ENHANCE BARRIER PRECAUTIONS

OVERVIEW

This toolkit will focus on the spread of Multi-Drug Resistant Organisms (MDROs) in a long-term care facility. MDROs are germs that are resistant to antibiotics, meaning the drug has lost its effectiveness and cannot kill the germ.[1] Some MDROs are resistant to many different antibiotics, making the infections they cause very difficult to treat and leading to hospitalizations and, at times, even death. The Centers of Disease Control and Prevention (CDC) estimates that MDROs cause 2,868,700 infections and 35,900 deaths each year.[1]

CONTENTS

WHY ENHANCED BARRIER PRECAUTIONS ARE NEEDED

Residents can either be colonized or infected with an MDRO. Colonized means that the germ is living in or on the resident, but not causing the resident any harm. The resident has no signs or symptoms of infection. However, MDROS can be spread in the facility by colonized residents. Infected means the germ is causing symptoms of an infection. Residents can also be at high risk of getting a MDRO if they have a device that is left inside the body (for example: urinary catheter, breathing tube, or feeding tube) or long-lasting wounds like pressure ulcers.[2]

Residents who are colonized with an MDRO are not often recognized by healthcare staff based on available cultures (tests) or medical history.[3] In one research study, it was shown that almost half of the residents were found to be colonized with an MDRO after testing. But only 4% of those residents had the MDRO written in their medical record. 44% were colonized with a MDRO and no one was aware.[4] This can lead to the silent spread of MDROs.[5]

WHAT ARE ENHANCED BARRIER PRECAUTIONS?

Enhanced Barrier Precautions (EBP) are infection-control practices to prevent the spread of MDROs in nursing homes. The Centers for Medicare and Medicaid (CMS) released QSO-24-08-NH in March 2024 that aligns with the CDC guidance for the use of EBP and incorporated EBP into F-tag 880 Infection Control. Although residents with MDROs can be found in many different types of healthcare facilities, at this time the CDC recommends the use of EBP only for nursing homes.[6]

Traditionally, transmission-based precautions have focused on the organism or specific disease and its mode of transmission. EBP requires healthcare staff to consider risk factors (e.g., wounds and indwelling medical devices) that place the resident at high risk for acquiring a MDRO and not just on transmission of the MDRO. Additionally, residents known to be colonized or infected with MDRO are also placed on EBP to limit its spread.

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At a minimum, Enhanced Barrier Precautions are intended to be used for residents:

- Who are at increased risk of MDRO acquisition, that is, residents with wounds and/or indwelling medical devices even if the resident is not known to be infected or colonized with a MDRO.
- That are colonized or infected with novel (e.g., those newly introduced or emerging in a locality or region) MDROs or MDROs targeted by CDC. CDC EBP guidance also provides facilities and jurisdictions the flexibility to implement EBP for residents colonized or infected with additional MDROs that may be epidemiologically important locally. Determinations about an organism being epidemiologically important may be influenced by factors that include: local epidemiology, presence of ongoing or past outbreaks, propensity for transmission in healthcare facilities, association with severe outcomes, or targeting for local prevention efforts.[6]

  Examples of MDROs currently targeted by CDC include:

  - Pan-resistant organisms (i.e., resistant to most or all antibiotics or antifungals)
  - Carbapenemase-producing carbapenem-resistant Enterobacterales (CP-CRE)
  - Carbapenemase-producing carbapenem-resistant Pseudomonas (CP-CRPA)
  - Carbapenemase-producing carbapenem-resistant Acinetobacter baumannii (CP-CRAB)
  - Candida auris[6]

  Examples of MDROs that might be epidemiologically important locally:

  - Methicillin-resistant Staphylococcus aureus (MRSA),
  - ESBL-producing Enterobacterales,
  - Vancomycin-resistant Enterococci (VRE),
  - Multidrug-resistant Pseudomonas aeruginosa,
  - Drug-resistant Streptococcus pneumoniae

