Why Focus on *C. diff*?

- 70% of *C. diff* infection-related harm is preventable
- About 1 in 5 patients who get *C. diff* will get it again
- Helps reduce readmissions and lowers SNF costs
- The Average Cost for *C. diff* medications in the Nursing Home = $2400 - $4800 per episode

https://www.cdc.gov/cdiff/what-is.html
Risk Factors for \textit{C. diff}

- **Antibiotics** (#1)
- Advanced Age – 65 or older
- Proton pump inhibitors
- GI surgery/manipulation
- Healthcare exposure
- Immunocompromised

http://www.cdc.gov/hai/organisms/cdiff/cdiff_faqs_hcp.html
Nursing Homes and Quality Innovation Networks—Quality Improvement Organizations (QIN-QIOs) across the country are working together in the CMS National Nursing Home Quality Care Collaborative from 2016-2019, in part to implement antibiotic stewardship and prevent and manage *C. difficile* infections. This initiative will support nursing home submission of data into the CDC’s National Healthcare Safety Network (NHSN) that will create a new national baseline for *C. difficile* infections.

Tracking *C. difficile* infections, implementing antibiotic stewardship, and effectively preventing and managing *C. difficile* infections will improve quality of care and outcomes for nursing home residents.
What the Facilities Agreed to Do

- **Track C. diff** using the same method as hospital partners – NHSN (National Healthcare Safety Network)

- Enroll the facility in NHSN and register users within the Secure Access Management Services (SAMS)

- Form an interdisciplinary team to utilize a data driven approach to identify opportunities for improvement and address gaps and apply planned interventions

- Identify a team sponsor and day to day leader

- Participate in NHSN Training sessions

- Submit data during time period

- Participate in education sessions, conference calls or webinars for Identification, Prevention and Management

Empower your Infection Prevention Nurse to lead the team
NHSN Reporting Advantages

Getting Ahead of the Curve

- Standardized method to track and analyze infection data
- Benchmarking against the state and nation
- Prepare for upcoming SNF infection surveillance regs
- Utilization of the same tracking method as hospitals
- Helps to meet CMS requirements for surveillance and tracking
Where We Focused Our Efforts

**Best Practices**

- NHSN Reporting: Participant Access and Data Accuracy
- Antibiotic Stewardship
- Testing Stewardship
- Hand Hygiene
- Environmental Cleaning
- Personal Protective Equipment
- Contact Isolation
NHSN Resources and Training

- 2018 NHSN Long-term Care Facility Component Annual Training
  [https://www.cdc.gov/nhsn/training/ltc/index.html](https://www.cdc.gov/nhsn/training/ltc/index.html)

- NHSN Data Reporting-Monthly Reporting Plan – Video #1: [https://www.youtube.com/watch?v=nN0Jw-jxFco](https://www.youtube.com/watch?v=nN0Jw-jxFco)

- NHSN Data Reporting-Entering C. diff Events – Video #2: [https://www.youtube.com/watch?v=EFAxtiT3zCk](https://www.youtube.com/watch?v=EFAxtiT3zCk)

- NHSN Data Reporting – Entering Summary Data – Video #3: [https://www.youtube.com/watch?v=Dwp8SebX6Ic](https://www.youtube.com/watch?v=Dwp8SebX6Ic)

- Refer to the *HQI NHSN Enrollment, Set-Up and Data Collection* guide

- Review the CDC-NHSN Lab ID Event Protocol for Long Term Care Facilities at: [https://www.cdc.gov/nhsn/pdfs/ltc/ltcf-labid-event-protocol_current.pdf](https://www.cdc.gov/nhsn/pdfs/ltc/ltcf-labid-event-protocol_current.pdf)

- Additional CDC-NHSN resources: [https://www.cdc.gov/nhsn/ltc/cdiff-mrsa/index.html](https://www.cdc.gov/nhsn/ltc/cdiff-mrsa/index.html)
NHSN Enrollment, Set-Up & Data Collection User Guide

- EASY to follow
- Step-by-step instructions
- Screen shots of EACH action
- All in logical order
NHSN Reporting

