Setting Up An Effective Resident and HCW Immunization Program

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Goals

• Understand how to:
  – increase rates of vaccination against influenza and pneumococcal pneumonia among residents of long-term care (LTC) facilities,
  – increase rates of vaccination against influenza among employees of LTC facilities, and
  – improve the processes for managing influenza outbreaks in LTC facilities.
Scope of the Problem

• More than 90% of all deaths from influenza occur in the elderly
• LTC residents are particularly at risk
• Illness rates up to 60% and fatality rates as high as 55% have been seen in LTC facilities\textsuperscript{1-4}
• Influenza and pneumonia combined represent the fifth leading cause of death in the elderly; up to 20,000 residents of LTC facilities succumb to these illnesses every year\textsuperscript{5}

Scope of the Problem

• In LTC settings, evidence exists to show that influenza vaccination of both residents and staff is beneficial in reducing hospitalizations and mortality rates.

• The CDC Advisory Committee on Immunization Practices (ACIP) notes that although influenza vaccination in the frail elderly may not prevent illness, it is 50% to 60% effective in preventing influenza-related hospitalizations or pneumonia and 80% effective in preventing death.

• Among Medicare beneficiaries, influenza and pneumococcal vaccines remain under used despite the fact that they are both clinically and cost effective and are covered benefits under Medicare Part B.
Recommendations

• New federal regulations provide financial and regulatory incentives to increase influenza and pneumococcal immunization rates.

• Two CDC advisory committees now recommend that all healthcare personnel be vaccinated against influenza annually.

• AMDA endorses these efforts.
Overview of the Federal Regulations

- F334: Influenza and Pneumococcal Immunizations was issued by the Department of Health and Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS) in October 2005.

- CMS is collecting the information on rates of influenza and pneumococcal immunization on residents in LTC via Section W of the Minimum Data Set (MDS)- Version 2.0.
Regulations continued

• CMS revised Guidance to Surveyors in January 2006 with the following:
  – Medicare-certified LTC facilities must establish and maintain policies and procedures for the prevention and control of influenza and pneumococcal pneumonia that are based on CDC recommendations.
  – Policies must be in place to define when and how the vaccinations will be administered, how to address a resident’s refusal to be vaccinated, and how the facility will respond when the vaccine is unavailable because of a local, regional or national shortage of supply.
Regulations continued

• CMS revised Guidance to Surveyors in January 2006 with the following:
  – Systems must be in place to ensure that residents are vaccinated unless vaccination is contraindicated.
  – A survey of a sample of residents must show that (a) residents have received the vaccinations, or (b) documentation in residents’ charts indicates why they have not been vaccinated.
  – Federal regulations promulgated by CMS in 2002 eliminated the requirement for specific practitioner authorization for administration of pneumococcal and annual influenza vaccinations in LTC facilities.
  – According to the CDC, standing orders are the most consistent and effective method for increasing adult immunization rates.
Regulations to Practice

- Facilities must be able to demonstrate to state surveyors that they have an immunization protocol and that they have offered influenza and pneumococcal vaccination to every resident (as appropriate) and provided education about the benefits and risks of vaccination to residents or their legal representatives.
Barriers to Immunization

• Barriers to immunization in LTC generally can be divided into the following categories:
  – **Knowledge.** When residents, family members, or facility staff have misconceptions about influenza and influenza vaccination efficacy or safety they are less likely to pursue flu vaccination for themselves or encourage it for others.
  – **Access and availability.** Another barrier is lack of access to or availability of vaccination. Accessibility issues include not addressing immunization status when a resident is admitted to the facility and not having a year-round immunization plan or effort.
Barriers to Immunization

– **Cost.** The cost of an immunization program can be a barrier. Although facilities may be concerned about the cost of an employee immunization program, the costs of influenza in terms of hospitalizations, lost productivity, facility disruption, the use of antiviral medications, and even deaths are much higher.

– **Promotion.** Promotional barriers include not having organizational goals for an immunization program and not having materials in the facility to promote the immunization program. These may be among the easiest barriers to overcome.
Barriers to Immunization

- **Consent.** Consent can be a confusing issue. Federal regulations state that in LTC settings consent for annual influenza vaccination needs to be obtained only once and need not be in writing (70 FR P58840 and 58841). Requiring signed consent for influenza vaccination is inconsistent with the current practice of not requiring signed consent for other common, low-risk interventions (e.g., antibiotic treatment).

