


Preventing Pneumonia Readmissions

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Health Services Advisory Group (HSAG)

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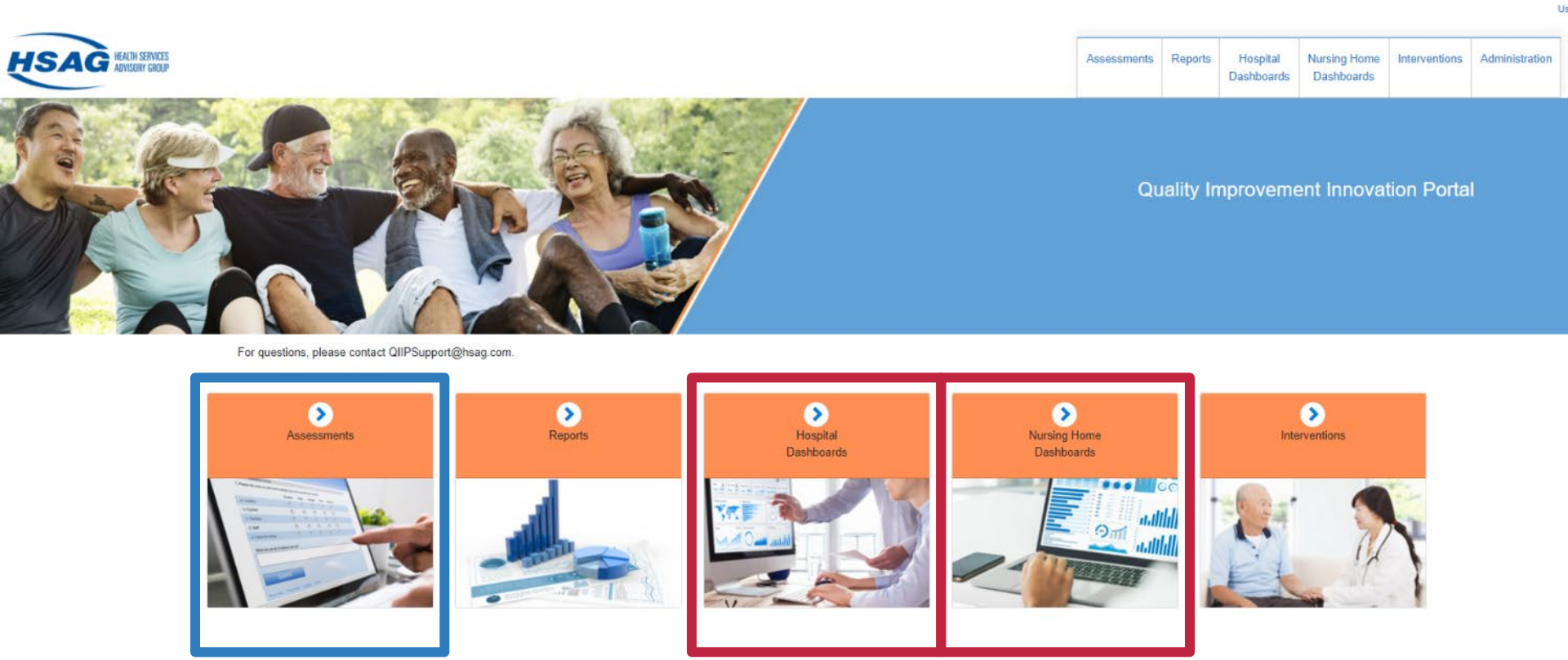
Quality Improvement Innovation Portal (QIIP): Assessments and Data Dashboard



www.hsag.com/qiip-start

QIIP Care Transitions Assessment

SNF Pain/Opioids | SNF Care Transitions | SNF ADE | SNF Quality Score | SNF Antibiotics

