



Toolkit for Increasing Vaccination Rates in Nursing Homes

 **ALLIANT**
HEALTH SOLUTIONS

QIN-QIO
Quality Innovation Network -
Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
QUALITY IMPROVEMENT & INNOVATION GROUP

Last Revised Date: 6/2024

TABLE OF CONTENTS

Chapter 1: Accessing and Knowing Your Data	3
iQIES (Internet Quality Improvement and Evaluation System)	3
CMS Care Compare	4
Electronic Health Records (EHR)	4
National Healthcare Safety Network (NHSN)	4
State Immunization Registries	5
Chapter 2: Regulations, Policies and Procedures	5
Federal, State, and Local Regulations	5
Policy and Procedures	5
Chapter 3: Process Mapping	6
Chapter 4: CDC Standards for Adult Immunization Practice (Assess, Recommend, Administer, Document)	7
Assess	7
Recommend	7
Administer	7
Document	8
Medicare and Medicaid Billing Guidance	9
Resources	9
Chapter 5: Action Planning	9
QAPI (Quality Assurance Performance Improvement)	9
Resources	9
Chapter 6: Emergency Preparedness Planning Integration	10
Chapter 7: Fostering a Culture of Immunization	10
Engaging Staff, Medical Staff, and Resident and Family Councils	10
Health Literacy, Health Disparities and Implicit Bias	11
Resources	11
Chapter 8: Sustainability	11
State Departments of Public Health Links	12
References	12
Contact Information	12



As a health care professional, you play a vital role in protecting the individuals living in the facility and their families. The best protection for reducing the risk of serious illness, hospitalizations, long-term health impacts, and death is vaccination. This toolkit provides resources, guidance, and samples for promoting and encouraging acceptance of vaccinations in your facility.

While this guide focuses on strategies to improve influenza vaccination rates, the strategies can also be applied to other vaccinations.

Chapter 1: Accessing and Knowing Your Data

Accessing your data is the first step to knowing your current immunization rates. Comparing your immunization rates to state and national rates provides valuable information as you begin to establish benchmarks and goals for improvement.

iQIES (Internet Quality Improvement and Evaluation System)

While electronic health records provide real-time data, the Centers for Medicare & Medicaid (CMS) [iQIES system](#) uses data submitted through your Minimum Data Set (MDS) to generate your quality measure reports. For example, the quality measures for influenza immunizations are:

Short Stay

- Percent of residents who were assessed and appropriately given the seasonal influenza vaccine.
- Percent of residents who received the seasonal influenza vaccine.*
- Percent of residents who were offered and declined the seasonal influenza vaccine.*
- Percent of residents who did not receive, due to medical contraindications, the seasonal influenza vaccine.

Long Stay

- Percent of residents who were assessed and appropriately given the seasonal influenza vaccine.
- Percent of residents who received the seasonal influenza vaccine.*
- Percent of residents who were offered and declined the seasonal influenza vaccine.*
- Percent of residents who did not receive, due to medical contraindications, the seasonal influenza vaccine.

** refers to measures that are not publicly reported but are available for provider preview.*

The [MDS 3.0 Quality Measures USER'S MANUAL V16](#), contains specifications for the MDS 3.0 quality measures and the Quality Measure Reporting Module Table that documents CMS quality measures calculated using the MDS 3.0 data and reported in a CMS reporting module.

The Alliant Health Solutions [QAPI for Flu and Pneumococcal Vaccine Success](#) webinar explains how to access and use immunization quality measure data. The PowerPoint for this webinar contains helpful information on Care Compare, QAPI and MDS documentation and can be download from the [Alliant Health Solutions website](#). **Note:** There have been updates and changes to the MDS manual and to the [Pneumococcal Vaccine Timing for Adults](#) since this webinar. Ensure you refer to the most updated MDS manual and Pneumococcal timing for adults guidance.

CMS Care Compare

Visit the [CMS Care Compare website](#) to view your publicly posted immunization rates. The publicly



posted immunization measures are the listed measures that do not have an asterisk.

