

Integrating LTCFs into State HAI programs: Expanding current efforts

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CDC HAI Grantees meeting
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Introducing the DHQP LTC Team

- ❑ NHSN LTCF support:
 - ❑ Angela Anttila, Elisabeth Mungai
- ❑ LTCF Infection Control assessment support:
 - ❑ Bola Ogundimu, Ruth Belflower
- ❑ Coordination of state and national LTC partner activities:
 - ❑ Taitainia Williamson, Kate Wiedeman
- ❑ LTCF HAI surveillance and antibiotic use projects:
 - ❑ Nicola Thompson, Taniece Eure, Lisa Laplace

Long-term Care Facilities (LTCFs)

- ❑ **Settings that provide a variety of medical and non-medical services to people who have a chronic illness or disability**
- ❑ **Provide similar services as hospitals to increasingly vulnerable post-acute care (short stay) residents**
 - Post-surgical wound care, rehabilitation, I.V. infusions, dialysis, ventilator and tracheostomy care
- ❑ **Examples include:**
 - Nursing homes (NH)/ Skilled nursing facility (SNF)
 - Intermediate care facility for individuals with intellectual disabilities (ICF)
 - Assisted living facility (ALF) / Residential care homes
 - Independent care (e.g., senior apartments or retirement communities)
 - PACE programs
 - Senior day programs

Differences in regulatory oversight in LTC

❑ **Nursing homes/skilled nursing facilities**

- 95% are certified by CMS to receive Medicare or Medicaid funds;
- CMS -certified facilities are subject to inspections by state survey agencies to determine compliance with minimum health and safety standards (including infection prevention program standards)

❑ **Intermediate care facilities for individuals with intellectual disabilities**

- Funded through a Medicaid option; Certified by CMS and subject to inspections by state survey agencies
- Over 80% of ICFs serve <15 people; privately operated group homes

❑ **Assisted living facilities/residential care homes**

- Operate under state licensing rules; no federal standards
- Oversight expectations and frequency of inspections vary by state

Spotlight on infection prevention in LTC

- ❑ Sept. 2012 – CDC released the LTCF infection reporting component within NHSN
 - ❑ Oct. 2012 – Updated infection surveillance definitions for LTC published by CDC/SHEA
- ❑ April 2013 – Dept. of Health and Human Services (HHS) released the National Action Plan to Prevent Healthcare-associated Infections in LTCF
 - ❑ NHSN reporting from nursing homes was #1 priority
- ❑ Feb 2014 – Office of the Inspector General released report on adverse events and harms in skilled nursing facilities
 - ❑ *1 in 5 post-acute residents experienced an adverse event within the first 30 days of their admission*

Harm from infections among SNF residents

- ☐ Infections were among the most common causes of harm; accounting for 26% of adverse events

Type of Harm	Events related to infection	Infection events deemed preventable	Transfers to hospital from infection event
Adverse events (n=148)	39 (25.8%)	22 (59%)	34 (87.2%)
Temporary (n=113)	20 (16.8%)	9 (45%)	NA

- ☐ Hospitalizations from infections were estimated to cost ~83 million dollars (the most expensive cause of harm)

OIG report: Adverse Events in Skilled Nursing Facilities: National Incidence Among Medicare Beneficiaries (OEI-06-11-00370), February 2014

Types of infections causing harm among SNF residents

Type of Infection	Events (All harm)	Preventable events
Pneumonia and respiratory tract	15 (includes 2 cases of sepsis)	5 (33%)
Surgical site infection (superficial only)	14	9 (64%)
Urinary tract, associated with catheter	14 (includes 3 cases of sepsis)	10 (71%)
<i>C. difficile</i> infections	7	5 (71%)
Soft tissue and other	6	1 (17%)
Vascular device associated.	3	2 (67%)

OIG report: Adverse Events in Skilled Nursing Facilities: National Incidence Among Medicare Beneficiaries (OEI-06-11-00370), February 2014

Gaps/opportunities to prevent infections

- ❑ **Better recognition of the problem**
 - ❑ Standardize the way infections are defined and reported to monitor the burden of the problem
- ❑ **Improved documentation of the response**
 - ❑ Inadequate documentation of actions leads to incomplete information and missed opportunities
- ❑ **Implementing best practices for prevention**
 - ❑ Facility programs to prevent infection should be monitored for adherence and impact
 - ❑ Implement consistent methods for assessing the effectiveness of infection prevention activities

Benefit of NHSN reporting: Data for action

Current capacity

- ❑ Standardizes surveillance definitions used by all facilities participating in the system
- ❑ Provides data to inform facility quality improvement

