



# Infection Control Advocate & Resident Education (ICARE) Program

## Implementation Guide: Nursing Home Leadership & Staff



**The University of North Texas Health Science Center  
Center for Older Adults**

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## **NURSING HOME INFECTION PREVENTION & CONTROL: WHERE WE ARE AND WHERE WE NEED TO GO**

Nursing homes experience major challenges and increased responsibility in protecting their community from infection and disease. At the end of 2019, nursing home communities worked to implement the final “Mega Rule” phase, incorporating major regulatory changes in infection control and quality care.<sup>1</sup> It was thought that there would be time to work out issues and gradually make changes. However, the emergence of the highly contagious SARS-CoV-2 virus and COVID-19 rapidly ushered in a greater level of infection control needs. Nursing home communities were devastated, and over 200,000 residents and staff in long-term care facilities died from COVID-19 in 2020 and 2021.<sup>2</sup>

The COVID-19 pandemic highlighted not only gaps in the application of infection prevention and control (IPC) standards but also in the standards themselves. Throughout nursing home communities, stringent IPC standards and procedures negatively impacted the overall psychosocial well-being of not only residents but also family members, staff, and leadership.<sup>3</sup> An ongoing challenge in nursing home IPC is balancing effective prevention protocols with person-centered practices that respect resident rights. To begin to address this challenge, the Infection Control Advocate and Resident Education (ICARE) program was developed. The ICARE program is an integrated, stepwise quality improvement program that provides nursing home communities with the structure, resources, and tools needed to strengthen IPC while placing ongoing emphasis on person-centered prevention. The ICARE program is based on established infection prevention and control standards and meets CMS regulatory requirements.

## **ICARE OVERVIEW**

### **ICARE GOAL AND OBJECTIVES**

The ICARE program aims to educate, engage, and empower people to promote and practice IPC, respecting the rights and roles of residents and their advocates for the delivery of quality care.

The objectives are to assist participants in understanding the following:

- Basic principles of preventing and controlling the spread of infection and disease in a nursing home environment
- The role of resident rights and infection prevention and control to achieve quality care
- How to engage with the nursing home community to actively implement IPC strategies that preserve resident rights, physical health, and psychosocial health

### **ICARE PROGRAM COMPONENTS**

The ICARE Program consists of two main components: 1) Resident-Centered Infection Prevention & Control and 2) Discussion & Advocacy. The first component of the ICARE program (see Figure 1) focuses on introducing IPC that is person-centered by integrating the basic principles of IPC with six main resident rights: planning, participation, involvement, being informed, communication, and choice (see Figure 2). These concepts are presented to participants through seven short (approximately 15 minutes) case-based lessons available in online and in-person learning formats (see Figure 3; Appendix 1). This component provides the participant with the essential knowledge to practice basic, resident-centered infection control in a nursing home community.

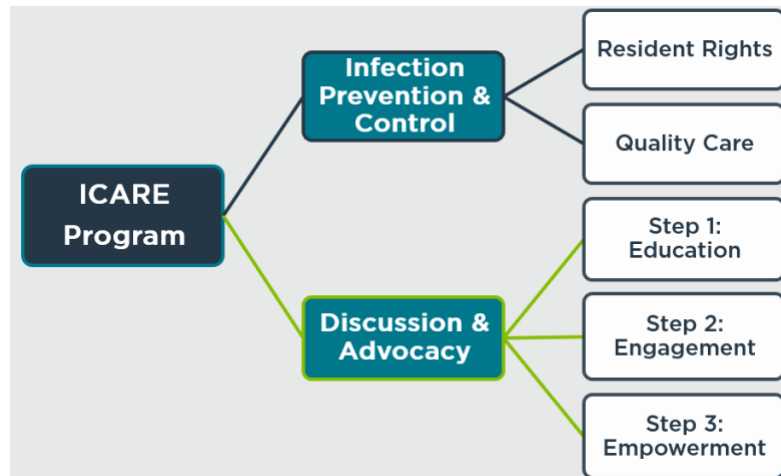


Figure 1. Overview of the ICARE program. Component 1 (Resident-Centered Infection Prevention & Control) and Component 2 (Discussion & Advocacy).

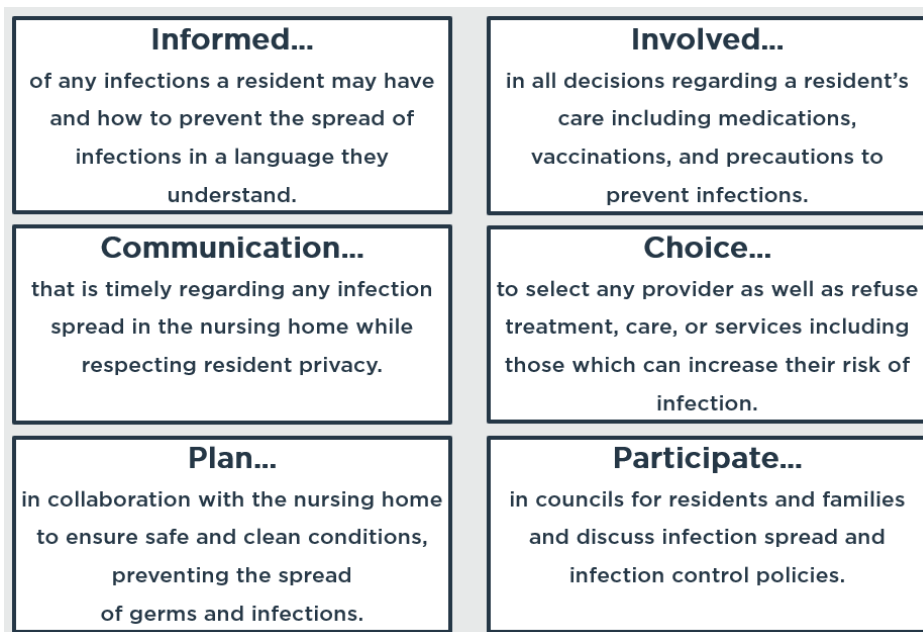


Figure 2. Six resident rights incorporated into the ICARE program.