As with the iQIES data, Short Stay measures apply to residents with a length of stay of 100 days or less and are covered under the Medicare Part A skilled nursing facility benefit. Long Stay measures apply to residents with a length of stay of 101 days or greater.

The *Design for Care Compare Nursing Home Five-Star Quality Rating System: Technical Users' Guide* has detailed information on each measure specification. This guide is updated quarterly and can be downloaded from the [CMS.gov](https://www.cms.gov) website. On the CMS site, scroll down to the downloads section and select the most updated version of the “*Five-Star Users Guide 2023-Updated 1/25/2023*”. The guide title date will change when a newer version is available. The guide is also available on the iQIES website.

Watch the [Alliant Health Solutions Immunizations Nursing Home Affinity Group presentation](#) for information on accessing influenza immunization rates on Care Compare and utilizing the Centers for Disease Control and Prevention (CDC) Standards Framework for improving immunization rates (Assess, Recommend, Administer and Document) discussed in Chapter 4 of this guide.

Electronic Health Records (EHR)

Many electronic health record systems have standard or custom reports that can be used during morning report meetings or rounding to discuss the next approaches for residents due for or lacking immunizations, including influenza.

National Healthcare Safety Network (NHSN)

Another forum for tracking weekly influenza vaccination data for residents is NHSN. As of the 2023-2024 season, weekly reporting of influenza vaccination data is not required by the CMS; however, this optional reporting can help facilities monitor influenza vaccination coverage during the influenza season. Reporting by the end of the season is required.

A Skilled Nursing Facility Quality Reporting Program (SNF QRP) [Influenza Vaccination Coverage Among Health Care Personnel Measure](#) added with the 2022-2023 season in NHSN.

The Healthcare Personnel Safety (HPS) Component of the NHSN application enables facilities to analyze their data and compare it with a national database. The application has two modules. The Healthcare Personnel Vaccination Module will include both the Influenza Vaccination Summary and the COVID-19 Vaccination Summary.

According to the [2022 NHSN manual](#), the “CDC/NHSN encourages that HCP influenza vaccination summary data be updated on a monthly basis and suggests that healthcare facilities update data within 30 days of the end of each month (for example, all October data should be added by November 30th) so they have the greatest impact on influenza vaccination activities. However, entering a single influenza vaccination summary report at the conclusion of the measure reporting period will meet the minimum data requirements for NHSN participation.”

Assign your facility infection preventionist or another designee to monitor the NHSN website for updates and announcements.



State Immunization Registries

Immunization Information Systems (IIS), often called state registries, are a reliable consolidated source of immunization information for providers, public health officials and patients. When utilized by all providers in a community, the registries serve as an effective resource for patient immunization status. Remember to check your specific state regulations to ensure compliance with your state's immunization reporting requirements.

- [State Immunization Registry Links State US Averages | Provider Data Catalog](#)
- [Basics of Immunization Information Systems \(IIS\)](#)

Chapter 2: Regulations, Policies and Procedures

Federal, State, and Local Regulations

Identify and communicate locations where staff can access and review federal, state and local influenza immunization-related regulations and internal policies. It is important to designate personnel responsible for monitoring and communicating any changes to relevant regulations.

Review federal, [state](#), and local guidance when developing your facility-specific policies. Key elements include, but are not limited to:

- Education regarding benefits and potential side effects
- Adherence to federal, state, and locally designated immunization timeframes and schedules (for example, the CMS State Operations Manual currently designates October 1 through March 31 as the influenza vaccine season) [CMS State Operations Manual-Appendix PP](#)
- The resident's right to refuse and documentation of declination
- Consent process
- Process for obtaining the vaccine and related supplies with backup processes
- Downtime policies
- Links to Emergency Preparedness Plans (EPP), the Facility Assessment and the Hazard Vulnerability Assessment

Policy and Procedures

The [State Operations Manual, Appendix PP](#) details influenza immunization regulations. Designate an individual(s) to check for revisions as CMS periodically updates the SOM.

