a project that focuses on high risk or problem-prone areas identified through data collection and analysis.
Stages of a PIP

1. Quality surveillance
2. Identifying performance gaps
3. Prioritization of opportunities for improvement
4. Stakeholder recruitment
5. Identify change ideas
6. Smaller scale/scope PDSA tests of implementation
7. Larger scale/scope PDSA tests of implementation
8. Hardwiring newly adopted system changes
Hardwiring Process Improvements

- Search for STRONG corrective actions that eliminate the possibility of failure
- Making changes to job descriptions, schedules, policies, procedures, forms, equipment, supplies, environment, incentives
- Document the flow of the new process — the new way of doing things
- Provide on-going training with teach-back or competency testing on the new process and the requisite skills
- Assigning day-to-day ownership for the improvement and maintenance of the new process, including on-going monitoring
Sources of Resistance to Change

• Perceived loss of autonomy due to process standardization
• Disruption of routines
• Misaligned incentives based in old process
• Tunnel vision, missing the big picture
• Fear of unknown, especially with perceived lack of resources
• Change burnout
PDSAs Are an Antidote to Resistance

PDSAs

- Involve affected staff in system redesign
- Provides a safe space to experience changes in routines
- Allows time to change incentives to match system change
- Brings all affected staff together to improve a process
- Drives out fear of unknown by conducting safe low-risk tests
- Can be conducted with willing volunteers
Action / Next Steps

• Answer your QAPI questions
  • What to monitor
  • How to monitor (data sources)
  • What you will you do with the information
Take Home Points

• Appendix PP of the SOM (Rev 173, 11-22-17) spells out QAPI requirements
• Active systematic surveillance using representative sampling is your friend
• Incident reporting supports RCA
• PDSAs are the engine of process improvement
Contact Information

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