WHY HIGH-CONTACT RESIDENT CARE ACTIVITIES REQUIRE ENHANCED BARRIER PRECAUTIONS

Resident-to-resident spread of MDROs in skilled nursing facilities occurs, in part, by healthcare staff who may carry and spread MDROs on their hands or clothing during resident care activities.[7] EBP recommends gown and glove use for certain residents during specific high-contact resident care activities associated with MDRO transmission.[3]

High-Contact Resident Care Activities Include:

- Dressing
- Bathing/showering
- Transferring
- Providing hygiene (brushing teeth, combing hair, and shaving)
- Changing linens
- Changing briefs or assisting with toileting
- Device care or use: central vascular lines (including hemodialysis catheters), indwelling urinary catheter, feeding tube, tracheostomy tubes
- Wound care, care of any skin opening requiring a dressing[6]

Standard Precautions still apply while using EBP. For example, if splashes and sprays are anticipated during the high-contact care activity, face protection should be used in addition to the gown and gloves.[6]

In terms of wounds, the main focus of EBP is on chronic (long-lasting) wounds and not shorter-lasting wounds, such as skin tears. Examples of chronic wounds include pressure ulcers, diabetic foot ulcers, unhealed surgical wounds, and chronic venous stasis ulcers.[6]

Contact Precautions are recommended if the resident has acute diarrhea, draining wounds, or other sites of secretions or excretions that are unable to be covered or contained or for a limited period of time during a suspected or confirmed MDRO outbreak investigation. If neither criterion is met and the resident does not have another indication for Contact Precautions, then EBP could be used, unless otherwise directed by public health authorities.[6]

OTHERS WHO MAY NEED TO USE ENHANCED BARRIER PRECAUTIONS

EBP is not intended to be used just by nursing staff. Physical and occupational therapists should also use gowns and gloves when working with residents on EBP in the therapy gym or in the resident's room if they anticipate prolonged, close body contact where transmission of MDROs to the therapist's clothes is possible.[6]

Since changing linen is considered a high-contact resident care activity, gowns and gloves should be worn by Environmental Services Staff (EVS) if they are changing the linen of residents on EBP and could be considered for responsibilities that involve extensive contact with the resident or the resident's environment. Gown and glove use by EVS should be based on facility policy and for anticipated exposures to body fluids, chemicals (per manufacturer's instructions), or contaminated surfaces.[6]

HOW LONG SHOULD ENHANCED BARRIER PRECAUTIONS REMAIN IN PLACE?

Because residents can remain colonized with an MDRO for a long period of time, EBP are to be used by healthcare staff for as long as the resident remains in the facility or until resolution of the wound or discontinuation of the indwelling medical device that placed them at higher risk.[6] In addition, EBP can be used as long as the resident does not develop a condition that would require Contact Precautions, such as acute diarrhea, draining wounds, other drainage that is unable to be covered or contained, or a specific infection that requires Contact Precautions.[6]

BENEFITS OF ENHANCED BARRIER PRECAUTIONS FOR RESIDENTS

EBP offers a least restrictive environment for residents with, or at risk for, MDROs to be able to participate in activities in their communities. EBP does not require single-room isolation. EBP allows residents to participate in group activities, residents can share meals with other residents or their families/friends in shared dining areas and they do not have to remain in their room.[6]

KEY DEFINITIONS

Antibiotics: drugs that kill certain kinds of germs called bacteria and stop their growth.[8]

Colonization: refers to the presence of microorganisms on or within body sites without detectable host immune response, cellular damage, or clinical expression.[8]

Enhanced Barrier Precautions: an infection control intervention designed to reduce transmission of multidrug-resistant organisms (MDROs) in nursing homes. Enhanced Barrier Precautions involve gown and glove use during high-contact resident care activities for residents known to be colonized or infected with a MDRO as well as those at increased risk of MDRO acquisition (e.g., residents with wounds or indwelling medical devices).

Germs: a microorganism, especially one which causes disease. These include bacteria, viruses, fungi, protozoans and parasites.[8]

Huddles: a short daily meeting for healthcare team members to review their patient care and share informational updates.

Just-in-time feedback: giving staff the critique, encouragement, and guidance as soon as they need it, in real time.