Future – requires more facilities to use NHSN

- ❑ Provides comparisons of infection data with adjustments for facility and/or resident characteristics
- ❑ Provides national benchmarks to assess performance in local and national prevention efforts
- ❑ Demonstrates national trends in improvements and/or areas of opportunity for each infection event

Promoting NHSN use by LTCFs

- ❑ April 2013: HHS Action Plan to Prevent HAIs in long-term care released
 - Increasing NHSN enrollment by nursing homes was 1st priority
 - Promoting CDI and UTI reporting in NHSN were additional goals
- ❑ 2013-2015: State HAI programs start engaging nursing homes in NHSN use for MDRO/CDI prevention activities
 - Several states actively recruiting nursing homes into NHSN as part of ELC-funded activities
 - Nevada was first state to mandate NHSN reporting by nursing homes/skilled nursing facilities in Jan 2015
- ❑ June 2015: CSTE position statement on HAI surveillance in LTCFs
 - Identified NHSN as preferred option for HAI reporting in LTCFs

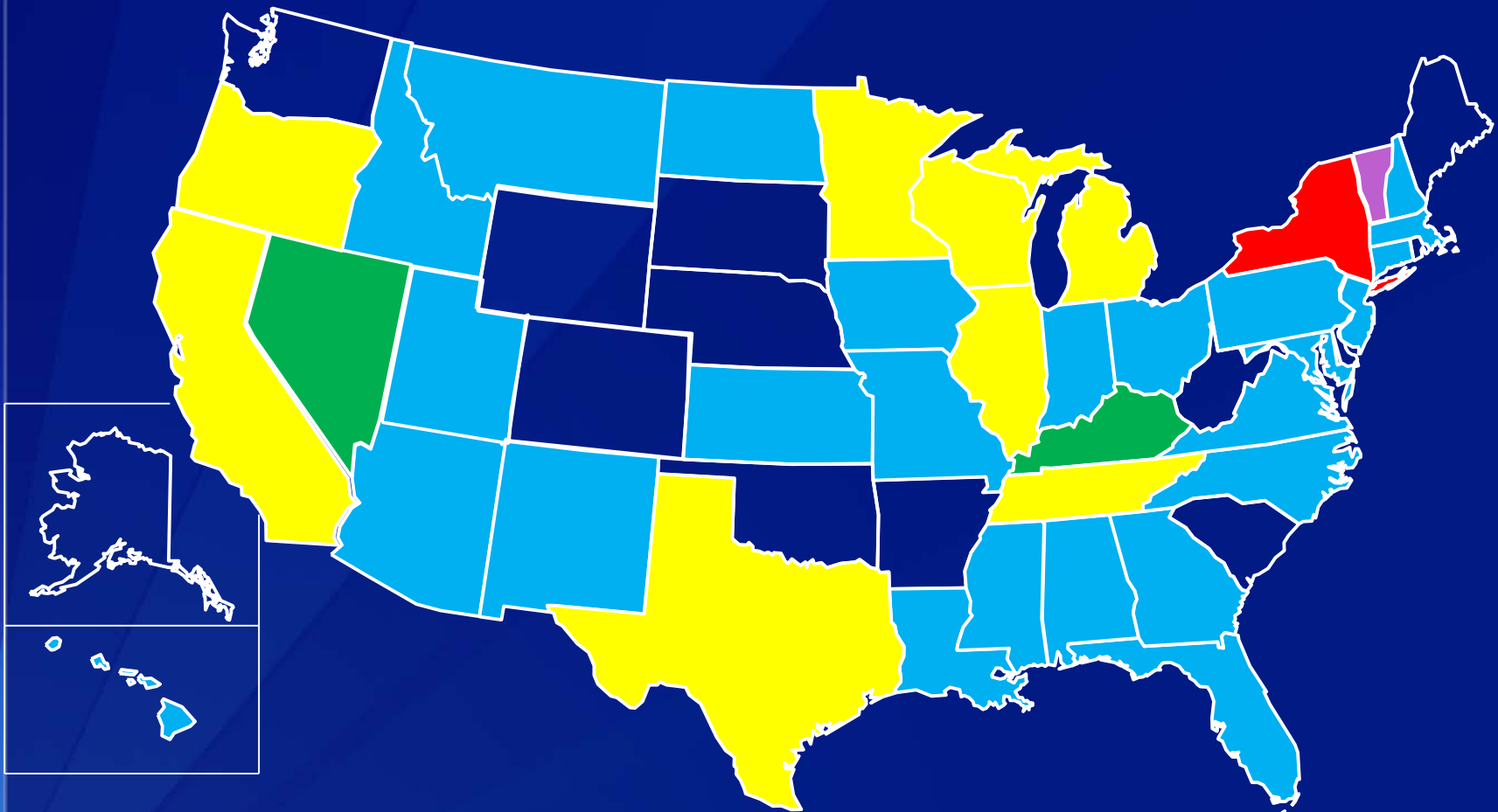
NHSN LTCF Component: Early enrollees

- ❑ **268 unique SNF/NHs have completed enrollment**
 - Represent 1.7% of CMS certified nursing facilities in US
 - 37 states + DC with at least one or more SNF/NH enrolled
- ❑ **Ownership***
 - 10% Government/Veterans administration**
 - 57% Non-profit**
 - 33% For profit
- ❑ **Affiliation***
 - 34% Hospital-based**
 - 38% Independent
 - 28% Multi-facility organizations
- ❑ **94% Dual certified facilities (Medicare and Medicaid)***

* estimates from preliminary analysis

** proportions are higher than distribution nationally

NHSN NH Users by State – 11/15/2015



- | | |
|---|---|
|  <5 |  31-50 |
|  5-15 |  51-75 |
|  16-30 |  >75 |

NHSN events and patterns of reporting: Jan 2013– Dec 2014

- ❑ Reviewed data reported from 201 facilities enrolled
- ❑ 155 (77%) submitted at least one monthly reporting plan
- ❑ 83% of facilities with a reporting plan submitted at least one complete month of data
- ❑ Consistent reporting (≥ 6 months of complete data) declined over time

Event	# of months intended	# of months completed	Percent completed
<i>C. difficile</i>	1358	1011	74%
Methicillin-resistant <i>S. aureus</i>	709	543	77%
Urinary tract infection	673	547	81%
Vancomycin-resistant <i>Enterococcus</i>	581	451	77%
Carbapenem-resistant <i>E. coli</i>	512	381	74%

Total number of facilities	2013	2014
Intending to report >1 event	110	118
>1 completed month (% among intended)	92 (83.6)	97 (82.2)