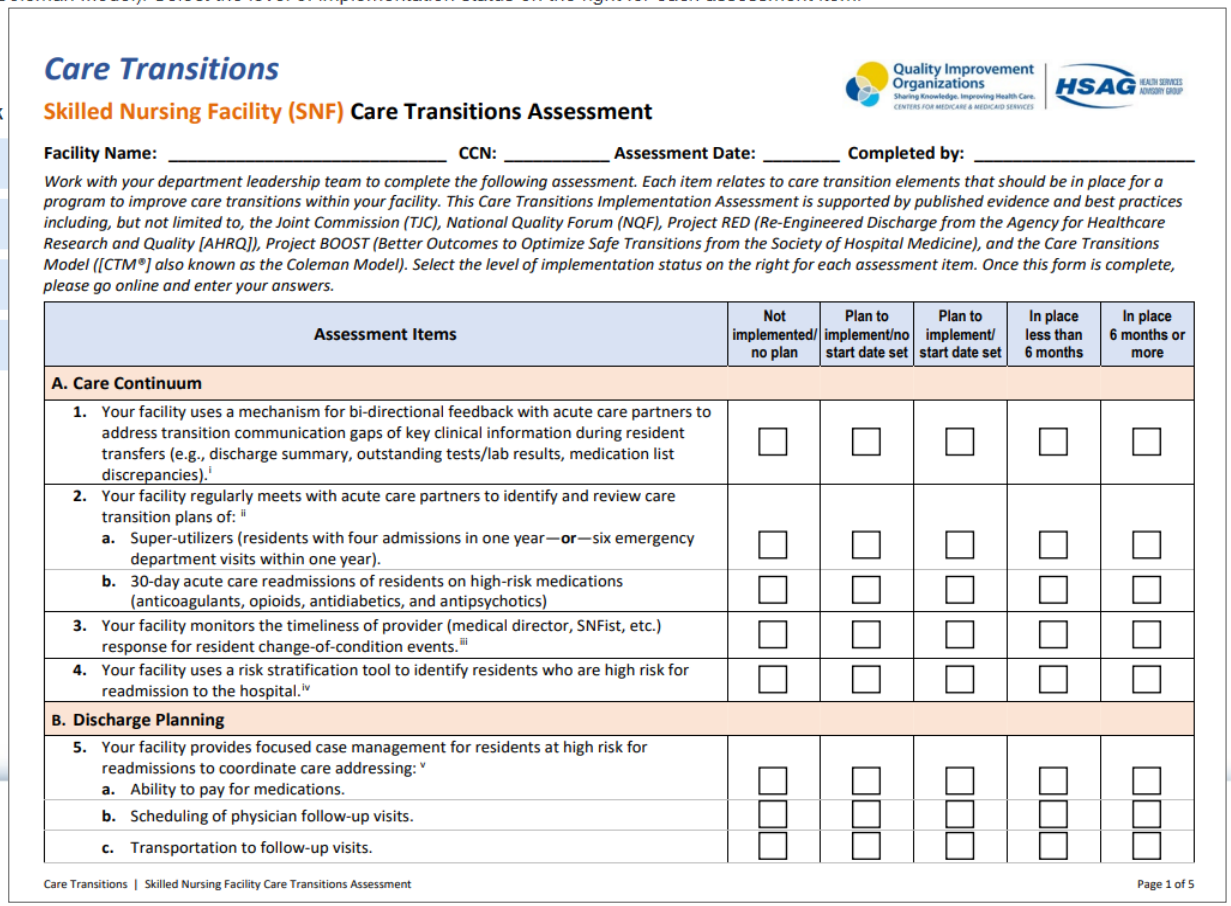
Care Transitions

Work with your department leadership team to complete the following assessment. Each item relates to care transition elements that should be in place for a program to improve care transitions within your facility. This Care Transitions Implementation Assessment is supported by published evidence and best practices including, but not limited to, The Joint Commission (TJC), National Quality Forum (NQF), Project RED (Re-Engineered Discharge from the Agency for Healthcare Research and Quality [AHRQ]), Project BOOST (Better Outcomes to Optimize Safe Transitions from the Society of Hospital Medicine), and the Care Transitions Model ([CTM®] also known as the Coleman Model). Select the level of implementation status on the right for each assessment item.

Download Assessment

To understand the rationale and references for each question, click

- **A. Care Continuum**
- **B. Discharge Planning**
- **C. Quality Improvement of Care Transitions**
- **Open Response**



Care Transitions

Quality Improvement Organizations — Sharing Knowledge. Improving Health Care. CENTERS FOR MEDICARE & MEDICAID SERVICES | HSAG HEALTH SERVICES ADVISORY GROUP

Skilled Nursing Facility (SNF) Care Transitions Assessment

Facility Name: _____ **CCN:** _____ **Assessment Date:** _____ **Completed by:** _____

Work with your department leadership team to complete the following assessment. Each item relates to care transition elements that should be in place for a program to improve care transitions within your facility. This Care Transitions Implementation Assessment is supported by published evidence and best practices including, but not limited to, the Joint Commission (TJC), National Quality Forum (NQF), Project RED (Re-Engineered Discharge from the Agency for Healthcare Research and Quality [AHRQ]), Project BOOST (Better Outcomes to Optimize Safe Transitions from the Society of Hospital Medicine), and the Care Transitions Model ([CTM®] also known as the Coleman Model). Select the level of implementation status on the right for each assessment item. Once this form is complete, please go online and enter your answers.

