Health Quality Innovation Network

Guidance for Performing Root Cause Analysis (RCA)

Purpose:

The Health Quality Innovation Network (HQIN) is offering this presentation as visual companion to the CMS Quality Assurance Performance Improvement (QAPI) Guidance for Performing Root Cause Analysis (RCA) with Performance Improvement Projects (PIPs).

This resource will:

1. Serve as a guide to walk through an RCA to investigate events in your facility
2. Serve as an educational tool for your team
3. Support survey readiness and response to Plan of Corrections and Directed Plan of Corrections
4. Connect you to additional QAPI resources

QAPI: Getting to the "Root of the Problem"

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 the underlying problem, which leads to identification of effective interventions that can be implemented in order to make improvements.

1. RCA helps teams understand that the most immediate or seemingly obvious reason for the problem or event may not be the real reason an event occurred
2. The RCA process leads to digging deeper and deeper – looking for reasons behind the reasons
3. The root causes and any contributing factors can be sorted into categories to facilitate the identification of actions that can be taken to make improvements

QAPI at a Glance: Step by Step Guide to Implementing QAPI

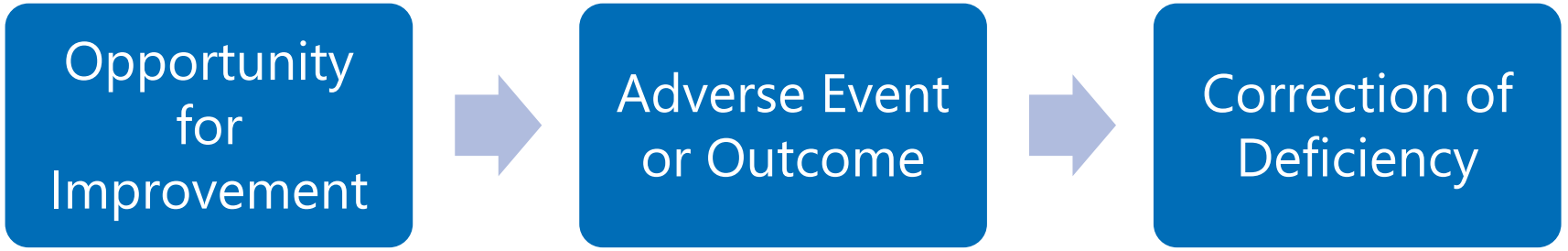
CMS QAPI Guidance for Performing RCA

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 several departments.

CMS QAPI Guidance for Performing Root Cause Analysis (RCA)

Step 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 concern, health department citation). The facility should have a process for selecting events that will undergo an RCA.



Step 2: Charter and select a team facilitator and team members

1. Leadership should provide a project charter to launch the team
2. The facilitator is appointed by leadership
3. Team members are people with personal knowledge of the processes and systems involved in the event to be investigated

CMS QAPI Worksheet to Create a Performance Improvement Project Charter

Step 3: Describe what happened

Collect and organize the facts surrounding the event to understand what happened.