Reported consistently* (% among completed)	70 (76.1)	46 (47.4)
Median consecutive months of reporting (IQR)	6.5 (1, 8)	4 (1, 8)

The critical role of state partners

- ❑ Staff turnover, limited time and resources, and competing priorities are known barriers to voluntary NHSN reporting by LTCFs
- ❑ External support from state health departments and other partners is a strong driver of NHSN use by LTCFs
- ❑ As state programs continue engaging LTCF in NHSN reporting, their experience will inform:
 - ❑ How barriers to NHSN enrollment and reporting can be overcome by LTCFs
 - ❑ What CDC can provide to assist state partners who are promoting NHSN use by LTC

Other HAI prevention efforts in NHs: The AHRQ CAUTI LTC project

- ❑ Nation-wide effort to promote CAUTI measurement and prevention; multi-partner effort led by HRET
 - Recruited 548 facilities into 5 cohorts; Organizational leads at the state level coach a smaller number of facilities in each cohort
 - Each cohort collects baseline (3mo) and post-education (9mo) data on catheter use, CAUTIs and process measures
- ❑ Used NHSN surveillance definitions and data collection methodology for CAUTI
 - Some state leads have incorporated NHSN into the UTI collaborative for data submission
- ❑ Strong educational program on management of urinary devices and key infection prevention practices
 - Major focus on use of diagnostic testing, interpretation of results and reducing antibiotic use for asymptomatic bacteriuria

Spotlight on infection prevention in LTC continues...

- ❑ March 2015 – The White House releases the National Action Plan for Combating Antimicrobial Resistance
- ❑ July 2015 – CMS proposes new Federal Regulations for Long-term care facilities *including new infection prevention and antibiotic stewardship activities*
- ❑ September 2015 – CDC releases the Core Elements of Antibiotic Stewardship for Nursing Homes
- ❑ October 2015 – CMS announces the *C. difficile* Infection Reporting and Reduction project within the nursing home 11th Scope of work for Quality Innovation Networks – Quality Improvement Organizations (QIN-QIO)

CMS proposed regulations for infection prevention and control programs (IPC)

- ❑ Facility risk assessment of resident population
- ❑ Integrating IPC into QAPI activities
- ❑ Required review and update of IPC program, policies/procedures
- ❑ Antibiotic use protocols and monitoring included in IPC and pharmacy services
- ❑ Designated IPC Officer with specific training
- ❑ IPC-specific education and training for all staff