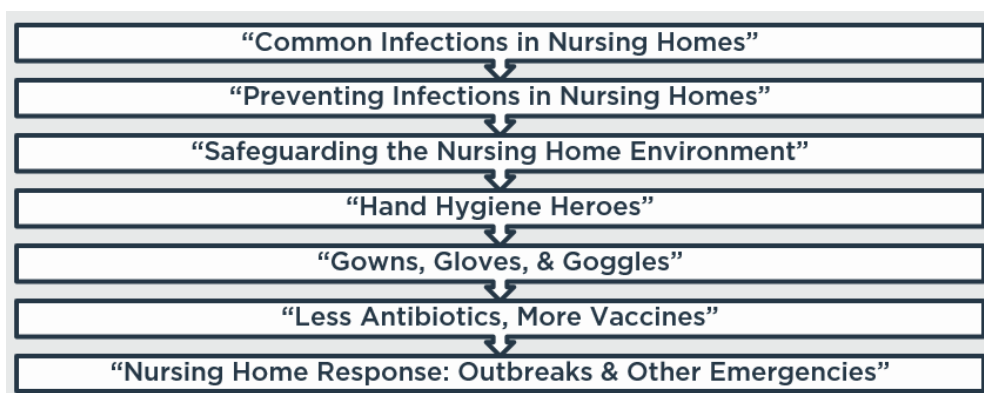


Figure 3. Lesson topics of the ICARE program.

The second component of the ICARE program is Discussion & Advocacy (see Figure 1). This component takes the ICARE program further by presenting the ICARE lesson content and actively involving the participant. Through discussing the ICARE content and using ICARE resources for self-advocacy, participants become actively involved in quality care initiatives beginning with IPC. Discussion & Advocacy proceeds from education, engagement, to empowerment as detailed below.

## ICARE: EDUCATE, ENGAGE, EMPOWER

The ICARE program is presented in three steps: Education, Engagement, and Empowerment. Each step answers a different level of question related to quality care (see Figure 4). These steps communicate to participants that quality care is a progressive journey that requires effort and time for change. The steps also allow participants to move through the ICARE program at a pace that best fits the current stage of culture change in the nursing home.

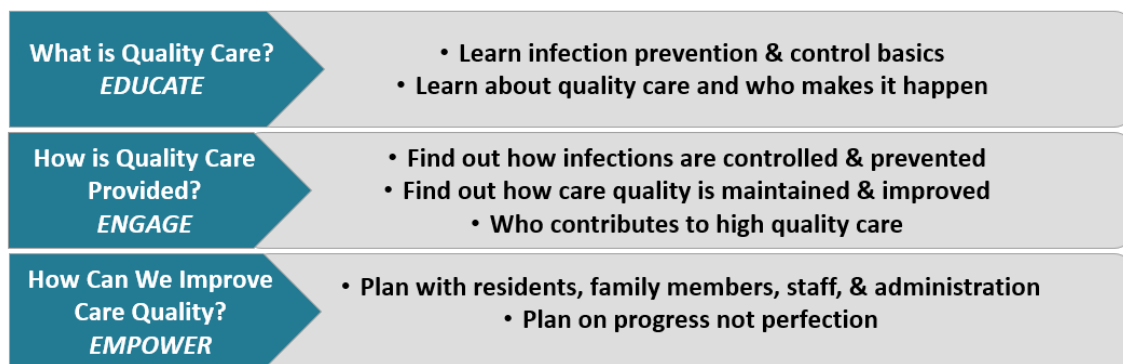


Figure 4. ICARE program steps: educate, engage, and empower. The purpose of each step is shown above.

### Educate

In Step 1 (Education) participants learn the basics of IPC and resident rights and how this relates to quality care. But learning these concepts alone will not result in changes in practice and culture. Instead, change begins when participants discuss the concepts in the



educational lesson and learn how to advocate for actions for quality care. This leads to Step 2, Engagement.

### **Engage**

Engagement includes undertaking actions to understand how quality care is maintained and improved in the nursing home community and who contributes to this process. As participants become more familiar and engaged with quality care in their nursing home community, they are prepared to contribute to this process. This is Step 3, Empowerment.

### **Empower**

Empowered participants plan how they can work with others in the nursing home community to identify barriers to providing the highest quality care and the steps they can work on with nursing home leadership and staff to improve and monitor care quality.

## **ICARE: PARTICIPANTS & ROLES**

All members of a nursing home community can participate and play an active role in implementing the ICARE program. Below, specific details are provided for different ICARE program participants. All participants described have unique, supportive roles in the three ICARE program steps (Educate, Engage, Empower).