Medical Director: means a physician who oversees the medical care and other designated care and services in a health care organization or facility. Under these regulations, the medical director is responsible for coordinating medical care and helping to implement and evaluate resident care policies that reflect current professional standards of practice.[8]

MDRO: microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents. Although the names of certain MDROs describe resistance to only one agent, these pathogens are frequently resistant to most available antimicrobial agents.[8]

Pan-resistant Organisms: microorganisms that are resistant to most or all antibiotics or antifungals.

Rounding: an intentional act conducted with a clear purpose for the benefit of the resident and/or staff.

Shift Coach: a program developed to help infection preventionists strengthen infection control practices and to develop mutual accountability through a feedback loop to monitor adherences to key practices.

QAPI: is the coordinated application of two aspects of a quality management system: Quality Assurance (QA) and Performance Improvement (PI).

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GLOSSARY OF ACRONYMS

ABHR: Alcohol-based hand rub

CDC: Centers for Disease Control and Prevention

CMS: Centers for Medicare and Medicaid Services

CP: Contact Precautions

EBP: Enhanced barrier precautions

ESBL: Extended-spectrum beta-lactamases

EVS: Environmental Services Staff

HCP: healthcare personnel

ICAR: Infection Control Assessment and Response

IP: Infection Preventionist

IPC: Infection Prevention and Control

MDRO: Multi-drug resistant organisms

MRSA: Methicillin-resistant Staphylococcus Aureus

OSHA: Occupational Safety and Health Administration

PDSA: Plan-Do-Study-Act

PPE: Personal Protective Equipment

VRE: Vancomycin-resistant Enterococcus

QAPI: Quality Assurance (QA) and Performance Improvement (PI)

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DIFFERENCES BETWEEN STANDARD PRECAUTIONS, CONTACT PRECAUTIONS, AND ENHANCED BARRIER PRECAUTIONS[6]

Precautions	Applies to	PPE Used for these Situations	Required PPE	Room Restriction
Standard Precautions	All residents	Any potential exposure to: • Blood • Body Fluids • Mucous membranes • Non-intact skin • Potentially contaminated environmental surfaces or equipment	Depending on anticipated exposure: Gloves, gown, facemask, or eye protection (Change PPE before caring for another resident)	None
Enhanced Barrier Precautions	All residents with any of the following: • Wound and/or indwelling medication devices (e.g., central line, urinary catheter, feeding tube, tracheostomy, ventilator) regardless of MDRO colonization status • Infection or colonization with a MDRO *when Contact Precautions do not otherwise apply*	During high-contact resident care activities: • Dressing • Bathing/showering • Transferring • Providing hygiene • Changing linens • Device care or use: central line, urinary catheter, feeding tube, tracheostomy, ventilator • Wound care: any skin opening requiring a dressing	Gloves and gown prior to the high-contact care activity (Change PPE before caring for another resident) (Face protection may also be needed if performing activity with risk of splash or spray)	None
Contact Precautions	All residents infected or colonized with an MDRO *in any of the following situations:* • Presence of acute diarrhea, draining wounds, or other sites of secretions or excretions that are unable to be covered or contained. • For a limited time period, as determined in consultation with public health authorities, on units or in facilities during the investigation of a suspected or confirmed MDRO outbreak. • When otherwise directed by public health authorities.	Any room entry	Gloves and gown; don before room entry, doff before room exit (Change PPE before caring for another resident) (Face protection may also be needed if performing activity with risk of splash or spray)	Yes, except for medically necessary care

ENHANCED BARRIER PRECAUTIONS

Communication Strategies

Communication with everyone who will be affected by putting Enhanced Barrier Precautions (EBP) into practice is important. Staff need to know the facility's expectations about hand hygiene and gown/glove use, have initial and refresher training, and access to appropriate supplies.[1]

CONTENTS

STAFF

Communication to staff about EBP and the dangers MDRO's pose to residents and staff will help to explain the "why" and set the stage for greater understanding and adoption of EBP.

1 **Townhall or unit meetings** with staff to explain what the changes will be with EBP and why.