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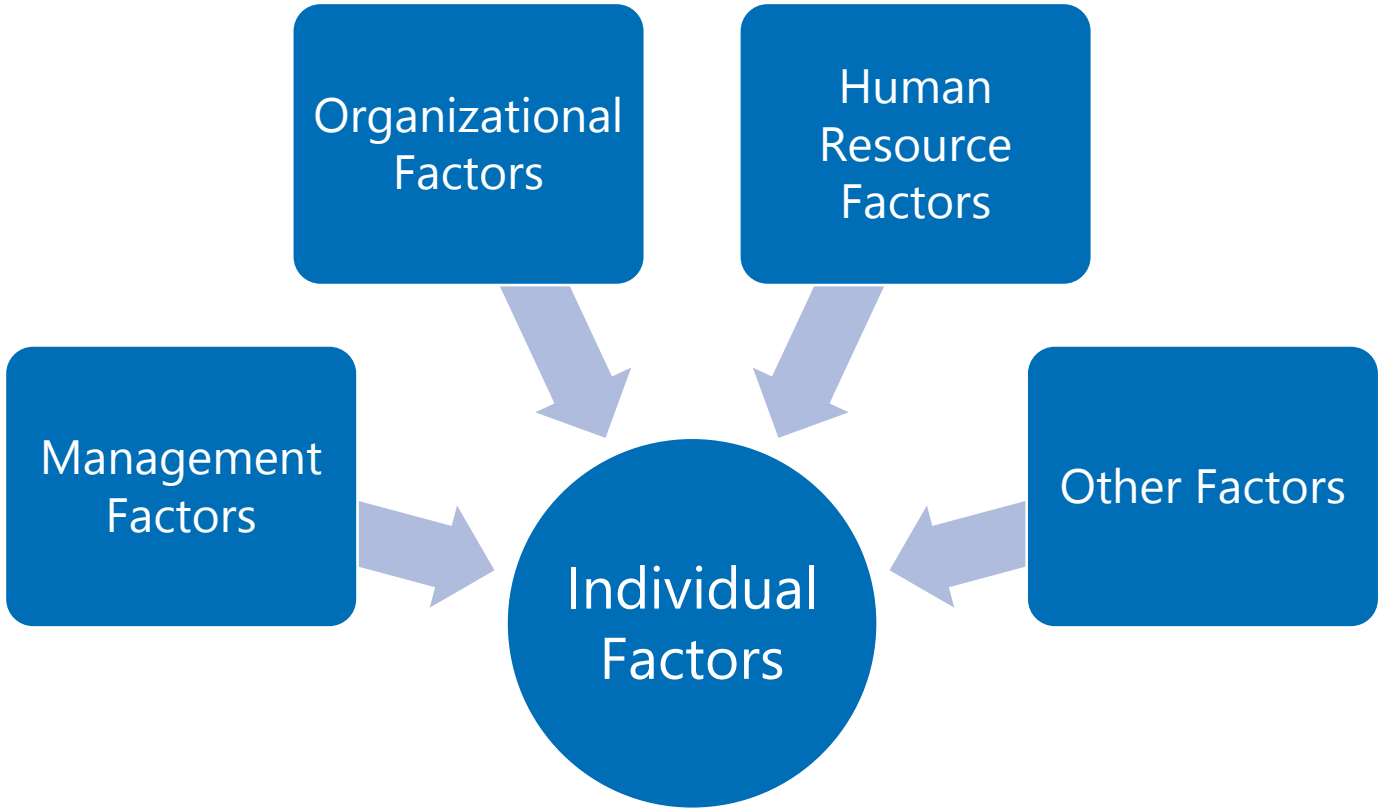
Step 4: Identify the contributing factors

The situations, circumstances or conditions that increased the likelihood of the event are identified.