Assessment Items	Not implemented/ no plan	Plan to implement/no start date set	Plan to implement/ start date set	In place less than 6 months	In place 6 months or more
A. Care Continuum					
1. Your facility uses a mechanism for bi-directional feedback with acute care partners to address transition communication gaps of key clinical information during resident transfers (e.g., discharge summary, outstanding tests/lab results, medication list discrepancies).[i]	☐	☐	☐	☐	☐
2. Your facility regularly meets with acute care partners to identify and review care transition plans of: [ii]					
a. Super-utilizers (residents with four admissions in one year—**or**—six emergency department visits within one year).	☐	☐	☐	☐	☐
b. 30-day acute care readmissions of residents on high-risk medications (anticoagulants, opioids, antidiabetics, and antipsychotics)	☐	☐	☐	☐	☐
3. Your facility monitors the timeliness of provider (medical director, SNFist, etc.) response for resident change-of-condition events.[iii]	☐	☐	☐	☐	☐
4. Your facility uses a risk stratification tool to identify residents who are high risk for readmission to the hospital.[iv]	☐	☐	☐	☐	☐
B. Discharge Planning					
5. Your facility provides focused case management for residents at high risk for readmissions to coordinate care addressing: [v]					
a. Ability to pay for medications.	☐	☐	☐	☐	☐
b. Scheduling of physician follow-up visits.	☐	☐	☐	☐	☐
c. Transportation to follow-up visits.	☐	☐	☐	☐	☐

Care Transitions | Skilled Nursing Facility Care Transitions Assessment — Page 1 of 5

QIIP Readmissions Summary Data

HSAG HEALTH SERVICES ADVISORY GROUP

Your Speaker

Karen Verterano, MSN, RN

OBJECTIVES

- Review evidence-based clinical practices shown to prevent pneumonia.
- Explore strategies to reduce pneumonia.
- Discuss adherence monitoring and feedback.

Pneumonia in Skilled Nursing Facilities (SNFs)

- One of the most common healthcare-associated infections in SNFs.
  - Occurs in an estimated 1–2 residents for every 1,000 days of nursing home residence.
- A significant cause of mortality and morbidity among residents in SNFs.
  - Mortality rate as high as 41%.

Stamm D; Katta S; Stankewicz H. Nursing Home Acquired Pneumonia. StatPearls Publishing. Last Update: July 18, 2022. www.ncbi.nlm.nih.gov/books/NBK537355/

Risk Factors for Pneumonia

Risk Factors

SNF Residents at Risk

- Adults 65 years or older
- Smokers
- Brain disorders
  - Stroke
  - Head injury
  - Dementia
  - Parkinson's disease
- Weakened immune system
  - HIV/AIDS
  - Chemotherapy
  - Steroids (long-term)

Risk Factors—Co-Morbidities

- Lung diseases (asthma, COPD)
- Other conditions (diabetes, heart failure)
- Enteral feedings
- Malnourished
- Decreased activity or bedridden
- Recently hospitalized
- Poor oral hygiene

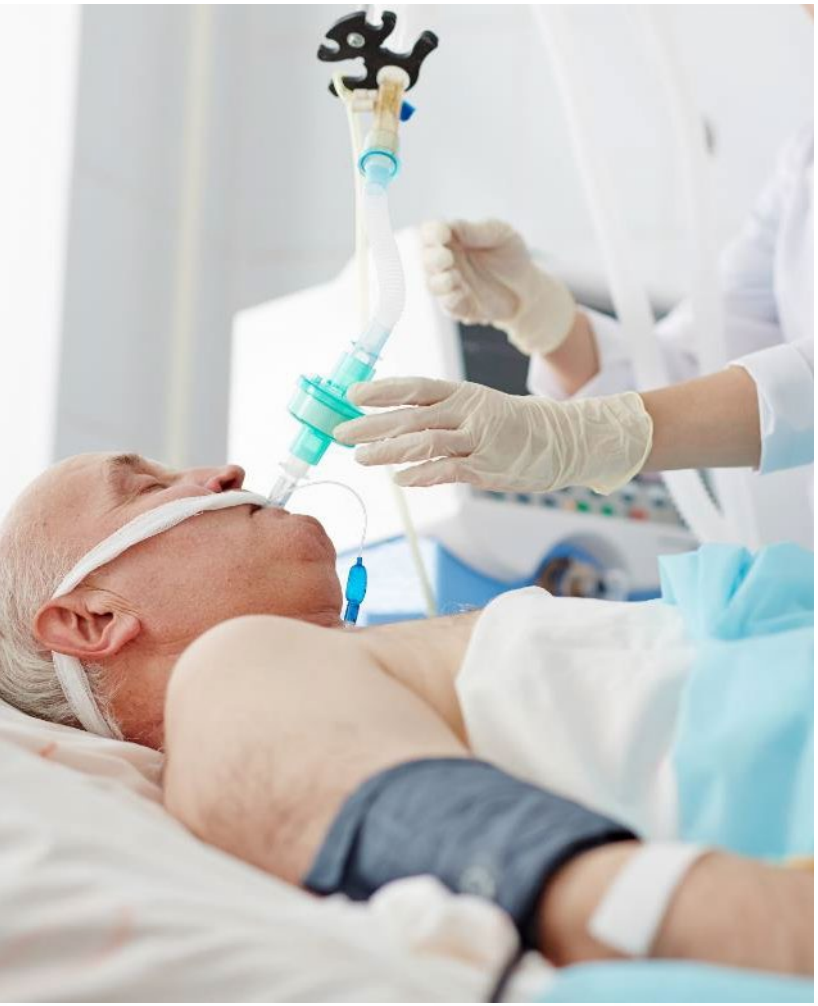
HIV/AIDS = human immunodeficiency virus/acquired immunodeficiency syndrome
COPD = chronic obstructive pulmonary disease