- Include all departments and explain how each will be impacted.
- Develop talking points, such as:
  - Multidrug-resistant organism (MDRO) transmission is common in skilled nursing facilities, contributing to significant resident illness and death and increased healthcare costs.
  - EBP are an infection-control intervention designed to reduce transmission of resistant organisms that employs targeted gown and glove use during high-contact resident care activities.
  - EBP may be indicated (when Contact Precautions do not otherwise apply) for residents with any of the following:
    - Wounds or indwelling medical devices, regardless of MDRO colonization status
    - Infection or colonization with an MDRO.
  - Standard Precautions, which are a group of infection prevention practices, continue to apply to the care of all residents, regardless of suspected or confirmed infection or colonization status.[1]

2 **Huddles** to briefly review and remind staff of the different parts of EBP, and to ask for questions and feedback.

3 **Posters**

- CDC Enhanced Barrier Precautions door sign (if using to identify "who" is on EBP)
  - English
  - Spanish

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- CDC EBP Steps Poster — reminds staff what to do and when to use EBP.
- CDC Enhanced Barrier Precautions Letter to Nursing Home Staff

LEADERSHIP

Having buy-in from facility leadership is important when introducing any new practice. Their support and communication to staff of their expectations will be needed.

It is important that facility leaders (administrator, director of nursing, medical director) understand why the practice is needed and how it will affect staff, residents, families, workflow, supplies, and the budget. Before meeting with leadership, develop talking points:

- Explain what MDROs are and how they can be silently spread and why current practices such as Standard and Contact Precautions are not sufficient.
- Focus on the greater convenience to residents and families as they can attend more group activities and experience less isolation.
- Provide infection control data from facility surveillance reports on MDROs present in the facility.
- Contact your local health department to discuss what MDROs they recommend EBP be used for based on facility surveillance and local spread.
- Specify how many residents will be placed on EBP and why.
- Explain impact on all departments.
- Indicate if any additional equipment (i.e., PPE carts/holders) or supplies (gowns, gloves) will need to be purchased.
- Discuss setting up a plan to put EBP into place - involve QAPI committee.
- CDC - Nursing Home Leadership Letter

RESIDENTS AND FAMILIES/RESPONSIBLE PARTIES

Residents and their families/responsible parties need to be informed of the facility use of EBP. This is especially important if staff have not been routinely using gowns and gloves during care. The sudden use of personal protective equipment (PPE) without explanation may cause unnecessary concern about the health status of the resident. Understanding that the use of PPE protects the resident from acquiring other residents' germs and protects the staff from exposure to germs and spreading them to other residents is important.

1 **Develop talking points** for use with Resident Council and/or Family Council.

- Explain what MDROs are and why it's important ot prevent their spread.
- Discuss use of PPE to help protect residents and staff and prevent spread to other residents.
- Explain that EBP will not require single bedroom, residents may participate in group activities and use shared dining rooms so they can eat with other residents, families, and friends and there is no room restriction.
- Explain and demonstrate how residents and families can help prevent the spread of germs, including MDROs, when they visit.
    - Hand hygiene

- CDC How We Keep Our Residents Safe Poster
  - English
  - Spanish
- CDC Keeping Residents Safe - Use of Enhanced Barrier Precautions letter
- AHCA Template Letter for Families

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ENHANCED BARRIER PRECAUTIONS
OVERVIEW

Training staff on Enhanced Barrier Precautions (EBP) will not be a one-time occurrence. The team must plan for initial and refresher training.