### **Nursing Home Residents & Families**

Nursing home residents and their family members are the primary, targeted participants for the ICARE program. Beginning with Step 1 (Educate), the ICARE program's seven learning lessons were designed to provide basic, non-clinical, non-technical infection prevention and control education within the framework of resident rights. Due to its unique approach, all members of a nursing home community including

leadership and staff, can expand their knowledge base through the ICARE lessons.

In step 2, Engagement, nursing home residents and their families play a role in progressively learning about quality assurance and quality improvement processes in their specific nursing home community. Nursing home community members, including leadership and staff work with residents and their families to help them understand the role and purpose of the Quality Assurance and Assessment (QAA) committee, data collected as part of QAA, Quality Assurance and Process Improvement (QAPI), and Process Improvement Projects (PIPs).

In step 3, Empowerment, nursing home residents and their families become partners and actively assist with QAPI and PIPs. This can include assisting with basic process improvement monitoring, such as hand hygiene or cleaning and disinfection of high-touch items in resident rooms.

### **Long-term Care Ombudsmen & Other Advocates**

Long-term care ombudsmen (LTCO) and other resident advocates serve a vital role in the ICARE program by supporting nursing home residents and families through the three program steps. Advocates include nursing home volunteers, public health practitioners, quality care proponents, and other individuals or groups advocating for nursing home safety and quality. In addition, nursing home LTCOs and advocates can assist residents and families in moving through the ICARE program steps in the Discussion and Advocacy component of the program.

In the Education step, LTCO and other advocates can provide the ICARE learning lessons in-person at council or staff meetings. To assist with this, PowerPoint slides with scripts are available for all ICARE lessons on the ICARE website ([ICARE for LTCO and Other Advocates](#)). As LTCO and other advocates must understand the ICARE program

content to teach it to nursing home residents and families, the PowerPoint slides also include additional information on the lesson topic. This additional information is found in the notes section of the PowerPoint slides under the heading “Know Before You Go” and supplements viewing the online ICARE lessons in learning the material. Several resources and references are also provided for the lesson topic in the Reference section of the slides. Lastly, to better understand the unique needs and challenges of the communities they serve, LTCO can partner with public health practitioners, infection preventionists (IP), or quality improvement specialists to better understand and improve infection prevention in nursing home communities.

Unique to the in-person learning of the ICARE lessons are slides at the end of the topic presentation entitled “Discussion” and “Advocacy: Next Steps.” In the Discussion section, the LTCO or other advocate leading the learning lesson poses 3-4 questions that allow learners to better understand and apply the content. The Advocacy section moves participants from learning the content to actively taking steps to enhance care quality. It is important to stress that this process takes multiple steps and takes time. The Advocacy section recommends 2-3 activities that can be done stepwise to enhance care quality in infection prevention and control. For example, under the Engagement step, participants with the assistance of the LTCO or other advocate can have nursing home leadership present how hand hygiene is monitored and improved in the nursing home.

It is vital to emphasize the importance of LTCO and other advocates in supporting nursing home residents and their families in the ICARE program. With this external support, participants will have the opportunity and resources to successfully become involved in care quality, beginning with IPC.

### **Nursing Home Staff**

Nursing home staff, including direct and indirect care staff, also significantly support the ICARE program in a nursing home community. The ICARE program is intended to empower nursing home residents, their families, and nursing home staff. The culture change that ICARE is designed to build requires staff to become integrated into quality care initiatives and leadership. The ICARE learning lessons may help support the IPC knowledge base of nursing home clinical staff and teach basic concepts to non-clinical staff. In addition, it is recommended that nursing home staff become aware of how they can contribute to the three steps of the ICARE program (Education, Engagement, and Empowerment). For example, staff can participate through increased inclusion of certified nursing assistants in the QAA committee or a subcommittee of the QAA.

### **Nursing Home Infection Preventionist**

The nursing home infection preventionist (IP) plays a vital role in integrating resident rights into the nursing home's infection prevention program through the ICARE program. The IP actively plans, promotes, and monitors the implementation of resident-centered infection prevention and control (RC-IPC) with the assistance and support of nursing home leadership and other partners (LTCO and other advocates). In addition, due to the role of the IP within the QAA committee, they serve to bridge both the quality care and IPC elements of the ICARE program. To learn more about integrating RC-IPC into the infection prevention program, please see the section entitled "ICARE and Infection Prevention and Control: Steps to Resident-Centered Infection Prevention and Control".

### **Nursing Home Leadership**

Nursing home leadership plays a very critical role in the ICARE program. Leadership must support and endorse the ICARE program,

its goals, and its objectives for the program to succeed. Determining if the ICARE program would benefit the nursing home community and how to implement the ICARE program requires assessing the facility's current QAA, QAPI status, and IPC plan. For example, does the facility have a strong QAPI plan and program? Has infection control been identified as an issue from monitoring data that needs to be addressed? Does the IPC plan promote the person through RC-IPC? The sections below will help nursing home leadership assess their status and, depending on this status, learn how the ICARE program can be used to improve IPC quality.

## ICARE & QAPI: STEPS TO QUALITY CARE

### QAPI OVERVIEW

QAPI combines meeting compliance standards and regulatory requirements (quality assurance) with continuous, data-driven improvement for resident care that involves everyone in the nursing home community (process improvement). QAPI ensures that nursing home communities are, in fact, communities where people are happy to work and live.