Assess for Pneumonia

- Fever
- Chills and sweats
- Fatigue
- Increased heart rate > 100
- Lower than normal body temperature
- Pain in the chest area
  - May occur with normal breathing
- Cough
  - May be productive or nonproductive with clear, purulent (yellow/yellowish green) or blood-tinged sputum
- Shortness of breath
  - At rest or with minimal activity
- Confusion
- Loss of appetite

Sattar S, Sharma S, et al. Bacterial Pneumonia (Nursing). August 2022. StatPearls. www.ncbi.nlm.nih.gov/books/NBK568697.
Patterson C. Loebinger M. Community Acquired Pneumonia: Assessment and Treatment. Clinical Medicine. June 2012. pubmed.ncbi.nlm.nih.gov/22783785.
Mayo Clinic. Pneumonia. www.mayoclinic.org/diseases-conditions/pneumonia/symptoms-causes/syc-20354204

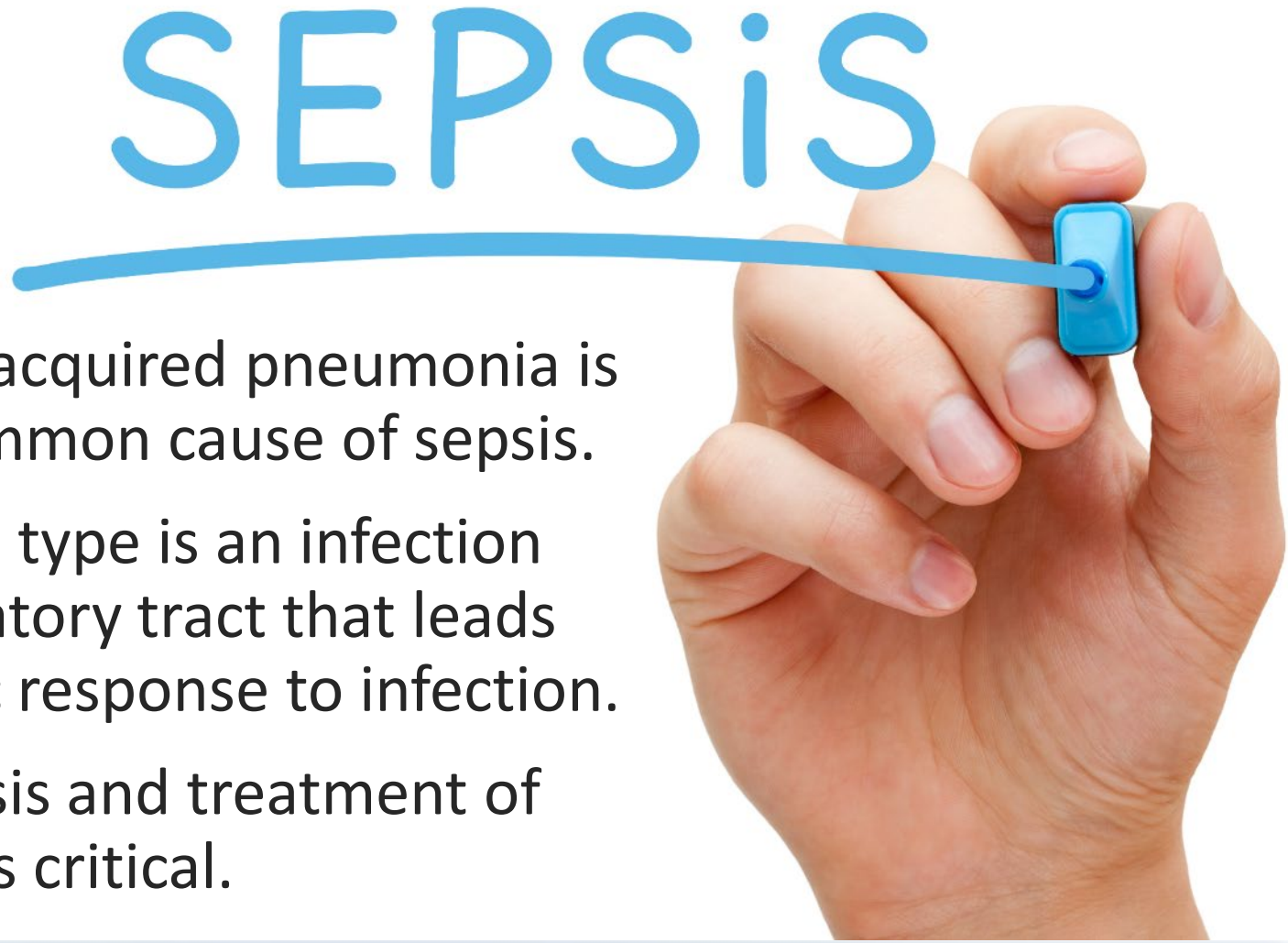
Pneumonia Complications



- Pleural effusion
- Respiratory failure
- Lung abscess
- Kidney, liver, and heart damage
- Pericarditis (heart lining inflammation)
- Atelectasis (collapse within the lungs)
- Sepsis

www.cdc.gov/pneumococcal/about/symptoms-complications.html

Pneumonia Progression to Sepsis



- Community-acquired pneumonia is the most common cause of sepsis.
- Sepsis of this type is an infection in the respiratory tract that leads to a systemic response to infection.
- Early diagnosis and treatment of pneumonia is critical.

www.cdc.gov/pneumococcal/about/symptoms-complications.html

Early Signs of Sepsis

Monitor all residents with pneumonia for early signs of sepsis

- Fever or low body temperature
- Chills
- Rapid heart rate
- Difficulty breathing
- Skin rash
- Confusion or disorientation
- Light-headedness due to a sudden drop in blood pressure

Yealy DM, Kellum JA, Huang DT, et al. A randomized trial of protocol-based care for early septic shock. *N Engl J Med.* 2014 May 1;370(18):1683-93. doi: 10.1056/NEJMoa1401602. Epub 2014 Mar 18. PMID: 24635773. pubmed.ncbi.nlm.nih.gov/24635773/

Preventing Pneumonia

- Vaccinations
- Proper hand hygiene
- Regular oral care
- Mobility
- Deep breathing exercises
- Adequate diet/hydration
- Isolate infected residents
- Smoking cessation

Yoshikawa T, Mylotte J. Nursing Home-Acquired Pneumonia. *Clinical Infect. Dis.* Nov 2022. academic.oup.com/cid/article/35/10/1205/296925.
Chebib N, Cuvelier C, et al. Pneumonia Prevention in Elderly Patients. *AgingClin.Expmntl.Rsrch.* Dec 2019. doi.org/10.1007/s40520-019-01437-7.