483.80(d)(1) Influenza

The facility must develop policies and procedures to ensure that:

- Before offering the influenza immunization, each resident or the resident's representative receives education regarding the benefits and potential side effects of the immunization.
- Each resident is offered an influenza immunization from October 1 through March 31 annually unless the immunization is medically contraindicated or the resident has already been immunized during this period.
- The resident or the resident's representative has the opportunity to refuse immunization.

483.80(d)(2) Pneumococcal disease

The facility must develop policies and procedures to ensure that:

- Before offering the pneumococcal immunization, each resident or the resident's representative receives education regarding the benefits and potential side effects of the immunization.



- (v) Each resident is offered the pneumococcal immunization, unless the immunization is medically contraindicated, or the resident has already been immunized during this period.
- (vi) The resident or the representative has the opportunity to refuse immunization.

Use the Alliant Health Solutions [Immunization Process Self-Assessment for Long-Term Care](#) checklist and watch the [brief video overview of the self-assessment and associated resources](#) to ensure your policies and procedures contain key elements.

Chapter 3: Process Mapping

Use process maps, also known as flow diagrams, to create a visual story of your current immunization process. A process map will enrich your team's understanding of all the steps in your immunization workflow, highlight variations between the process as it is expected to work based on your immunization policies and actual day-to-day workflow, and help your team visualize the current state in comparison to the ideal future state for your facility.

The Institute for Healthcare Improvement (IHI) describes the benefits and types of flowcharts as follows:

Benefits

- Helps to clarify complex processes.
- Identifies steps that do not add value to the internal or external customer, including delays, needless storage and transportation, unnecessary work, duplication, added expense and breakdowns in communication.
- Helps team members gain a shared understanding of the process and use this knowledge to collect data, identify problems, focus discussions and identify resources.
- Serves as a basis for designing new processes.

Types:

A **high-level flowchart** showing six to 12 steps gives a panoramic view of a process. These flowcharts show the major blocks of activity or the major system components in a process. High-level flowcharts are especially useful in the early phases of a project.

A **detailed flowchart** is a close-up view of the process, typically showing dozens of steps. The flowchart makes it easy to identify rework loops and complexity in a process. Detailed flowcharts are useful after teams have pinpointed issues or when they are making changes in the process.

On the IHI website, the [IHI Flowchart videos](#) can educate teams on how to complete a process map and a four-page guide to creating a process map.

The University of North Carolina Institute for Healthcare Quality Improvement website has a video on [Process Mapping](#) that provides an overview of creating a process map and walks the user through creating an actual map of a patient visit to a clinic.

A sample process map of a care transition workflow and worksheets are available on the [Alliant Health Solutions website](#).

To begin, identify the team members actively involved in your immunization processes to participate in the creation of the first iteration of your process map. This will likely result in a process



map that is a visual story of your processes that aligns with your immunization policies. To capture all the steps and any workarounds, review your process map with frontline staff who work with the processes in each step. Create a safe environment for transparency and communicate that you want to capture how the process is working at the current time.

Involving frontline staff will enhance the quality of your map or flowchart and build staff enthusiasm for engaging in the design and implementation of your desired future immunization state or workflow.

Chapter 4: CDC Standards for Adult Immunization Practice (Assess, Recommend, Administer, Document)

The CDC Standards for Adult Immunization Practice provide a framework for defining specific steps to operationalize your influenza immunization policies.

Assess

Assess each short-term patient and long-term resident at multiple touchpoints, including on admission, during each care conference, during an outbreak and before discharge. Consider all avenues for obtaining immunization history, including the patient or resident's primary care physician, all hospitals providing past care to the patient, the patient, health care agents, family members, care partners, state registries, and health information exchanges. For patients and residents declining immunization, establish a leadership-driven structured reapproach.

Recommend

According to the 2021 edition of the [Pink Book](#), "A strong recommendation by a health care provider is a powerful motivator for patients to comply with vaccine recommendations" and "Even initially reluctant adults are likely to receive an influenza vaccination when the health care provider's opinion of the vaccine is positive."

