



Long-Term Care Facilities Workgroup Update

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HAI in LTCFs Working Group

- Develop a chapter of the National Action Plan on the Prevention of Healthcare-Associated Infections that focuses on long-term care facilities (LTCFs)
- Focus of the chapter is limited to NFs and SNFs initially (collectively considered “nursing homes”)



LTCF Action Plan Chapter timeline

- Working Group Begins Spring, 2011
- Federal Clearance Summer, 2012
- Public Comment 7/23/12-8/22/12
- Revision in Response to Federal and Public Comments Fall 2012
- Secretarial Approval Pending
Late 2012



The Burden Estimate

765,000 - 2.8 million Infections/Year



Priority Areas

1. National Healthcare Safety Network (NHSN) Enrollment
2. *Clostridium difficile* Infections (CDI)
3. Resident Influenza and Pneumococcal Vaccination
4. Healthcare Personnel Influenza Vaccination
5. Urinary Tract Infections (UTI)



Metrics with Targets

- ❑ National Healthcare Safety Network Enrollment
- ❑ Resident Influenza and Pneumococcal Vaccination
- ❑ Healthcare Personnel Influenza Vaccination



Promoting NHSN Enrollment by LTCFs

- National data sources for tracking infections in LTCFs have been limited
- The recently released NHSN LTCF Component was designed for use and application by LTCF providers
- Promoting enrollment and use of this new system will:
 - Standardize surveillance definitions and activity
 - Provide data for national benchmarks
 - Provide trends in infection rates to assess success of prevention activities



Priority Area 1: Promoting NHSN Enrollment

- *Metric 1: # certified nursing homes enrolled into the NHSN LTC Component / # certified nursing homes in the US*
 - *Baseline: No current enrollment*
- **Goal: 5% of certified nursing homes (currently 15,735) enroll in NHSN over the 5 years following launch of the component**



Preventing Lower Respiratory Tract Infections

- Lower Respiratory Tract Infections (LRTI) are a leading cause of hospitalization and death in adults older than 65 years
 - Includes severe Influenza infections and bacterial pneumonia
 - Outbreaks can occur among LTCF residents due to communal living environment, and shared care-givers
- Influenza
 - 90% of influenza related deaths occur in in persons 65 and older
 - Greater vaccination coverage in both residents and healthcare personnel has been shown to reduce healthcare-associated influenza and influenza related mortality
- Bacterial Pneumonia
 - Most commonly caused by *Streptococcus pneumoniae*
 - Pneumococcal vaccination has been shown to reduce bacteremia and death from *S. pneumoniae* in the elderly



Priority Area 3: Vaccination for residents against influenza and pneumococcus

- *Metric 3a (Influenza):* # residents receiving influenza vaccine during the current or most current influenza season/ # residents eligible for the influenza vaccine
 - *Baseline:* 81.7% for long-stay residents & 60.1% for short-stay residents according to the MDS 3.0
- *Metric 3b (Pneumococcus):* # residents receiving pneumococcal vaccine or up-to-date with their pneumococcal vaccination / # residents eligible for pneumococcal vaccine
 - *Baseline:* 79.8% for long-stay residents & 61.2% for short-stay residents according to the MDS 3.0
- ***Goal: 85% vaccination coverage of eligible residents for both seasonal influenza and pneumococcus***



Priority Area 4: Healthcare Personnel Influenza Vaccination

- *Metric 4: Proportion of Healthcare Personnel who work in long-term care who received the seasonal influenza vaccine*
 - *Baseline: 36.2% coverage according to the National Health Interview Survey (NHIS) for the 2007-2008 season*
 - *Preliminary (non-NHIS) data for 2010-11 has 64.4% coverage*
- ***Goal: 75% of HCPs in LTC receiving the seasonal influenza vaccination by 2015 based on NHIS survey data.***
 - *Aligns with previous HCP Influenza Vaccination goals outlined in Phase 2 of Action Plan*



Metrics without Targets

- *Clostridium difficile* Infections (CDI)
- UTI, CAUTI and Catheter Care Processes



Reducing *C. difficile* Infections

- *Clostridium difficile* infections (CDI) are the most common cause of acute diarrhea among nursing home residents
 - Estimated that over half of all healthcare-associated CDI will manifest in NHs
- CDI causes more severe and often relapsing infections in people >65, resulting in frequent hospitalizations and deaths
- Multiple prevention strategies including hand hygiene, environmental disinfection and antibiotic stewardship can impact transmission and infections with *C. difficile*



Priority Area 2: *Clostridium difficile* Infections

- *Metric 2: Incident NH-onset CDI Lab-ID events/ 10,000 resident days*
 - Incident lab events are defined as no previous positive or prior positive >8 weeks
 - Only those events occurring >3 calendar days after resident admission are considered NH-onset
 - *Baseline: No current established national baseline*
- ***Goal: Pilot implementation of reporting to NHSN, evaluate variability in measure, and obtain consensus on measurable 5- year target***



Reducing Urinary Tract Infections

- Urinary Tract Infections (UTI) are the most frequently reported and treated HAI in LTC
 - Leading cause of 30-day hospital readmissions from SNFs
 - Often a source for more serious infections such as blood stream infections and sepsis
- Catheter-Associated UTI (CA-UTI) events comprise a smaller proportion of all UTI events diagnosed in LTC
 - Baseline catheter utilization is lower (~5%) in nursing homes compared to acute care settings
 - More urinary catheter exposure seen in the residents recently transferred from hospitals compared to longer term residents
- High rates of asymptomatic bacteriuria (ASB) in LTCF residents leads to greater use of antibiotics
 - 23% to 50% in non-catheterized NH residents
 - 100% among residents with long-term catheters
 - Treatment has lead to an overuse of antibiotics with subsequent negative outcomes including antibiotic resistance and *C. difficile* infections



Priority Area 5: Urinary Tract Infections

- *Metric 5a: Non-Catheter Associated Symptomatic UTIs*
 - *Metric:* Non-catheter associated symptomatic UTI incidence rate: #events/1,000 resident days
 - *Baseline:* No current established national baseline
- *Metric 5b: Catheter-Associated Urinary Tract Infections*
 - *Metric:* Catheter associated symptomatic UTI incidence rate: #events/1,000 resident days
 - *Baseline:* No current established national baseline
- *Metric 5c: Catheter Utilization Ratio*
 - *Metric:* Catheter utilization ratio: catheter days/resident days
 - *Baseline:* No current established national baseline
- ***Goal: Pilot reporting to NHSN, evaluate variability, and obtain consensus on measurable 5- year target***



Next Steps

- NHSN Release to LTC Community
- Infection surveillance
- Education
- Addressing hospitalizations and rehospitalizations
- More research needed across the LTC spectrum
- Antibiotic Stewardship



Questions and Answers