Burdsall D, Schweon S, et al. A Unit Guide to Infection Prevention for LTC Staff. *AHRQ*. Mar 2017. www.ahrq.gov/hai/quality/tools/cauti-ltc/modules/resources/guides/infection-prevent.html.

Summary

- Pneumonia can lead to bloodstream infections.
- Adherence monitoring of evidence-based care practices will reduce pneumonia incidence.
- Feedback pneumonia incidence and adherence monitoring results to staff to improve outcomes.

HSAG Pneumonia Prevention Toolkit—Action Plan

Infection Prevention and Control Post-Acute Plan Prioritized Risks, Goals, Strategies, and Implementation
Healthcare-Associated Infections (HAIs) | Pneumonia

Nursing Home Name: _____ CCN*: _____ Date: _____

Goal: The Percentage of Healthcare-Associated Pneumonia will Decrease by _____% by _____ (date)

Topic	Root Cause	Strategies	Implementation		Internal Nursing Home Goals
Area of Concern	Survey Findings	Action	Responsible Person(s)	Date of Completion	Evaluation of Effectiveness
HAI pneumonia	High rate of HAI pneumonia	1. Review and update policies and procedures to reflect current evidence-based practices. 2. Identify pneumonia prevention champions for each area/unit. 3. Conduct education with teach-back for staff, including nurses and nursing assistants, including: • Pathophysiology of pneumonia. • Clinical signs and symptoms of pneumonia. • Risk factors of pneumonia • Prevention bundles. 4. Use Pneumonia Risk Form to identify residents that are high risk. 5. Implement prevention bundle for pneumonia for residents identified as high risk. 6. Use HSAG Pneumonia Bundle Compliance Tool to assess adherence to prevention strategies.			100% of policies and procedures updated. 100% of the staff received education for pneumonia and prevention bundles. _____% of the residents were screened for risk of Pneumonia. _____% of the residents had implementation of the Pneumonia Bundle. Perform _____ audits/week. Compliance goal: _____%

*CCN=Centers for Medicare & Medicaid Services (CMS) Certification Number

HSAG Pneumonia Prevention Toolkit—Screen

Risk Factors for Pneumonia

Use this list of evidence-based risk factors for identifying residents that are at a higher risk of acquiring pneumonia. If a resident has two or more of these, assessment of possible pneumonia is advised.