Helpful Tips

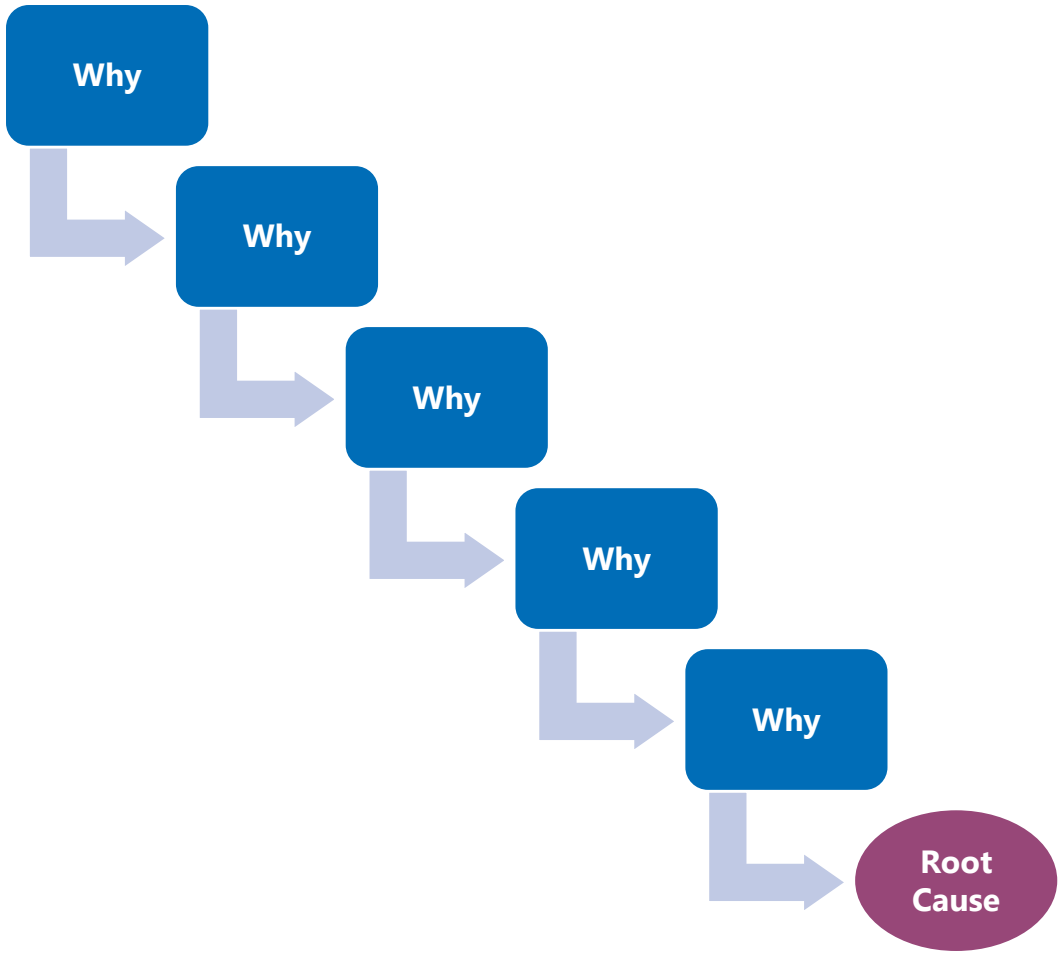
1. Create an event timeline
   - Consider what was happening at each step
   - Whenever possible, use a timeline as the basis for identifying contributing factors
2. Brainstorming
   - Tool to identify contributing factors by asking, "What might have happened that would increase the likelihood the event 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.
3. Avoid "hindsight bias"
   - Knowing the eventual outcome of a timeline can influence how team members view activities leading up to the event.
   - Consider not only those factors that were present and known to those involved at the time – not what was only realized after-the-fact.

Step 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.

The Five Whys

1. The Five Whys is a simple problem-solving technique that helps get to the root of a problem quickly
2. Involves looking at any problem and drilling down by asking: "Why" or "What caused this problem?"
3. One of the simplest tools, easy to complete without statistical analysis



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When is the Five Whys Most Useful?