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A variety of teaching techniques can be applied, such as:

- **Just-in-time, On-the-job**
- **On unit training sessions** - training content can be broken into multiple sessions
- **Accessible information** when needed (i.e., posters on donning/doffing PPE, EBP Steps)
- **Mobile training** - carts, iPad for video viewing
- **Active** - return demonstration

KEY POINTS TO INCLUDE

When training on EBP, the following key points should be included:

- Define MDROs
- Explain how MDROs are spread and why controlling the spread is important
- Discuss why existing precautions such as Standard and Contact are not sufficient
- Describe EBP
- What qualifies a resident to be placed on EBP
- What steps the healthcare staff should take when caring for a resident on EBP
- When a resident may need to be placed on Contact Precautions
- The staff role in maintaining an adequate supply of PPE in the PPE cart/holder
- Discuss how EBP applies to different disciplines (e.g., therapy, environmental services)

TEACHING MATERIALS

Training resources below can be utilized by the team to train staff on Enhanced Barrier Precautions:

- CDC Enhanced Barrier Precautions In Nursing Homes (3:35)

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- CDC *Continuing Education Webinar: Implementation and Use of Enhanced Barrier Precautions in Nursing Homes*. November 15, 2022:
    - YouTube Video - Implementation and Use of Enhanced Barrier Precautions in Nursing Homes (59:10)
    - Slides - Enhanced Barrier Precautions in Skilled Nursing Facilities
- Table - Summary of PPE Use and Room Restriction When Caring for Residents in Nursing Homes
- CDC EBP Pocket Guide - for staff for easy reference
- CDC Updates Enhanced Barrier Precautions in Infection Prevention - flyer

TEACHING SCENARIO

As part of the Long-Term Care National Infection Prevention Forum created from a grant from the Center For Disease Control Project First Line to the American Health Care Association, clinical case scenarios have been developed that can be used as a teaching tool.

- EBP Clinical Scenario with scenario description and questions (i.e., student copy)
- EBP Clinical Scenario with answers, supporting evidence, and case review

COMPETENCY VALIDATION FOR PPE

The North Carolina Statewide Program for Infection Control & Epidemiology (SPICE) has many resources on general infection control practices. They've developed a competency validation checklist for donning/doffing all PPE, that could be used to show competency specific to the gown/glove components of EBP.

- Competency Validation for PPE SPICE

FREQUENTLY ASKED QUESTIONS (FAQs)

These FAQs were created to address questions about Enhanced Barrier Precautions as defined in the CDC guidance Implementation of Personal Protective Equipment (PPE) in Nursing Homes to Prevent Spread of Multidrug-resistant Organisms (MDROs).

- Frequently Asked Questions (FAQs) about Enhanced Barrier Precautions in Nursing Homes | LTCFs | CDC

ROLE OF THE MEDICAL DIRECTOR[3]

When initiating any changes affecting resident care, the medical director should be consulted and involved. After all, the medical director serves as the physician responsible for the overall care and clinical practice carried out at the facility. In this role, the medical director can assist with:

- Developing and managing quality initiatives
- Providing information that helps others (including facility staff, practitioners, and those in the community) understand and provide care

- Making recommendations and approving relevant policies and procedures
- Developing and disseminating key information and education[2]. This could be useful for informing both in-house and community medical providers of the implementation of EBP.

IMPLEMENTATION TOOLS FOR ENHANCED BARRIER PRECAUTIONS

While implementation of EBP for all residents who meet criteria is the goal, this may not initially be feasible for your facility. If, during the development of your implementation plan, challenges arise for facility-wide implementation, you may choose to implement EBP on a unit or wing first, preferably one where most residents would meet criteria for the use of EBP (e.g., residents with indwelling medical devices, wounds, or known MDRO infection or colonization).[2]

Below are some tools that can assist with implementation.

- Implementation of Enhanced Barrier Precautions in Nursing Homes Presentation
- Plan-Do-Study-Act (PDSA) Cycle Template - Plan and document your progress with tests of change conducted as part of chartered performance improvement projects.
- Sustainability Decision Guide helps teams determine if the interventions and changes they are making are sustainable. This guide will help identify why interventions may not be sustainable and therefore need to be reconsidered.

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ENHANCED BARRIER PRECAUTIONS

Assessment and Evaluation

ASSESS CURRENT FACILITY PRACTICES

Infection Preventionists can assess current facility infection prevention and control practices through a variety of methods.