	Risk
☐	**Adults 65 Years or Older**
☐	**Current/Former Smoker**
☐	**Brain Disorders** • Stroke • Head injury • Dementia • Parkinson's disease
☐	**Weakened Immune System** • HIV/AIDS • Chemotherapy patients • Long-term use of steroids
☐	**Lung Diseases** • Asthma • Bronchiectasis • Cystic fibrosis • Chronic obstructive pulmonary disease (COPD)
☐	**Other Conditions** • Diabetes • Heart failure • Sickle cell disease • Liver disease • Kidney disease
☐	**Residents Who Receive Enteral Feedings (Tube Feedings)**
☐	**Residents Who Are Malnourished**
☐	**Residents With Decreased Activity or Bedridden**
☐	**Residents Who Were Recently Hospitalized**
☐	**Residents With Poor Oral Hygiene**

One-page screening tool to identify residents **most** at risk for developing pneumonia

www.hsag.com/medicare-providers/nursing-homes/infection-prevention/#Pneumonia

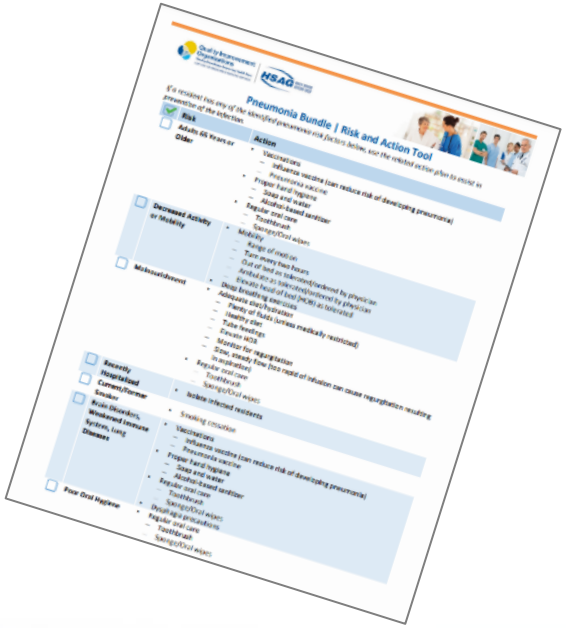
HSAG Pneumonia Prevention Toolkit—Prevent

Pneumonia Bundle | Risk and Action Tool

If a resident has any of the identified pneumonia risk factors below, use the related action plan to assist in prevention of the infection.

✓	Risk	Action
☐	**Adults 65 Years or Older**	• Vaccinations – Influenza vaccine (can reduce risk of developing pneumonia) – Pneumonia vaccine • Proper hand hygiene – Soap and water – Alcohol-based sanitizer • Regular oral care – Toothbrush – Sponge/Oral wipes
☐	**Decreased Activity or Mobility**	• Mobility – Range of motion – Turn every two hours – Out of bed as tolerated/ordered by physician – Ambulate as tolerated/ordered by physician – Elevate head of bed (HOB) as tolerated • Deep breathing exercises
☐	**Malnourishment**	• Adequate diet/hydration – Plenty of fluids (unless medically restricted) – Healthy diet – Tube feedings – Elevate HOB – Monitor for regurgitation – Slow, steady flow (too rapid of infusion can cause regurgitation resulting in aspiration) • Regular oral care – Toothbrush – Sponge/Oral wipes
☐	**Recently Hospitalized**	• Isolate infected residents
☐	**Current/Former Smoker**	• Smoking cessation
☐	**Brain Disorders, Weakened Immune System, Lung Diseases**	• Vaccinations – Influenza vaccine (can reduce risk of developing pneumonia) – Pneumonia vaccine • Proper hand hygiene – Soap and water