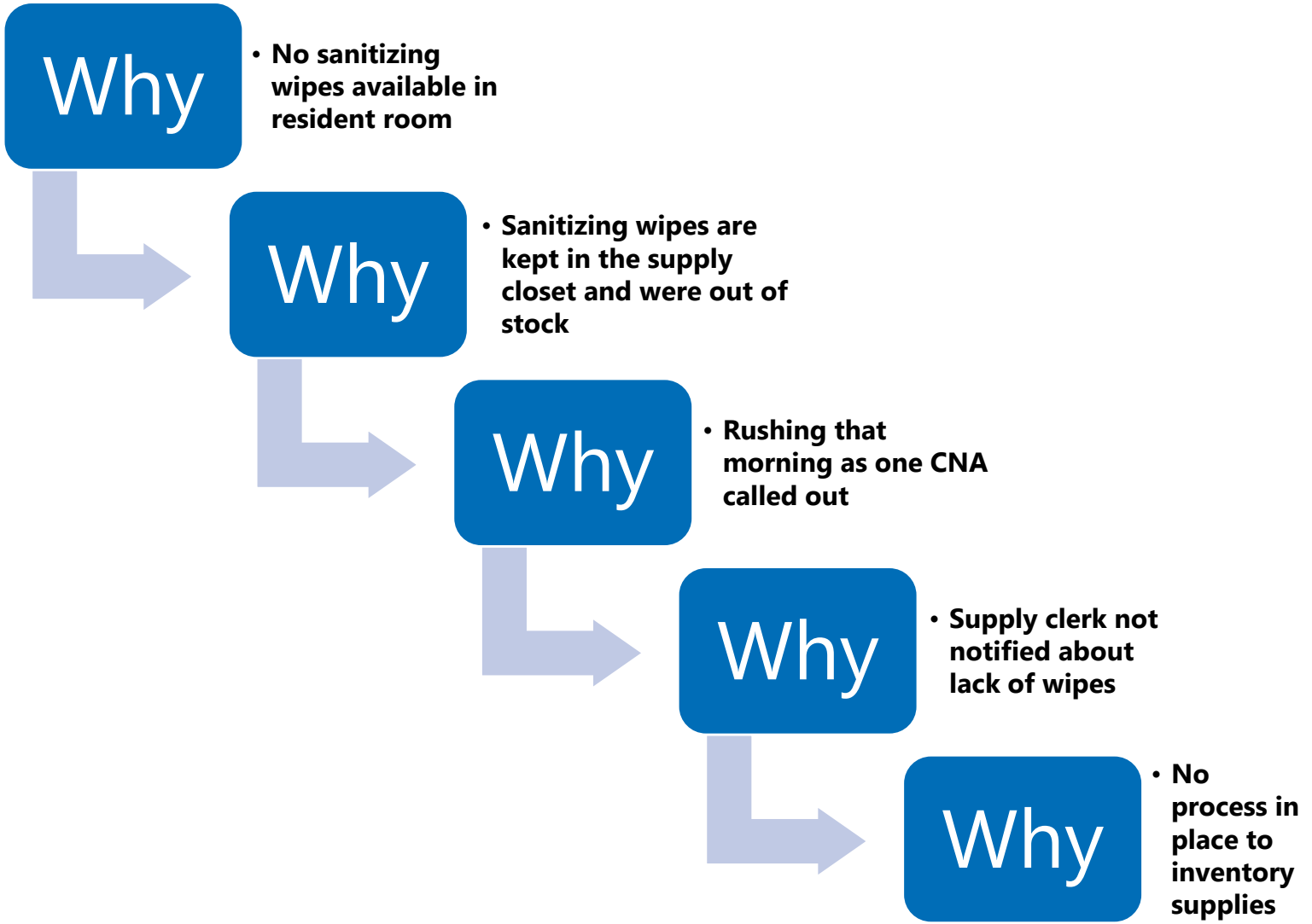
1. When problems involve human factors or interactions – the very nature of long-term care
2. Can also be helpful for environmental or systemic factors, i.e., faulty or improperly serviced equipment
3. In day-to-day provision of care and services; can be used BEFORE an incident occurs

NOTE: In long-term care, we frequently investigate incidents that involve human AND environmental/systemic factors.

CMS QAPI Five Whys Tool for Root Cause Analysis

Five Whys Example

Certified Nursing Assistant (CNA) observed using vital sign machine between resident care without sanitizing