There are five strategic elements to effective QAPI. These elements serve as building blocks that be combined with twelve actions to help nursing homes develop, implement, and sustain QAPI in their communities. These elements and steps were taken from [\*QAPI at a Glance: A Step by Step-by-Step Guide to Implement QAPI in Your Nursing Home\*](#). Please see this guide for more information.

Strategic Element	Action Step
Governance and Leadership	Action 1: Leadership accountability and responsibility. Action 2: Develop a deliberate approach to teamwork.

Design and Scope	Action 3: Take your QAPI pulse with a self-assessment. Action 4: Identify your organization's guiding principles. Action 5: Develop your QAPI plan. Action 6: Conduct a QAPI awareness campaign.
Feedback, Data Systems, and Monitoring	Action 7: Develop a strategy for collecting and using QAPI data. Action 8: Identify your gaps and opportunities.
Process Improvement Projects (PIPs)	Action 9: Prioritize quality opportunities and charter PIPs. Action 10: Plan, conduct, and document PIPs.
Systematic Analysis and Systematic Action	Action 11: Get to the "root" of the problem. Action 12: Take systematic action.

The Center for Medicare and Medicaid Services (CMS) and nursing home Quality Improvement Organizations (QIO) provide numerous resources and tools to help you learn and implement QAPI. Please see Appendix B for resources used in this section and guide.

## **QAPI ASSESSMENT**

A QAPI assessment allows a nursing community to understand better where they are in their QAPI journey, determining the design and scope of the QAPI program. This self-assessment is needed to determine how the ICARE program can benefit the nursing community. A QAPI Self-Assessment tool is available here:

<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/QAPISelfAssessment.pdf>. This self-assessment tool asks organizations to rate how well 24 statements fit their current QAPI status. In completing this assessment, if most of your responses were rated as "Almost There" or "Doing Great", please proceed to the "ICARE: Process Improvement Project" section. This section focuses on integrating the ICARE program into an existing

QAPI program as a process improvement project. If most of your responses were rated as “Not Started,” “Just Starting,” or “On Our Way,” please proceed to the ICARE: Building QAPI below. This section helps you use ICARE to build your QAPI program beginning with infection prevention and control. Once your QAPI program is in place, proceed to the “ICARE: Process Improvement Project” section.

Before beginning, it is highly recommended that you reach out to your QIO to request assistance. QIOs have a great deal of experience and resources to assist you in all aspects of QAPI. Locate your QIO here: <https://qioprogram.org/locate-your-qio>.

## **ICARE: BUILDING QAPI**

The QAPI action steps below include examples of how the ICARE program can better incorporate quality improvement with quality assurance practices in a nursing home community. This process will take time, so be patient and open to change for the long term.

Become familiar with each QAPI action by reading [\*QAPI at a Glance: A Step by Step-by-Step Guide to Implement QAPI in Your Nursing Home\*](#).

### **Leadership Accountability & Responsibility**

A major focus of the ICARE program is creating a community that promotes care quality. This can only happen when nursing home leadership supports active participation in QAPI. Commit to accountability and responsibility for infection prevention and control with the ICARE program:

- *Promote ICARE learning lessons to the nursing home community (residents, families, and staff). ICARE informational handouts for nursing home residents and families can be included in admission packages and community bulletin boards (See Appendix B).*
- *Promote the ICARE program and learning lessons to resident and family council leadership. Communicate that nursing home*

*leadership has an open, ongoing commitment to quality and is accountable for ensuring and improving care quality in a nonpunitive environment. Demonstrate this commitment by collaborating with nursing home advocates such as long-term care ombudsman, quality liaisons (QIO), and public health to educate, engage, and empower residents using the ICARE program.*

- *Include QAPI training via the ICARE program to all staff during new employee training and annual training. The ICARE learning lessons can be used to highlight the five strategies of QAPI.*

### **Teamwork Approach**

Nursing home leadership should stress the importance of obtaining input and involvement from everyone in the nursing home community (residents, families, staff, and leadership) to improve care quality. A deliberate teamwork approach can be accomplished with the ICARE program:

- *Create a special QAA subcommittee to promote and implement the ICARE program. Membership can include residents, family members, ombudsmen, nursing, and CNAs invited to participate by nursing home leadership.*
- *Link the QAA committee and the resident council concern process by inviting the resident council staff representative to attend the QAA committee and report on the status of the resident council concerns related to infection prevention and control.*

### **Organizational Guiding Principles & QAPI Scope**

For all nursing home communities, the COVID-19 pandemic impacted residents, family members, and staff confidence and engagement. As nursing home communities transition from immediate, emergency pandemic response to recovery and routine practice, it is an ideal time



to commit to culture change. The challenges and opportunities for infection prevention and control focused on resident rights are likely areas everyone in the nursing home community can relate to. If your nursing home is part of a larger corporate organization, the pandemic demonstrated the need for individual nursing home communities to adapt quality goals to their individual needs and resources. Below are some examples of how the ICARE program can help:

- *The goals and objectives of the ICARE program can be used to revisit or create your organization's vision and mission statements. How do the central themes align or differ from the ICARE program goals and objectives? How can input from others in the nursing home community be solicited and included in these statements?*
- *While your nursing home may need to follow corporate vision and mission statements, the ICARE program can help nursing home communities advocate for individualized QAPI purpose and guiding principles. In addition, nursing home communities can request from their corporate office the facility to use the ICARE program as the ICARE program is based on recognized infection prevention and control standards, CMS regulatory requirements, and provides the material needed for implementation.*
- *Create a QAPI purpose statement and QAPI guiding principles by considering the change you would like the ICARE program to make in your nursing home community based on the ICARE learning lesson content. For example, is one purpose to include all departments in nursing home infection prevention and control training? Can this inclusion expand to other areas of quality?*

Please refer to the [QAPI: Guide for Developing Purpose, Guiding Principles, and Scope for QAPI](#) for details on this step.