Strategies to maximize the impact of a facility's recommendations on each vaccine decision include:

- Educating vaccine-hesitant staff on their responsibilities to promote immunization regardless of their personal choices.
- Providing scripted messages to help staff promote vaccine acceptance.
- Incorporating a presumptive approach that assumes a patient, resident or health care agent will choose to vaccinate. Ensure that your presumptive approach combines the required elements of informed consent, shared decision-making, person-centered care and resident federal and state rights to refuse treatment.
- Write a letter to families and residents that highlights the importance of vaccinations prior to the start of your seasonal immunization campaigns.

Tailor the reasons why vaccination is right for each patient and resident and address patient concerns or questions in a culturally and linguistically appropriate way. Chapter 7 contains guidance on health literacy, health disparities and implicit bias that should be considered in tailoring the approach or reapproach for each individual.

Administer

When administering the vaccine to the patient, provide the [Vaccine Information Statement \(VIS\)](#), follow standard precautions for infection control, and know, be prepared for, monitor and



report potential adverse reactions. The VIS for influenza and other vaccines is available in multiple languages. Your process should also include steps to properly [store, handle and monitor vaccines](#) and supplies.

Document

As the source of influenza quality measure data, the Minimum Data Set (MDS) is the first place to look when assessing opportunities to improve immunization rates.

1. Identify upcoming MDSs due for completion. Pay particular attention to each Admission MDS. Conduct a team review of the MDS and the patient’s chart and update, when appropriate, all influenza vaccines coded “not offered,” “inability to obtain influenza vaccine due to a declared shortage,” or “none of the above.”
2. Review all completed MDSs that reflect that a resident did not receive the influenza vaccine. Ensure the reason is coded appropriately and reapproach as appropriate.
3. Pay close attention to deadlines for submitting corrected or modified MDSs. Thirty days before the deadline, run a report of all residents who did not receive the vaccine or documented as never offered. Conduct a team review and correct as appropriate.
4. Establish a process for reviewing and discussing the immunization of all new admissions and a path for reapproach (i.e., during morning or unit rounding).

Ensure there is clear documentation in the medical record of assessments, education, and conversations with patients, residents and health care agents regarding immunizations, decisions and vaccinations given.

Specifying any reasons for declination in documentation positions you to develop a person-centered reapproach. Accurate documentation of each element in the health record is essential for completion of the MDS Section O: Special Treatments, Procedures and Programs: O0250 Influenza Vaccine. [The Minimum Data Set \(MDS\) 3.0 Resident Assessment Instrument \(RAI\) Manual](#) provides specific instructions for documenting influenza and pneumococcal vaccinations in the MDS.

Watch the Alliant Health Solution [Immunization Documentation in Nursing Homes](#) video for additional guidance on documentation in the MDS. The guidance can be used for your MDS quality check and

for new or existing staff education.

Consider the health literacy of the patient, resident or health care agent when providing education and developing your person-centered re-approach.

Document known vaccination history and all vaccines provided during the patient or resident’s stay with you in transitions of care and/or discharge documentation. Documentation of vaccination status should follow the individual just like advance directives.

Review your state regulations for additional documentation requirements, such as requirements for reporting to a state immunization registry.

Several resources are listed below to guide you in assessing, recommending, administering and documenting influenza immunizations.



Medicare and Medicaid Billing Guidance

Reimbursement is complex and requirements can change with waivers and other healthcare emergencies. It is important to understand the root cause of billing challenges to determine who to reach out to for guidance. Here are some general resources for vaccination billing:

Below are some general Medicare and Medicaid resources:

- [Billing for Vaccines in Skilled Nursing Facilities: A Guide](#)
- [CMS Billing Medicare for Respiratory Vaccines](#)

Resources

- [Standards for Adult Immunization Practices](#)
- [Influenza \(Flu\) Vaccine -Addressing Common Questions about Influenza Vaccination for Adults](#)
- [Alliant Health Solutions Immunization Resource webpage](#)
- [2022 National Forum for Heart Disease & Stroke Prevention Flu Vaccination Decision – Making Guide](#)
- [Medicare Claims Processing Manual Chapter 6, Section 20.4 Screening and Preventive Services](#)
- [Pneumococcus: Questions and Answers - Information About the Disease and Vaccines](#)

Chapter 5: Action Planning

QAPI (Quality Assurance Performance Improvement)

Monitoring and tracking the facility’s influenza vaccine process through the facility’s QAPI plan is an effective way to assess, evaluate and improve the vaccination process and vaccination rates. Initiate and utilize a QAPI project to demonstrate efforts and successes in improving immunization rates.