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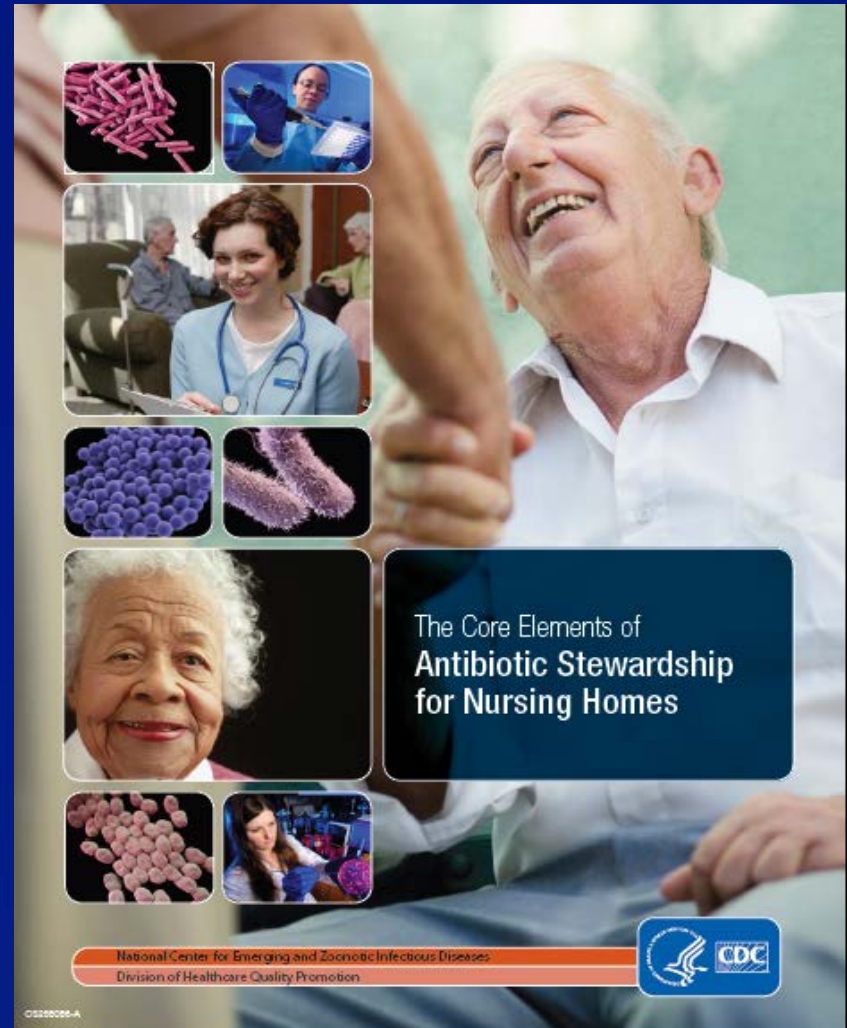
42 CFR Parts 405, 431, 447, *et al.*

Medicare and Medicaid Programs; Reform of Requirements for Long-Term Care Facilities; Proposed Rule

CDC Core Elements of Antibiotic Stewardship

- ❑ Leadership commitment
- ❑ Accountability
- ❑ Drug expertise
- ❑ Action
- ❑ Tracking
- ❑ Reporting
- ❑ Education