CONTENTS

1. **Rounding** - walking through the nursing units, kitchen, laundry, and other areas of the facility and observing staff infection prevention and control activities. Based on the findings, the IP can provide just-in-time training to the staff.
2. **Use of shift coaches -** shift coaches are usually a member of the nursing staff that have an interest in infection prevention and control and want to help improve resident care.
3. **Secret Shoppers** - can be anyone in the facility, including volunteers. Secret shoppers are trained by the IP on how to perform and document infection-control observations. By utilizing others in the facility, rather than just the IP to make observations, a more well-rounded picture of staff compliance can be made.
4. **Use of tools** - tools help to ensure the data is collected in the same way each time and provide for a more efficient method of documentation.

ASSESSMENT TOOLS

One of the most common assessment tools is the CDC's Infection Control Assessment and Response (ICAR). It is a comprehensive tool intended to help assess infection prevention and control practices in long-term care settings and guide quality improvement activities. The tool includes a series of modules that individuals performing the assessment may use depending on the focus of the assessment. Modules can be selected based on allotted time, facility-specific concerns, or applicability to an organism of concern.[1] The ICAR can be completed by the facility, or it can be facilitated by a member of the state department of health or another entity.

Instructions and Helpful Tips for the Infection Control Assessment and Response (ICAR) Tool for General Infection Prevention and Control (IPC) Across Settings

ICAR Assessment Tool

- **ICAR Section 1 | Demographics** - Collects the specific facility characteristics and critical systems information. These questions often require that the facility look up answers or consult with staff members and thus pre-collection often saves time during the actual assessment.
- **ICAR Section 2 | Facilitator Guide Assessment Modules** - Includes various assessment modules for review during a discussion of policies and practices. These sections cover a variety of infection-prevention practices. Most modules also include corresponding observation components.
- **ICAR Section 3 | Observation Forms** - Intended for use during observations of infection prevention practices. These sections are meant to assess how some of the discussed policies and practices are being implemented. If this tool is being used as part of an in-person assessment, facilitators might consider expanding observations beyond what is listed in this tool.

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READINESS TOOLS

Prevention of MDRO transmission in nursing homes requires more than just proper use of personal protective equipment (PPE) and room restriction. Guidance on implementing other recommended infection prevention practices (e.g., hand hygiene, environmental cleaning, proper handling of wounds, indwelling medical devices, and resident care equipment) are available in CDC's free online course — Nursing Home Infection Preventionist Training. Nursing homes are encouraged to have staff review relevant modules and to use the resources provided in the training (e.g., policy and procedure templates, checklists) to assess and improve practices in their facility.[2]

EVALUATING COMPLIANCE

Below are steps to perform when evaluating compliance with Enhanced Barrier Precautions.

1 Perform process surveillance to monitor EBP adherence.

- Observations should be scheduled at different times on different days.
- Include a variety of staff being observed to get an accurate picture of compliance.
- Be sure the method of data collection is consistent.
- Utilize the same data collection tools and methods each time.

⇒ The CDC EBP Implementation - Observations Tool should be used only after you have established the use of Enhanced Barrier Precautions (EBP) in your facility (either in a unit, wing, or entire facility), and can be customized to meet the needs of the skilled nursing facility/nursing home. This tool is designed to support conducting observations of healthcare personnel (HCP) using EPB during high contact resident care activities as part of auditing and feedback. Responses should refer to current practices in a facility.[3]

Enhanced Barrier Precautions (EBP) Implementation - Observations Tool (For use in Skilled Nursing Facilities / Nursing Homes only)

⇒ Enhanced Barrier Precautions Observation Tool Summary Spreadsheet

2 As with any data collected, to be useful, it must be analyzed and then acted upon as necessary.

- Look for trends in the data. Is the data showing improvement in compliance, no change, or a decrease.
- Are there certain disciplines, a time of day or tasks that seem to score the lowest?
- Consult with staff to determine the barriers to successful practice. Are the barriers:

⇒ Operational - missing precaution signs on resident room doors, lack of gowns/gloves, or

⇒ Educational - staff have a true lack or misunderstanding of EBP. The resulting information should be shared with administrative and frontline staff and the QAPI Committee. The QAPI Committee can provide feedback on the information provided and assist in development of the corrective action plan. Be sure to document your data, analysis, and any action plan(s).