- The “Response to Comments” that accompanies the final rule makes it clear that consent for annual influenza vaccination needs to be obtained only once.
Barriers to Immunization

• **Organization.** Organizational barriers include:
  – Lack of policies and protocols on resident immunization.
  – Lack of a system (e.g., registry) for tracking the immunization status of residents and staff.
  – Lack of reminder systems.
  – Poor documentation of vaccine administration.
Barriers to Immunization

- **Liability concerns.** Ample data over many decades demonstrate that both influenza and pneumococcal vaccines are safe and effective. Nevertheless, fears of liability related to the remote possibility of a complication may lead managers of long-term care facilities to implement onerous consent requirements for vaccinations. These requirements create a barrier to the improvement of vaccination rates.
Strategies And Resources For Overcoming Barriers

- Strategies include:
  - Use of a standard form to record all vaccine-related information for each resident.
  - Implementation of standing orders.
  - Use of incentive and recognition programs.
  - Acquisition of vaccine for staff from public health programs where available and during shortages.
  - Cultivation of a culture in which influenza and pneumococcal immunization is seen as an integral part of ensuring patient safety and delivering high-quality care.
Strategies

• LTC facilities should make annual influenza vaccination for residents and staff the norm.

• Some facilities adopt an “opt-out” policy for influenza vaccinations.
Health Care Worker (HCW) Immunization Programs

- Influenza transmission among residents, family members, other visitors, and HCWs is a particular problem in LTC facilities for two reasons:
  - The close proximity of HCWs and residents.
  - The immunological changes that occur in frail or debilitated individuals, which may prevent them from responding fully to flu vaccine with protective levels of antibody.
Why is it so Important?

• Unvaccinated HCWs can both introduce influenza into a LTC facility and spread the infection once it is present.
• Studies have shown that influenza outbreaks in LTC facilities are associated with low vaccination rates among HCWs.
• Influenza vaccination of HCWs protects vulnerable patients, improves patient safety, and can significantly decrease patient morbidity and mortality.
• Vaccination rates of 50% to 60% among HCWs were associated with 40% reductions in mortality among residents⁶.

Possible Reasons For The Low Rate

• Fear of injections
• Fear of vaccine-induced illness
• A perception that the vaccine is ineffective
• Inconvenience, and
• Employers’ failure to cover the cost of vaccination
• Facility’s failure to make HCW immunization a priority
Big Problem

• Widespread illness resulting from low vaccination rates among employees may also result in staffing problems at long-term care facilities, including increased workplace absenteeism, increased work hours for remaining workers, and significant measurable costs for employers.
Understanding Translates into Acceptance

• It is important for staff to realize that they will benefit directly from receiving the vaccine.

• Staff also need to be aware that if they are vaccinated against the flu, they will be helping to protect their children and other family members from illness.
Myths and Misconceptions

• The flu vaccine causes the flu
• I got the vaccine and it made me sick
• I’ll just stay home if I get the flu
• If you vaccinate the residents, that is enough
• The preservative in the flu shot is dangerous
• The flu shot isn’t effective anyway
Examples of Incentives to Encourage Health Care Workers to Accept Influenza Vaccination

• Contests between units
• Free lunches
• Gift certificates
• Parties
• Raffles
• Recognition programs
Role of the Medical Director

• In partnership with the DON
  – Developing facility policy
    • Federal guidance to surveyors strongly promotes the medical director’s involvement in the development of facility policies on the prevention and control of influenza and pneumococcal pneumonia (F334 483.25(n) and proposed guidance Appendix P and PP). These policies should cover:
      – The timing of the facility’s annual influenza vaccination program;
Evaluating Residents for Vaccination

- The medical director should provide guidance as needed to nursing staff and practitioners who are evaluating residents’ appropriateness for vaccination. (Next slide)
- The evaluation process must emphasize and support residents’ right to refuse vaccination.
- The medical director should be available to intervene if practitioners do not comply with any step in the assessment process.
Indications and Contraindications for Influenza Vaccination

Indications for vaccination:

- High risk for complications from influenza:
  - Age $>$ 65 years
  - Residence in a long-term care facility
  - Presence of chronic disease (e.g., heart disease, kidney disease, lung disease, diabetes, asthma, anemia)
- Muscle or nerve disorders (e.g., seizure disorders, severe cerebral palsy) that can result in difficulty breathing or swallowing
  - Weakened immune system
- Ability to spread influenza to those at high risk

Valid medical reasons for withholding vaccination:

- Presence of fever
- Moderate or severe acute illness
- End stages of a terminal illness
- Egg allergy
- Development of neurologic symptoms (e.g., GBS) within 7 weeks of prior dose of influenza vaccine
Issues Specific to Influenza Immunization Programs

• Ordering vaccine supplies
  – The size of the facility and the employee vaccination rate will determine the projected need. In facilities with historically low resident or employee vaccination rates, the projected need should factor in plans for a QI program to increase rates. The staff turnover rate should be taken into account; a high turnover rate will increase the need for vaccine.

• Timing the Annual Influenza Program
  – Federal regs require facilities to offer influenza vaccination to all residents between October 1 and March 31.
Issues continued

• Using practitioner orders: The medical director may assist the facility in developing a standing order policy to prevent delays in obtaining practitioner orders.

• Managing shortages: Because federal regulations now require that all long-term care residents be offered immunization, the medical director should seek guidance from local and state authorities if he or she believes that facility staff should be given priority for vaccination during a shortage.