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

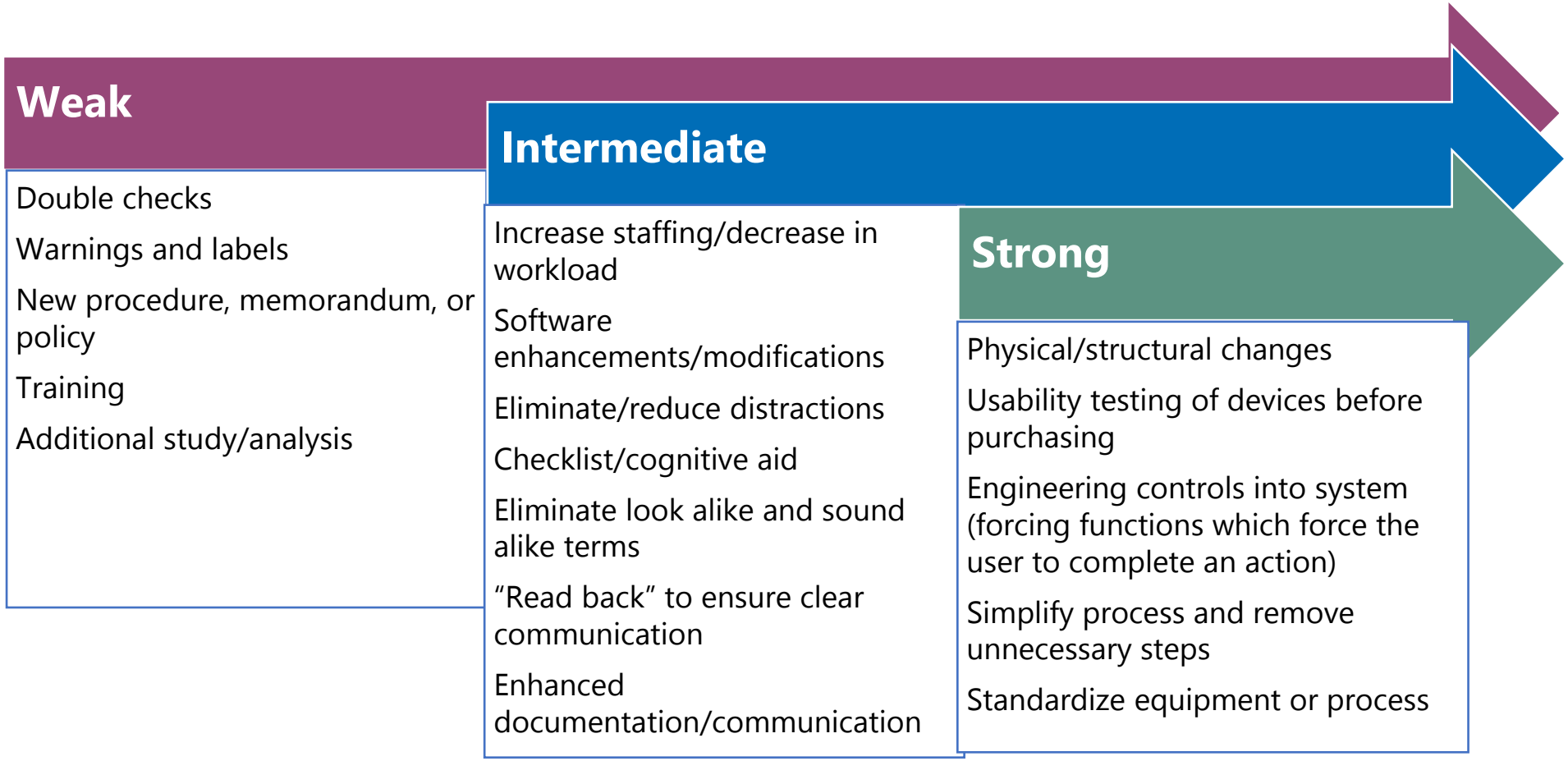
1. The team determines how best to change processes and systems to reduce the likelihood of another similar event
2. Choosing actions that are tightly related to the root cause and that lead to a system or process change will provide sustainability
3. If systems don't exist, they may need to be developed
4. If systems impede quality, they must be changed

Example: Mount holder for sanitizing wipes on vital sign machine

When developing interventions consider questions such as:

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

Take Systematic Action



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

Step 7: Measure the success of change

1. Like all improvement projects, the success of improvement actions is evaluated.
2. The data will require systematic organization and interpretation in order to achieve meaningful reporting and action.
3. The team should set targets for performance in the areas you are monitoring.
4. You will need to develop a plan for data collection, review and analysis.

What you measure should answer these three questions:

Did the recommended corrective actions get done? (i.e., did all staff participate in the training of appropriately donning/doffing facial covering; has the supply of N95 respirator masks been delivered, etc.)

Are people complying with the facility policy and action plan? (i.e., are staff handwashing and disinfecting of equipment between resident use; are weekly audits of handwashing and disinfecting of equipment being completed and analyzed for trends/patterns, etc.)

Have the changes made a difference? (i.e., has the facility seen a reduction in acquired UTIs; has the facility seen a reduction in number of ER visits/hospitalizations due to sepsis, etc.)

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