- Here is a corrective action tool that can be used to develop an action plan for any process improvements that may need to be made.

Infection Prevention and Control Action Plan Template[4]

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ENHANCE BARRIER PRECAUTIONS

Turning Data Into Insights and Actions

USING DATA TO GAIN INSIGHT AND CREATE ACTION

Data by itself is not enough to create change or improvements in outcomes. You need to collect the right data for your specific problem or goal and gain insight from the data to determine what needs to be changed and how.

CONTENTS

Use the following steps to help make your QAPI program lead to actionable improvements:

1 **Identify the problem and set a goal.** Your quality assurance program should help you determine areas for improvement. Goals need to be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound).

2 **Include measurable and meaningful improvements.** Data must be measurable. You may obtain either from your medical records, chart reviews, or from another handwritten data collection tool/log. These become your metrics, and you may need to collect more than one or more than one kind of metric depending what you are attempting to measure.

- Process measure - a measure of adherence to the action, how many times an activity is performed (example: communication log, observation log)
- Outcome measure - effectiveness of an activity or service (example: rates of URI, antibiotic use)

3 **Collect and analyze the data/metrics**, remove any errors or inconsistencies, and then find a way to visualize the data to identify trends or patterns.

4 **As a team use the data to develop insights** to develop actionable changes.

- Actions need to be clear, concise, and easy to understand.
- Best developed with staff input for how to implement.

5 **Implementing strategies for change may take a few iterations to be successful.** Stick with it and learn from "failure."

6 **Share the successes and learning experiences with the team** to get input but also so they can see why their work matters and that their efforts made a difference.

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Exercises are a key element in turning data into action. Staff need the opportunity to practice, thereby building their analytical skills and applying them in the workplace. These realistic scenarios simulate the processes and challenges of collecting and recording quality data. They are also productive activities that encourage interactivity and lead to staff's use of data.

SCENARIO

Infection Preventionist Danielle is worried. The facility admitted resident C with Candida auris (C. auris) a week ago. The facility already had two other residents on EBP for C. auris. Resident D on the same unit has just been diagnosed with C. auris. Resident D has not been out of the facility, but has an indwelling urinary catheter which put him at risk for acquiring the MDRO. Danielle believes this is an in-house acquired infection.

Danielle brings her concern to the QAPI team. The team agrees this is something they need to better understand. They agree to track two elements over the next few weeks.

Process Measure

⇒ How often are staff performing hand hygiene correctly during observations?

⇒ How often are staff wearing PPE properly when performing high-contact resident care activities on residents that have been placed on EBP on the unit?

Danielle uses her shift coaches to help do random observations on different shifts, assigning 3 per shift. They collect this data from observation logs and turn it in at the end of each shift. This information is tracked by shift and by day.

Outcome Measure

Danielle uses the medical records of the residents on the unit to determine if all the residents that meet the requirements for EBP have been placed on EBP. She takes the data and creates a spreadsheet from the observation data. *But does this tell the whole story?*

Data Review - By Unit during week 1 observation period:

Unit	HH Performed	HH Not Performed	PPE Worn Correctly	PPE Not Worn
North	46/63	18/63	49/63	13/63

There is clearly a hand hygiene and donning/doffing of PPE problem on the North Unit. While she starts planning in services for all shifts, she takes time to break it down further.

Data Review - By Unit / Shift during week 1 observation period:

		Hand Hygiene		PPE Wearing (when appropriate)	
Unit	Shift	Performed Correctly	Not Performed Correctly	Worn Correctly	Not Worn Correctly
North	Day	19/21	2/21	20/21	1/21
	Evening	6/21	15/21	10/21	11/21
	Night	20/21	1/21	19/21	2/21

This shows the problem is specific to the evening shift in the North unit.

Residents with qualifying factors for placement on EBP from medical record during week 1 observation period:

Unit	Residents with Qualifying Factors	Residents Currently on EBP
North	6	4

Additional preliminary data from week 1 shows that two residents on the unit that should have been placed on EBP were not. One resident had developed a stage 3 pressure ulcer and another resident had a newly placed PICC line.