Recommended steps:

1. Form a multidisciplinary team, including frontline staff who know the process best. Consider having a nurse manager, infection preventionist, admissions screener, MDS nurse, LPN, CNA and a physician or advanced practice practitioner on this team.
2. Establish a baseline facility immunization rate using resources from Chapter 1.
3. Set project goals using SMART principles.
4. Conduct a root cause analysis using the “Five Whys” or fishbone diagram.
5. Guide work using the Plan-Do-Study-Act cycle.

Resources

Included are tools from Alliant Health Solutions and CMS QAPI resources for action planning:

- [QAPI PIP Charter Worksheet](#)
- [QAPI PDSA Cycle Worksheet](#)
- [Five Whys for RCA Tool](#)
- [Fishbone Diagram Worksheet](#)
- [AHS Using QAPI for Flu Vaccination Success](#)
- [SMART Goals](#)



Chapter 6: Emergency Preparedness Planning Integration

Emergency Preparedness Plan (EPP) sections on infection control should address all infectious disease [outbreaks occur or are near pandemic levels](#) and be updated annually, periodically, and when outbreaks occur or are near pandemic levels. Ensure your EPP contact list is maintained with current contact information for you local health department and other pandemic subject matter experts. Specify in the EPP Communications Plan how and in what languages outbreaks will be communicated to all stakeholders. Consider designating one of your full or tabletop drills to focus on epidemic or pandemic preparedness.

The [CMS State Operations Manual, Appendix Z](#), Requirements for Long-Term Care (LTC) Facilities, describes requirements for related emergency preparedness planning.

Consider how the regulations crosswalk from section 483.73 across multiple manual sections, including resident rights, infection control, immunization, medication administration and training. A sample of the sections to review include:

The [CDC Long-Term Care Pandemic Influenza Planning Checklist](#) provides a start-to-finish planning checklist to assist with influenza planning. Use this tool to identify strengths and weaknesses, and areas of opportunity in your facility. The CDC has archived this checklist with plans to update it, so the links are inactive. The checklist is still relevant and useful as a planning guide.

Chapter 7: Fostering a Culture of Immunization

Engaging Staff, Medical Staff, and Resident and Family Councils

First, create a culture of immunization by working with your team to craft and broadly share your vision for the facility's future state. Then, develop a plan to engage frontline staff from all disciplines on all units and shifts, medical staff, patients, residents, and resident and family council members.

Throughout the development of your culture change plan, remember that each individual has a unique perspective, their personal values related to immunization, cultural and implicit biases and varying degrees of health literacy.

Tips for avoiding the pitfalls that often result in a failed organizational or culture change include:

- Consistently connect the dots of your culture vision to purpose, meaningful work and making a difference.
- Balance your approach.
- Include an objective accountability system.
- Provide training on culture and organizational change.
- Sequence new processes and expected behaviors—avoid introducing too many changes at once.
- Standardize best practices across the organization.
- Demonstrate and role model desired behaviors.
- Celebrate, celebrate, celebrate.

(Deao, *How to Change the Culture of an Organization* 2014)

The CDC [Improving Health Literacy for Older Adults](#) Panel Report is a good starting place for developing your immunization communication approaches. Additional strategy guidance for communicating effectively with all adults can be found on the [CDC Health Literacy](#) page.



[Incentive programs](#) are one approach to generating excitement around the culture you are creating. Rewards such as popcorn, ice cream sundaes, hand massages, salon services or events can be planned on vaccination days and periodically as program goals are met.