Pneumonia Prevention Bundle Strategies



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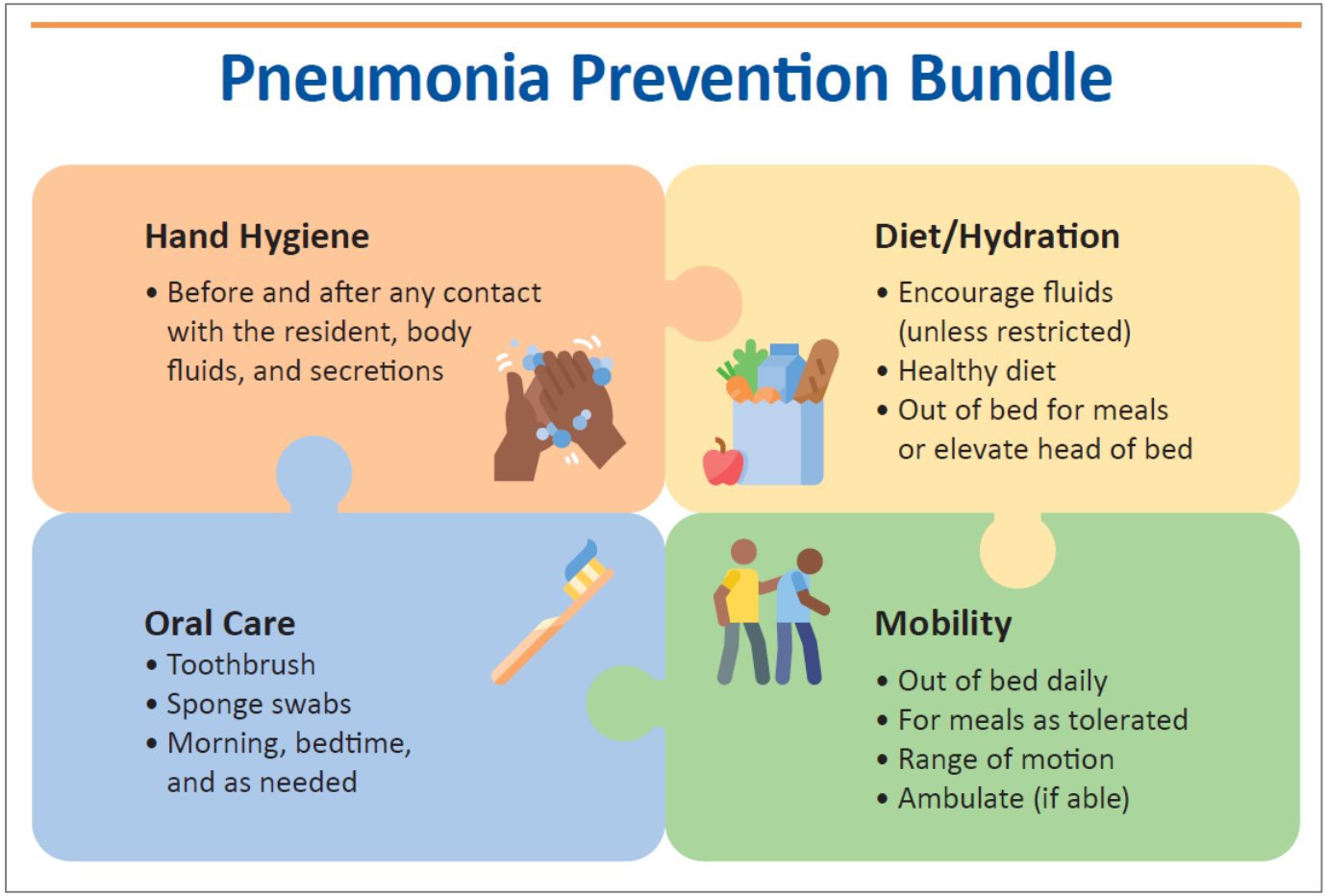
HSAG Pneumonia Prevention Toolkit—Bundle Poster



Visual cue poster to remind staff, residents, and families about the importance of pneumonia prevention strategies.

HSAG Pneumonia Prevention Toolkit—Identify

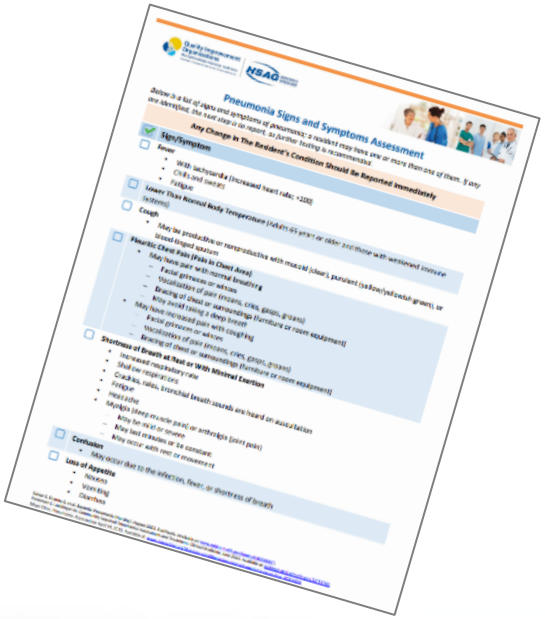
Pneumonia Signs and Symptoms Assessment

Below is a list of signs and symptoms of pneumonia; a resident may have one or more than one of them. If any are identified, the next step is to report, as further testing is recommended.