Based on this short-term data, she decides to prioritize the following:

- Focus on North unit evening staff.
- Ask the weekend unit nurse to use huddle time to learn more about their knowledge and attitudes about hand hygiene and wearing PPE.

Plan:

After reviewing the data, actionable steps include:

- Conduct three 5-minute training sessions to address knowledge deficit during huddles.
- Share the data related to hand hygiene performance and appropriate use of PPE on this shift compared to other shifts.
- Work 1:1 with staff for part of three evenings to identify barriers and ask for ideas for solutions.
- Work with Unit Manager and the three shift charge nurses to develop system to accurately identify residents with qualifying factors for placement on EBP and implementation of EBP.
- Work with QAPI team to determine implementation of suggested solutions.
- Follow up again with observations to ensure the processes are working.

Continuing to track these metrics will be important to see if this was a bad week or a pattern and to see if the interventions started are making a difference.

Key Take Aways

⇒ ***Data needs to be measurable and specific enough to identify where a potential cause of the problem is.***

⇒ ***Help staff understand how to use data for decision-making. That way, staff will see that quality data does not end with collection — it also needs to be analyzed and put to use.***

⇒ ***The plan needs to be as specific as possible to the problem identified.***

⇒ ***People whom the change impacts need to be part of the solution.***

⇒ ***Data trends over time will be used in the assessment of problems and evaluation of the solutions.***

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ENHANCE BARRIER PRECAUTIONS

QAPI

QAPI is the coordinated application of two aspects of a quality management system: Quality Assurance (QA) and Performance Improvement (PI). QAPI takes a systematic, comprehensive, and data-driven approach to maintaining and improving safety and quality in nursing homes while involving all nursing home caregivers in practical and creative problem solving.[1]

CONTENTS

QAPI GUIDE[2]

The QAPI at a Glance guide is a resource for nursing homes striving to embed QAPI principles into their day-today work of providing quality care and services. This guide will lead the team on how to succeed in developing and maintaining their performance improvement plans.

QAPI PROCESS TOOL FRAMEWORK

The Process Tool Framework includes all the tools that a long-term care setting needs to maintain their performance improvement plan and, in the case of an outbreak, manage their goals.

Worksheet to Create a PIP Charter clearly establishes the goals, scope, timing, milestones, and team roles and responsibilities for an Improvement Project (PIP).

PIP Launch Checklist - Helpful hints for project leaders, managers, and coordinators - use this checklist to make sure you have everything you need in place when you start a project. Ensuring you have these steps in place can help you save time and confusion down the road.

Plan-Do-Study-Act (PDSA) Cycle Template - Used to plan and document your progress with tests of change conducted as part of the performance improvement project.

Goal Setting Worksheet - Goal setting is important for any measurement related to performance improvement.

Brainstorming, Affinity Grouping, and Multi-Voting Tool includes approaches for generating, categorizing, and choosing among ideas from a group of people. Using these techniques encourages every person within the group to contribute, instead of just one or two. They spark creativity in group members as they listen to the ideas of others and generate a substantial list of ideas, rather than just the few things that first come to mind. Finally, the techniques allow a group of people to choose among ideas or options thoughtfully.

CORRECTIVE ACTION TOOL

Here is a corrective action tool that can be used to develop and monitor progress towards goals.[3]

- Infection Prevention and Control Action Plan Template[2]

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CHANGE CHAMPION QUALITIES[4]

When identifying champions to assist with infection prevention and control efforts, or any change efforts, these qualities have been identified that may help your efforts.

- Relationship and community builder.
- Trusted by peers.
- Proactive and resourceful.
- Mentor to others/viewed as leader by colleagues.
- Embedded in the daily workflow.
- Able to navigate the organization's social and cultural hierarchies.
- Early adopter when change was needed previously.
- Strong communicator with peers.

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[1]CMS. QAPI Description and Background. Last modified 09/06/2023. Accessed 7-2-24.

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