Practical strategies for applying the core elements in nursing homes



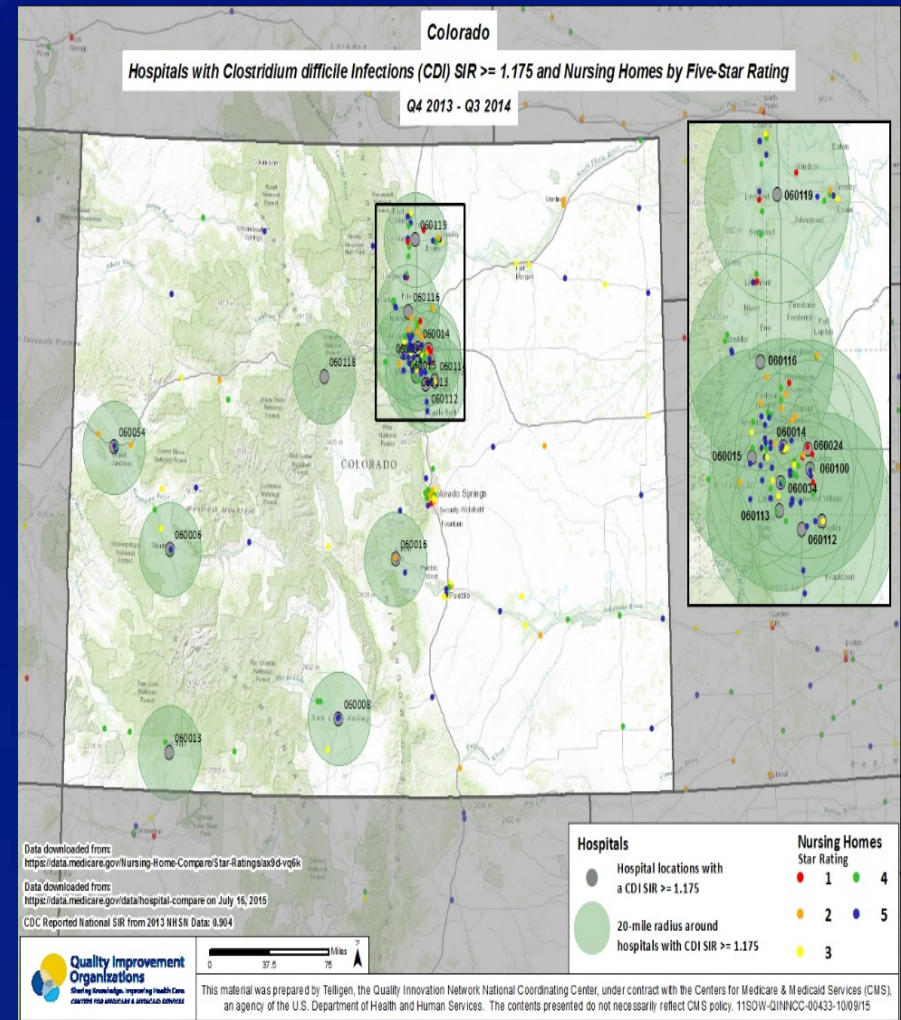
<http://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html>

CMS CDI Reporting and Reduction project, 2016-2019

- ❑ Working within the National NH Quality Care Collaborative
 - ❑ QIN-QIOs have already recruited ~7400 NHs into the collaborative
- ❑ CDI project goal to recruit 15% (~2300 NHs) to enroll into NHSN and report CDI events
 - ❑ Recruitment and NHSN enrollment from Feb-June 2016
 - ❑ Monthly NHSN CDI reporting from July 2016- July 2019
- ❑ Training in LTC communication (TeamSTEPPS) and antibiotic stewardship for *all NHs* within the collaborative starting in July 2017
 - ❑ CDC and CMS will be monitoring change in CDI rates among the NHSN reporters before and after these educational interventions

CMS CDI project: Data to guide recruitment

- ❑ CMS QIN national coordinating center providing state reports to state QIOs to support NH recruitment based on publically available NHSN data
- ❑ The map identifies hospitals whose Standardized Infection Ratio (SIR) is at least 130% of the national CDI SIR average and any Nursing Homes within a 20-mile radius of hospital.



Expanding IC assessments in LTCFs

- ❑ Assessments designed for use in nursing homes
- ❑ While observations are not required, tools for monitoring HH, gown/glove use and point of care testing included in assessment
- ❑ State NH partners can provide support for identifying and recruiting NHs

Infection Control Domains for Gap Assessment

- I. Infection Control Program and Infrastructure
- II. Healthcare Personnel and Resident Safety
- III. Surveillance and Disease Reporting
- IV. Hand Hygiene
- V. Personal Protective Equipment (PPE)
- VI. Respiratory/ Cough Etiquette
- VII. Antibiotic Stewardship
- VIII. Injection safety and Point of Care Testing
- IX. Environmental Cleaning

Take away points

- ❑ Several national initiatives are driving NHSN use, infection prevention and antibiotic stewardship in NHs
 - ❑ These activities may align closely with State HAI prevention plans for long-term care facilities
- ❑ State HAI programs serve a critical role in supporting NH infection surveillance and prevention programs
 - ❑ The expanded IC assessments provide an opportunity to identify key resource and training gaps needed to sustain infection prevention activities, including NHSN use
- ❑ State partners have an opportunity to coordinate efforts and expand the impact of these programs
 - ❑ Build on existing relationships, experience, and infrastructure
 - ❑ Shared learning and support within the state

Open discussion about engaging LTCFs

- ❑ Is your HAI program already partnering with the QIN-QIO nursing home programs?
- ❑ Could the state HAI program have a role in supporting the CMS CDI reporting project?
- ❑ Have any state HAI programs brought NH partners into your HAI advisory committees?
 - ❑ Which partners have you included?
 - ❑ Could those partners help promote the IC assessments?
- ❑ Other comments or questions about engaging nursing homes or other LTCFs?

Thank you for all your efforts!!

Email: nstone@cdc.gov with questions/comments

For more information please contact Centers for Disease Control and Prevention

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