## QAPI Plan Development & Awareness

Your facility's individual QAPI plan is a living document that is the heart of quality care for your nursing home community. However, if your nursing home community is following a larger, corporate QAPI plan, it is imperative that your facility have an individualized plan. The ICARE program can assist in creating and promoting this individualized plan:

- *Watch the ICARE lessons and review the ICARE handouts with leadership and staff. Are there specific gaps in infection control practices in your facility that you can identify? Reflect on how resident rights are currently considered in applying infection control standards. Learning and reflecting on the ICARE materials can be a starting point for your QAPI plan.*
- *Make QAPI awareness a goal in your nursing home community by promoting the resident rights highlighted in the ICARE program. Create information boards throughout the nursing home that include resident rights and QAPI purpose and goals.*

Read [QAPI: Guide for Developing a QAPI Plan](#) and [QAPI Written Plan How-to-Guide](#) for details on this step.

## QAPI Data: Strategies & Collection

Determine what infection prevention and control quality data is currently being collected, why it is being collected, and what is done with the data. Align and revise the data that is being collected with the nursing home's QAPI plan. The ICARE program can provide support:

- *Watch the ICARE learning lessons and review the materials. What infection prevention and control process and outcome measures are highlighted in the lessons? How does this differ from what is being done at your nursing home? How are the highlighted resident rights being measured and how is this data collected? Develop measures and goals specific to your facility.*

- *With the assistance of residents, family, and staff, monitor process and outcome measures related to infection prevention and control focus areas covered in the ICARE program. This can include hand hygiene, PPE use, or environmental cleaning and disinfection.*
- *Several resident rights are measured through the minimum data set (MDS). Use the ICARE program to promote awareness of these measures and goals.*

### **QAPI Gaps & Priorities**

Once quality care goals have been established and both process and outcome measure data are collected, gaps will be identified. It is important to keep in mind this is a positive step in improving quality care. The QAPI process can be overwhelming with several clinical and non-clinical areas that would benefit from process improvement. The ICARE program can help focus the process:

- *Review infection prevention and control monitoring data at QAA committee and determine which groups (residents, family members, and/or staff) may assist in reaching quality goals. Focus on groups and concepts covered in the ICARE learning lessons.*
- *Present infection prevention and control monitoring and quality data to resident or family councils; receive their input and request their assistance in identifying priorities.*
- *Create and post infection prevention and control quality data on boards in the nursing home. Implement huddle boards for staff to routinely review data and provide input on priorities.*
- *Create an ICARE Champs board, highlighting successes and people who contribute to success.*

## ICARE: PROCESS IMPROVEMENT PROJECT

Each ICARE program step (educate, engage, and empower) is well suited for a process improvement project (PIP). Each nursing community will have unique resources and needs to develop and carry out PIPs. Therefore, the ICARE program provides one-on-one, individualized support for implementation of an ICARE PIP. This support can be as simple as a consultation session with a certified infection preventionist or as involved as a ICARE certification for nursing home leadership provided by The University of North Texas Health Science Center. Please contact ICARE staff for more information ([geriatrics@unthsc.edu](mailto:geriatrics@unthsc.edu)). The information below provides brief examples of how the ICARE program can be utilized as a PIP.

### PIP Charter

Charter a specially formed ICARE team with diverse representation (CNAs, DONs, environmental management, etc.) across the facility. For this PIP charter to be successful, participation and support from leadership is critical. Having ICARE Champions in both clinical and non-clinical leadership will strengthen implementation of the ICARE program. For infection prevention and control, medical as well as nursing personnel champions can support the ICARE team members. The ICARE team will suggest how to move residents and their families through the three steps of the ICARE program (Education, Engagement, and Empowerment). To do so, the ICARE team, in collaboration with the QAA Committee will need to set goals for the ICARE PIP. For example, the ICARE team may suggest a goal to have 20% of residents or a designated family member complete at least one ICARE learning lesson in three months.

Please see the [QAPI Goal Setting Worksheet](#) to assist in setting PIP goals.

### PIPs: Plan, Conduct, and Document

After establishing your ICARE PIP goals, it is important to be realistic in conducting the PIP. Beginning with a simple goal that may be easier to obtain but can impact the psychosocial wellbeing of those in the nursing home community is ideal. Quick wins can help practice and establish confidence in the PIP process. Using a model such as Plan, Do, Study, Act (PDSA), the ICARE PIP team will study root causes to identify system level gaps. Addressing these gaps appropriately will not only enhance infection prevention and control, but also all care quality. For example, in attempting to meet the ICARE training goal stated above, it may be found that a root cause of not meeting the goal is poor nursing home communication with family members. It is now important to establish a strong action focused on a system level change. This may include changing the communication process with multiple notification levels to ensure continuity of communication.