• Providing information about the risks and benefits of vaccination: The medical director should assist facility staff in identifying and providing information about the benefits and risks of influenza vaccination.
Issues continued

• Vaccinating employees, visitors and volunteers
  – The medical director can play a pivotal role in educating staff about the principles of influenza prevention and assisting in developing a program to ensure maximal participation of staff in the vaccination program, such as providing incentives for staff vaccination.
  – The medical director should participate in any decisions to make staff vaccination mandatory or to extend vaccination to cover volunteers and frequent visitors.
  – The medical director should also participate in developing an absenteeism policy for staff members with influenza-like illness.
Giving Pneumococcal Revaccinations

• CDC guidelines recommend giving a booster pneumococcal vaccination after 5 years only to residents who:
  – Were under age 65 when they received the first vaccination
  – Have other medical conditions (e.g., asplenia, chronic renal failure, nephrotic syndrome) that increase their risk

• Many practitioners, favor giving a one-time 5-year booster regardless of the resident’s age at the time of the first vaccination.

• The medical director should participate in the decision to offer and carry out booster vaccinations.
Management of Influenza Cases

• The medical director should:
  – Provide guidance to nursing and medical staff on the management of influenza cases within the facility.
  – Ensure that a process exists for him or her to be notified in a timely manner when a case of influenza is confirmed.
  – Ensure that a process exists for tracking all cases of influenza-like illness within the facility.
  – Establish a process for determining when to implement outbreak control measures such as antiviral prophylaxis. This should be coordinated with state and local health departments.
  – Participate in the decision to instruct visitors not to visit the facility if they have influenza-like illness.
Management of Influenza Outbreaks

• Before the Season
  – Prepare a comprehensive plan for resident and staff vaccination, surveillance, treatment, prophylaxis, and infection control
  – Implement a high-profile influenza immunization campaign
  – Discuss antiviral medication use with the consulting pharmacist(s).

• Testing for Influenza
  – Before the flu season begins, medical directors should ensure that the facility has adequate testing supplies and that the facility’s nursing staff know how to collect nasopharyngeal specimens and order influenza tests.
When to Implement Outbreak Control Measures

• According to the CDC, an outbreak is:
  – a sudden increase of acute febrile respiratory illness (AFRI) cases over the normal background rate or when any resident tests positive for influenza
  – One case of confirmed influenza, by any testing method, in a long-term care facility resident is an outbreak

o The decision to initiate influenza prophylaxis in a LTC facility should optimally be made prior to the development of a full-blown clinical outbreak.

o Begin antiviral prophylaxis within hours of receiving laboratory notification of a case of influenza.
Infection Control Precautions During an Outbreak

• Post signs at entrances and throughout the facility asking visitors to stay home if they have new respiratory symptoms.

• If an outbreak is particularly severe or widespread, a complete ban on visitors for the duration of the outbreak may be appropriate.
Appropriate Additional Infection Control Measures During an Influenza Outbreak

• Redouble the emphasis on
  – Vaccination of staff and residents
  – Hand hygiene
  – Respiratory hygiene and cough etiquette
• Insist that sick staff members do not come to work.
• Limit staff floats to or from affected units.
• Post visual alerts at building entrances and on the doors to infected residents’ rooms.
• Maintain a minimum 3-foot separation between an infected patient and other patients and visitors.
• Ensure that direct caregivers wear masks when working within 3 feet of an infected patient and that infected patients wear masks when they leave their rooms.
Declaring an Outbreak to be Over

• The CDC advises that an influenza outbreak should be considered to be over when:
  – on the basis of daily monitoring of acute febrile respiratory illness (AFRI), the facility has recorded no new cases for 1 week
  – States may issue their own guidance on when an influenza outbreak in a long-term care facility may be declared over
  – Medical directors should be familiar with their state health department’s guidance on this issue.
Declaring an Outbreak to be Over

• Consider a pneumococcal disease outbreak to be over when:
  – on the basis of daily monitoring for AFRI and pneumonias, no new cases are recorded during the month that follows the month in which the last recorded case occurs (i.e., if the last case is recorded on April 15, consider the outbreak to be over at the end of May).
Summary

- Influenza and pneumococcal disease are major preventable causes of morbidity and mortality among residents of LTC facilities.
- Federal regulations require nursing homes to offer influenza vaccination to all residents for whom vaccination is not medically contraindicated and encourage increasing immunization rates among LTC facility staff.
- Where permitted by state law, federal regulations authorize the use of standing orders to facilitate immunization programs.
Summary

- Reimbursement rates and more efficient Medicare billing procedures provide additional incentives to providers to implement immunization programs in LTC settings.
- LTC facilities must plan in advance for influenza outbreaks and must have protocols in place to deal with vaccine shortages.
Information

• For more information, contact Jackie Vance at jvance@amda.com

• To order the kit or just the DVD, go to http://www.amda.com/tools/toolkits.cfm