Identify key influencers and trusted messengers. These individuals may be very different for your staff and your patient populations. They can support your culture change by sharing positive stories, infomercials and written materials that generate confidence among those who are vaccine-hesitant.

Health Literacy, Health Disparities and Implicit Bias

The CDC's health equity guiding principles for inclusive communication emphasize the importance of addressing all people inclusively and respectfully. The principles are intended to help public health professionals ensure that communication products and strategies adapt to each population's cultural and linguistic situation. They can be a good starting point for an organization as it continues to engage with your communities and partners to build your culture.

Resources

- [NIVDP Resource Kit](#)
- [CDC P4VE Program](#)
- [Integrating Health Equity into Flu Vaccinations](#)
- [Tackling Implicit Bias in Health Care](#)

Chapter 8: Sustainability

According to the [Robert Wood Johnson Foundation: Building a Culture of Health](#), "When we work together to create opportunities that improve health equity for everyone, we're building a Culture of Health. In partnership with others, we work to develop a Culture of Health rooted in equity that provides every individual with a fair and just opportunity to thrive, no matter who they are, where they live, or how much money they have.

As you consider, plan and implement each process change, identify how you will utilize small tests of change and how you can make it easy for your entire team to do the right thing. Engaging frontline staff, including vaccine-hesitant staff, in all phases of your review and performance improvement activities will increase acceptance and support of the process improvements.

Incorporate the process changes made as a result of your quality improvement initiative into your QAPI plans, infection control plans, EPP, and seasonal influenza campaign plans to help hardwire changes until they become part of the facility's immunization culture.

A year-round focus on immunizations as a wellness priority will help sustain the new or revised processes you put into place. Energize your annual seasonal campaign as a focal point within the year. Begin the planning process for each seasonal campaign by June. Utilize the [Alliant Ready, Set, Go! Seasonal Immunization Campaign Calendar](#) as a planning guide.

Tips for beginning the planning process:

- Establish goals for the new season to meet or exceed last year's rates.
- Identify immunization champions from each unit and shift.

- Order vaccines and supplies.
- Send presumptive letters to patients, residents and health care agents, and include the education, consent and declination with a specific return date and date vaccinations will begin.
- Work with each unit manager to schedule vaccination dates and times.

Another key strategy for sustainability is embedding immunization into wellness priority messaging and expectations into staff development and education plans and annual competencies. Include a process to ensure all contracted staff are educated and understand their responsibility to support your immunization culture and goals.

Develop and communicate a backup plan that designates specific individuals for each key component. Document the backup plan in policies, EPP and job descriptions. Consider incorporating immunization performance goals in annual evaluations for the facility infection preventionist, facility leaders and essential personnel.

State Departments of Public Health Links

Alabama:	https://www.alabamapublichealth.gov/flu/campaign.html
Florida:	https://www.floridahealth.gov/programs-and-services/immunization/
Georgia:	https://dph.georgia.gov/immunizations/adult-immunizations
Kentucky:	https://www.chfs.ky.gov/agencies/dph/dehp/Pages/immunization.aspx
Louisiana:	https://ldh.la.gov/immunizations
North Carolina:	https://immunization.dph.ncdhhs.gov/
Tennessee:	https://www.tn.gov/health/cedep/immunization-program.html

References

Centers for Disease Control and Prevention. (2021, August 18). *Pink Book*. Centers for Disease Control and Prevention. Retrieved January 13, 2023, from [Pink Book | Immunization Strategies | Epidemiology of VPDs | CDC](#)

Deao, C. (2014). *How to Change the Culture of an Organization*. Lecture.

The National Healthcare Safety Network (NHSN) manual - cdc.gov. CDC.gov. (2022, October). Retrieved January 13, 2023, from *The National Healthcare Safety Network (NHSN) manual* - cdc.gov. CDC.gov. (2022, October). Retrieved January 13, 2023, from <https://www.cdc.gov/nhsn/pdfs/hps-manual/vaccination/hps-flu-vaccine-protocol-508.pdf>

Contact Information

Email nursinghome@AlliantHealth.org with questions or to request coaching support with your immunization performance improvement initiatives.