## ICARE AND IPC: STEPS TO RESIDENT-CENTERED INFECTION PREVENTION AND CONTROL

To support care quality, ICARE incorporates resident-centered infection prevention and control, or RC-IPC. RC-IPC:

- *Begins with promoting the person,*
- *Is developed and implemented in equitable partnership,*
- *Incorporates engaged education and training that involves everyone in the nursing home community, and*
- *The assessment and adaptation of the quality of IPC measures is evidence-based, systematic, and ongoing.*

As shown in Figure 1., there are two main components of the ICARE program, RC-IPC and Discussion & Advocacy. As the IP integrates RC-IPC into the IPC program, this assists participants to discuss and advocate for RC-IPC, moving through the educate, engage, and empower steps of the program. In addition, by practicing RC-IPC, a

nursing home community integrates the six core resident rights previously presented in Figure.2 into their IPC program. Prior to integrating RC-IPC, a nursing home must first conduct a risk assessment and have infection prevention policies and procedures in place as detailed in [CMS State Operation Manual Appendix PP-Guidance to Surveyors for Long-Term Care Facilities](#) and [other CMS requirement documents](#).

The sections below provide actions IPs can take to integrate RC-IPC into the infection prevention and control program (IPCP) as well as examples of RC-IPC.

### Promoting the Person

When developing policies and procedures to support the IPCP, it is important to consider a nursing home community's resident population in terms of cognition, condition, contentment, change capable, control, and curiosity. These are the 6C's of Person Promotion (see Appendix C). While nursing home communities may consider the 6C's in a facility-wide risk assessment, the psychosocial elements are not commonly incorporated into an infection prevention risk assessment. Yet these psychosocial elements (contentment, change capability, control, and curiosity) are integral to successful implementation and sustainability of the IPCP.

Examples for including the 6C's of Person Promotion in the IPCP utilizing the ICARE program steps include:

- **Educating** residents and family members regarding the role of age-related changes in lung function and immune function increases the risk of infection and disease (condition). Include residents with subjective cognitive decline or dementia in IPC education for families, nursing home leadership, and staff. (cognition)
- **Engaging** residents in activities that integrate both IPC and common activities such as games, exercises, or social activities.

*For example, bug bingo, finger painting hand hygiene signage, flu season “need to know” kick-off party. When designing these activities, it is important to have several modifications for different resident capabilities and work closely with the Activity’s Director. These activities can stimulate contentment & curiosity.*

- ***Empowering*** residents by including them and their family members in IPC procedures and monitoring decisions and activities. *For example, active participation in hand hygiene monitoring, presenting the results and incorporating their feedback on process improvement activities. This emphasizes that residents are agents of change in their care and provides them control by active participation in care activities.*

### **Equitable Partnership**

The IPCP should include policies and procedures that emphasize maintaining a home environment for residents that prevents and controls infections. This can only be accomplished when IPC measures reflect the values, perspectives, and choices of the residents and staff. As policies and procedures are developed, it is important to incorporate resident, family, and staff’s opinions and ideas, stressing a non-punitive approach, building community and individual relationships.

Examples for including the equitable partnerships in the IPCP utilizing the ICARE program steps include:

- ***Educating*** residents, family members, and staff regarding basic information on multi-drug resistant organisms through ICARE learning lessons.
- ***Engaging*** residents and family members during resident and family councils by presenting antibiotic resistance summaries and discussing infections, antibiotic prescribing practices, and any transmission-based precautions that can affect resident rights.

- **Empowering** residents, family members, and CNAs to communicate regularly regarding duration of transmission precautions and how they can advocate for the least restrictive measures for their medical situation. As transmission-based precautions can lead to isolation and stigmatization, residents and CNAs can provide feedback and suggestions regarding how personal protective equipment can be covered or stored and signage can be displayed while still maintaining a home environment.

### Engaged Education

IPC education and training should include the experiences and perspectives of residents and those who provide their social support (family members, staff, and administration). This includes having residents and family members tell their stories about how infections and/or IPC measures have impacted their lives.

Examples for including engaged education in the IPCP utilizing the ICARE program steps include:

- **Educate** staff regarding regular assessment of indwelling urinary catheter for continued need using case scenarios and comments from residents and family members. For example, educational materials can include quotes from residents and/or family members regarding how a urinary tract infection affected their life.
- **Engage** family members or residents during direct care staff environment of care training to express how they feel when their room is clean and cared for, for example, to express gratitude for high-level care.
- **Empower** healthcare staff to share stories during leadership IPC training regarding how they feel when residents are placed on transmission-based precautions to emphasize the need for ongoing culture change to support resident quality care.



## Evidence-based, Systematic, and Ongoing Practices

Evidence-based standards and guidelines, and regulatory agency requirements must always be the basis for the IPCP. Regulatory requirements stress person-centered care while IPC standards and guidelines emphasize evidence-based practices. Many times, in practice these two concepts do not overlap. Therefore, to implement RC-IPC, the IP must use their role in the QAA committee to plan and study RC-IPC, documenting the effectiveness of RC-IPC. The IP can collaborate with other advocates such as the QIO or public health practitioners to publish or present these best practices, developing RC-IPC as the standard of care for all nursing home communities. The ICARE program can assist IPs to develop their role as proponents of RC-IPC.