Any Change in The Resident's Condition Should Be Reported Immediately

- ☑ **Sign/Symptom**
- ☐ **Fever**
  - With tachycardia (Increased heart rate; >100)
  - Chills and sweats
  - Fatigue
- ☐ **Lower Than Normal Body Temperature** (Adults 65 years or older and those with weakened immune systems)
- ☐ **Cough**
  - May be productive or nonproductive with mucoid (clear), purulent (yellow/yellowish green), or blood-tinged sputum
- ☐ **Pleuritic Chest Pain (Pain in Chest Area)**
  - May have pain with normal breathing
    - Facial grimaces or winces
    - Vocalization of pain (moans, cries, gasps, groans)
    - Bracing of chest or surroundings (furniture or room equipment)
    - May avoid taking a deep breath
  - May have increased pain with coughing
    - Facial grimaces or winces
    - Vocalization of pain (moans, cries, gasps, groans)
    - Bracing of chest or surroundings (furniture or room equipment)
- ☐ **Shortness of Breath at Rest or With Minimal Exertion**
  - Increased respiratory rate
  - Shallow respirations
  - Crackles, rales, bronchial breath sounds are heard on auscultation
  - Fatigue
  - Headache
  - Myalgia (deep muscle pain) or arthralgia (joint pain)
    - May be mild or severe
    - May last minutes or be constant
    - May occur with rest or movement
- ☐ **Confusion**
  - May occur due to the infection, fever, or shortness of breath
- ☐ **Loss of Appetite**

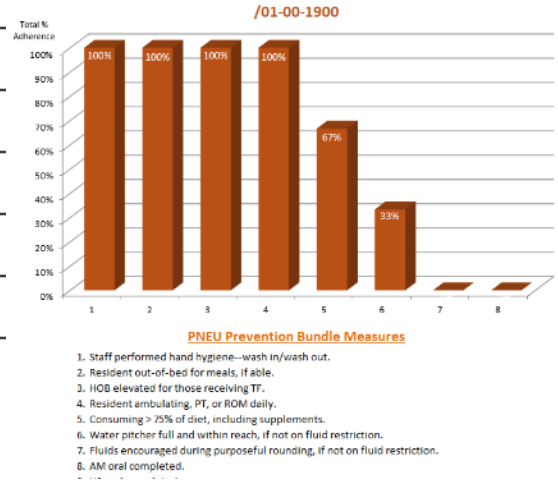
One-page assessment checklist to assist in identifying possible pneumonia



www.hsag.com/medicare-providers/nursing-homes/infection-prevention/#Pneumonia

Pneumonia Audit Tool

Complete for Each Resident With PNEU Prevention Bundle Implemented:	Resident 1	Resident 2	Resident 3
Comments			
Direct Observation — Room #			
1. Staff performed hand hygiene--wash in/wash out.	Yes	Yes	Yes
2. Resident out-of-bed for meals. (If able)	Yes	Yes	Yes
3. Head-of-bed (HOB) elevated for those receiving tube feeding (TF).	Yes	Yes	Yes
4. Resident ambulating, physical therapy (PT), or range of motion (ROM) daily.	Yes	Yes	Yes
5. Consuming > 75% of diet, including supplements.	Yes	Yes	
6. Water pitcher full and within reach, if not on fluid restriction	Yes	No	
7. Fluids encouraged during purposeful rounding, if not on fluid restriction.	No	No	
8. A.M. (morning) oral care completed.	No	No	
9. HS (at bedtime) oral completed.	Yes	No	
10. Up-to-date on PNEU vaccine(s)	Yes	No	
Total Positive Per Patient	7	5	
Total % Adherence Per Patient	87.5%	62.5%	



www.hsag.com/medicare-providers/nursing-homes/infection-prevention/#Pneumonia

Next HSAG Care Coordination Quickinar (No Sessions in November or December)

Preventing Urinary Tract Readmissions

Tuesday, January 9, 2024 | 11 a.m. PT

bit.ly/cc-quickinars3

Care Coordination Quickinar Series

NEW

Register for Phase 3: Continuation of the Care Coordination Series
August 2023–May 2024 (Sessions 21–28) at:
bit.ly/cc-quickinars3

- 21. SNF 2.0 INTERACT, Using Stop-and-Watch, and SBAR
- 22. Sepsis Readmission Prevention
- 23. Preventing Pneumonia Readmissions
- 24. Preventing UTI Readmissions
- 25. Readmissions and End of Life
- 26. Improving Communication and Teamwork Around Antibiotic Decision Making
- 27. Readmission Incentive and Penalty Programs, HRRP, WQIP, VBP
- 28. Readmissions and Post-Discharge Follow Up

www.hsag.com/cc-quickinars

Long-Term Care: 7-Week Sepsis Sprint

30-minute quickinars—*Lunch n' Learn* format
Every Tuesday, 12 noon–12:30 p.m. (PT)

1. September 26	Sepsis Kick-Off: On Your Mark, Get Set, Go!
2. October 3	Sepsis: the Silent Killer
3. October 10	Hand Hygiene: Spread the Word Not the Germs
4. October 17	Don't Wait Until It Is Too Late to Vaccinate
5. October 24	Sepsis Prevention and Screening in Long-Term Care
6. October 31	Post Sepsis Syndrome and Readmission
7. November 7	Wrap Up: Go!

Register today at: **bit.ly/NHsepsisSprintLunchNLearn**

Questions?

Thank you!

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HSAG HEALTH SERVICES ADVISORY GROUP

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