Examples for including evidence-based, systematic, and ongoing practices in the IPCP utilizing the ICARE program steps include:

- **Educate** all residents and their family members on infection control topics using the learning lessons and materials provided through the ICARE program. These lessons cover major topics related to an IPCP based on evidence-based standards and regulations and resident rights.
- **Engage** residents and family members in IPCP surveillance data by presenting outcome or process monitoring surveillance data (hand hygiene, standard or transmission-based precautions, reported cases of notifiable, infectious diseases, etc.) at resident or family council meetings. Collaborate with QIO or public health practitioners to have an open discussion regarding precautions residents, family, and staff can take to prevent transmission or microorganisms.
- **Empower** residents, family members, and staff to take part in a QAA subcommittee and develop a process improvement project (PIP) based on IPCP surveillance data.

## Factors Influencing RC-IPC

Two primary factors influence the application of RC-IPC. First, nursing home communities and their residents serve as reciprocal pillars to actively engage and support the successful operation of RC IPC. A nursing home community's leadership must support a culture of change. It is only through this culture of change the structure and support for person-centered care by staff can be achieved. Once person-centered care becomes foundational, RC-IPC can become the standard. Residents and their family members must be provided the opportunities, support, and resources by the nursing home community to play an active role in promoting their values and rights. This will then allow residents and family members to advocate for quality care including IPC.

Secondly, the IP and nursing home leadership must continue to revise and update RC-IPC as the operational application of RC-IPC is influenced by changes in time to regulations, policies, and practices which serve to protect resident rights.

## ICARE NEXT STEPS

The ICARE program has the potential to transform how infection prevention and control is practiced in your nursing home community. Infection prevention and control measures that are founded on resident rights can lead to enhanced quality assurance and process improvement in all areas of clinical and non-clinical care. You can move forward with the ICARE program in your nursing home community by following the steps below:

- *Review the materials provided in the appendices below. Several resources are provided to help you implement the ICARE program. All resources are separated by group (Residents & Family Members, Nursing Home Leadership & Staff, and Long-Term Care Ombudsman & Other Advocates) and available on the ICARE website: [www.unthsc.edu/ICARE](http://www.unthsc.edu/ICARE).*

- *Contact ICARE program staff to assist you in implementing the ICARE program. Individual consultation is available with an infection preventionist certified in long-term care infection control. You can request consultation by sending a message to [Geriatrics@unthsc.edu](mailto:Geriatrics@unthsc.edu).*
- *Reach out to your nursing home QIO, LTCO, or public health practitioner and inform them of your interest in the ICARE program. ICARE program staff are also available to assist these groups in program implementation.*

## APPENDICES

### APPENDIX A: ICARE LEARNING LESSONS AND MODULES

Participants can take the seven ICARE learning lessons below in any order, but the sequence below is recommended. The ICARE introductory modules below can help introduce the ICARE program to stakeholders.

ICARE Learning Lesson	Length (minutes)
<a href="#">Common Infections in Nursing Home Communities</a>	9:39
<a href="#">Preventing Infections in Nursing Home Communities</a>	12:34
<a href="#">Safeguarding the Nursing Home Environment</a>	23:05
<a href="#">Hand Hygiene Heroes!</a>	17:13
<a href="#">Gowns, Gloves, and Goggles: Precautions for Prevention</a>	18:24
<a href="#">Protect Yourself and Others: Less Antibiotics, More Vaccines</a>	17:34
<a href="#">Nursing Home Response: Outbreaks and Other Emergencies</a>	21:34

ICARE Introduction Modules
<a href="#">ICARE: Overview for Nursing Home Leadership</a>
<a href="#">ICARE: Overview for Nursing Home Staff</a>
<a href="#">ICARE: Overview for Long-Term Care Ombudsmen</a>

### APPENDIX B: ICARE TOOLS AND RESOURCES

ICARE information sheets that accompany each ICARE module and ICARE promotional information for nursing home residents and family members are provided below. All information sheets can be provided in an editable format with nursing home specific information.

ICARE Lesson Information Sheets	ICARE Promotional Information
<a href="#">Common Germs in Nursing Homes</a>	<a href="#">Preserve My Rights, Prevent Infections!</a>

<a href="#"><u>Preventing Germ Spread in Nursing Homes</u></a>	<a href="#"><u>Infection Prevention and Control: Regulations &amp; Requirements</u></a>
<a href="#"><u>Safeguarding the Nursing Home Environment</u></a>	<a href="#"><u>Resident Care Roles: Nursing Home Administration</u></a>
<a href="#"><u>Hand Hygiene High Five</u></a>	<a href="#"><u>Resident Care Roles: Nursing Services</u></a>
<a href="#"><u>Prevention Precautions: Promoting Well-being</u></a>	<a href="#"><u>Resident Care Roles: General Care Services</u></a>
<a href="#"><u>Less Antibiotics, More Vaccines</u></a>	<a href="#"><u>Resident Care Roles: Medical Services</u></a>
<a href="#"><u>Nursing Home Emergency Response</u></a>	

To assist in presenting the ICARE lessons, ICARE lesson slides are provided below with a script and additional lesson content information.

ICARE Learning Lesson PowerPoint Slides
<a href="#"><u>Common Infections in Nursing Home Communities</u></a>
<a href="#"><u>Preventing Infections in Nursing Home Communities</u></a>
<a href="#"><u>Safeguarding the Nursing Home Environment</u></a>
<a href="#"><u>Hand Hygiene Heroes!</u></a>
<a href="#"><u>Gowns, Gloves, and Goggles: Precautions for Prevention</u></a>
<a href="#"><u>Protect Yourself and Others: Less Antibiotics, More Vaccines</u></a>
<a href="#"><u>Nursing Home Response: Outbreaks and Other Emergencies</u></a>

## APPENDIX C: RC-IPC COMPONENTS

The table below shows the major components of RC-IPC and how a nursing home community can address each component.

Promoting the resident is the foundation	IPC measures address the 6Cs: cognition, condition, contentment, curiosity, change capable, and control.**
IPC measures developed and implemented in equitable partnerships	IPC measures reflect the values, perspectives, and choices of the residents and staff by incorporating their opinions and ideas in the development and implementation of IPC measures.
	Support, include, and empower residents and those who provide them with social support, such as family members, in developing and implementing IPC.

	Support, include, and empower staff in developing and implementing IPC measures.
	Stress a non-punitive approach, building community and individual relationships.
	IPC measures maintain a home environment for residents that prevents and controls infections.
IPC measures incorporate engaged education and training that involves everyone in the nursing home community	IPC education and training includes the experiences and perspectives of residents and those who provide their social support (family members, staff, and administration).
Evidence-based IPC practice	IPC measures utilize evidence-based and regulatory agency standards and guidelines as the basis for IPC measures.
IPC measure planning, control, and improvement is systematic and ongoing	Core IPC component quality assurance and process improvement that is data-driven and takes the IHI Whole System Quality Approach to incorporate the CMS Five Elements for Framing QAPI in Nursing Homes.
<b>**6 C's for Promoting the Person</b>	
<b>Cognition:</b> refers to a person's ability to remember, learn new things, concentrate, or make decisions. (CDC)	
<b>Condition:</b> refers to health conditions that may increase frailty, use of devices such as urinary catheters, decrease immune function, skin integrity, mobility, bowel or bladder function, and nutritional maintenance. (APIC)	
<b>Contentment:</b> refers to a person's satisfaction with who they are and the activities they participate in throughout their lives and as their lives change. This helps people cope and adapt to their settings and life situations.	
<b>Curiosity:</b> refers to the desire to know or learn something new and explore one's environment to allow one to participate in activities to the best of one's ability through modification as needed.	
<b>Change Capability:</b> refers to a person's ability to be an agent of change in their lives, to make decisions that influence the integration of biological, psychological, and social components of their lives.	
<b>Control:</b> refers to active participation and promotion in one's care and originates from awareness, empowerment, and social support.	

## APPENDIX D: QAPI & INFECTION PREVENTION RESOURCES

CMS Nursing Home QAPI Website:

<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/NHQAPI>

QAPI at a Glance: A Step by Step Guide to Implementing Quality Assurance and Performance Improvement (QAPI) in Your Nursing Home: <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/QAPIAtaGlance.pdf>

QAPI Self-Assessment Tool: <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/QAPISelfAssessment.pdf>

Guide for Developing a QAPI Plan:

<https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/qapiplan.pdf>

QAPI Written Plan How-To Guide:

<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/QAPI-Plan-How-to-Guide.pdf>

QAPI Goal Setting Worksheet:

<https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/qapigoalsetting.pdf>

Quality Improvement Organizations- Locates Your QIO:

<https://qioprogram.org/locate-your-qio>

Institute for Healthcare Improvement: Whole System Quality.

<https://www.ihl.org/resources/Pages/IHIWhitePapers/whole-system-quality.aspx>

The National Association of County and City Health Officials (NACCHO). Long-term Care Infection Prevention & Control Toolkit (5/16/22).

[https://www.naccho.org/uploads/downloadable-resources/Programs/Community-Health/Project-Firstline/Toolkit\\_5.16.2022\\_to-NACCHO-1.pdf](https://www.naccho.org/uploads/downloadable-resources/Programs/Community-Health/Project-Firstline/Toolkit_5.16.2022_to-NACCHO-1.pdf)

Association for Professionals in Infection Control and Epidemiology (APIC). Content of an Infection Prevention and Control Plan.  
[https://apic.org/Resource /TinyMceFileManager/Education/ASC Intensive/Resources Page/Content of an Infection Prevention and Control Plan.pdf](https://apic.org/Resource/TinyMceFileManager/Education/ASC_Intensive/Resources_Page/Content_of_an_Infection_Prevention_and_Control_Plan.pdf)

CMS State Operations Manual. Appendix PP- Guidance to Surveyors for Long-Term Care Facilities. Revised 2/3/23.  
<https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf>

CMS QSO-20-03 NH. Updates and Initiatives to Ensure Safety and Quality in Nursing Homes. Includes Attachment A- LTC Facility Infection Control Worksheet, Self-Assessment Tool.  
<https://www.cms.gov/files/document/qso-20-03-nh.pdf>



## REFERENCES

1. QSO-22-19 NH: Revised Long-Term Care Surveyor Guidance (2022).
2. Crnich CJ. Reimagining Infection Control in U.S. Nursing Homes in the Era of COVID-19. *Journal of the American Medical Directors Association*. 2022;doi:10.1016/j.jamda.2022.10.022
3. Gaugler JE, Mitchell LL. Reimagining Family Involvement in Residential Long-Term Care. *Journal of the American Medical Directors Association*. 2022;23(2):235-240. doi:10.1016/j.jamda.2021.12.022