Positive \textit{C. difficile} test result

\begin{itemize}
  \item Prior Positive \leq 2 weeks
  \begin{itemize}
    \item NO: Report as Lab ID Event
      \begin{itemize}
        \item \textit{Incident} if no previous positive, or prior positive >8 weeks
      \end{itemize}
    \item YES: Duplicate – Not a Lab ID Event
      \begin{itemize}
        \item \textit{Recurrent} if prior positive >2 and \leq 8 weeks
      \end{itemize}
  \end{itemize}
\end{itemize}
Excel Tracking Tool for *C. diff*

https://www.nhqualitycampaign.org/goalDetail.aspx?g=inf#tab2

**Infections Tracking Tool**

Use this Excel Tracking Tool to track *C. difficile* and related processes. It has been especially designed to support homes who would also like to report data to the National Healthcare Safety Network (NHSN), which is maintained by the Centers for Disease Control and Prevention (CDC). Your data will produce charts to help you identify patterns and track processes. [InfectionsTrackingTool_v2.1_11-22-16.xls]

<table>
<thead>
<tr>
<th>Worksheet</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>Table of contents and overview.</td>
</tr>
<tr>
<td>Instructions</td>
<td>Step-by-step guide for using this tool provided in a separate word document. Print for easy reference.</td>
</tr>
<tr>
<td>Common Qs &amp; As</td>
<td>Answers to commonly asked questions. Print for easy reference.</td>
</tr>
<tr>
<td>Definitions of CDI Case Types</td>
<td>Definitions of terms used in this workbook.</td>
</tr>
<tr>
<td>Resident List</td>
<td>Step 1: Create dropdown lists for your residents' names.</td>
</tr>
<tr>
<td>Specimen Log</td>
<td>Step 2: Log each CDI POSITIVE result you receive from the lab.</td>
</tr>
<tr>
<td>Admissions &amp; Census</td>
<td>Step 3: Record your average daily census and number of residents treated for CDI on admission each month.</td>
</tr>
<tr>
<td>Process Tracking</td>
<td>Graphs help you monitor and track your processes from month to month.</td>
</tr>
<tr>
<td>Data for Website Entry</td>
<td>Two outcomes are calculated each month. Log in to the Campaign website to submit your results EACH MONTH.</td>
</tr>
</tbody>
</table>

*Confidentiality is important. Please do not transmit this form with resident-identifying information. Instructions for de-identifying this tool are provided in the Common Qs & As tab.*

Click the hyperlinks above or the tabs at the bottom of your Excel window to access the different worksheets.
You Can’t Improve What You Don’t Measure
Facility-Specific CDI Reports

ABC Nursing & Rehab Center

C. difficile Rates Report (Data Source: NHSN)

Timeframe: 08/2017 to 05/2018

WHERE DOES MY FACILITY CURRENTLY STAND AND WHAT IS THE GOAL?

Currently, your facility rank within the state network of NHSN reporting SNFs is: # 33 out of 42

Your facility’s baseline LTCF-onset incident CDI rate in Mar - Dec 2017 was: 0.970

By September 2018, the goal is to achieve an LTCF-onset incident CDI rate of equal to or less than: 0.873

Your facility’s current 10-month LTCF-onset incident CDI rate in Aug - May 2018 is: 1.303

WHAT IS IN THIS REPORT? The following report contains monthly data on your nursing home’s C. difficile infection (CDI) rates as reported through NHSN. The primary outcome measure we are tracking is the LTCF-onset incident CDI rate, which excludes recurrent infections. In addition, we have provided the other types of CDI rates from NHSN to help your facility track progress in CDI reduction across all areas. The measures included are calculated using the formulas below:

- **LTCF-onset incident CDI rate** = # LTCF-onset C.diff incident count / # resident days * 10,000
- **LTCF-onset CDI rate** = # LTCF-onset C.diff events / # residents days * 10,000
- **Total CDI rate** = # C.diff events / # resident days * 10,000
- **Percent of total CDI counts that are LTCF-onset** = # LTCF-onset C.diff events / # C.diff events
- **Total CDI LTCF-onset percent that is acute care transfer** = # acute care transfer LTCF-onset C.diff events / # LTCF-onset C.diff events
- **Total CDI percent that is community-onset** = # community-onset C.diff events / # C.diff events
- **Total CDI percent that is recurrent** = # C.diff recurrent events / # C.diff events
- **CDI treatment prevalence on admission** = # treated C.diff resident admissions / # resident admissions * 100
Facility-Specific CDI Reports

ABC Nursing & Rehab Center
C. difficile Rates Report

Currently, your facility rank within the state network of NHSN reporting SNFs is: # 33 out of 42

Your facility's baseline LTCF-onset incident CDI rate in Mar - Dec 2017 was: 0.970

By Sep 2018, the goal is to achieve an LTCF-onset incident CDI rate of equal to or less than: 0.873

Your facility's current 10-month LTCF-onset incident CDI rate in Aug - May 2018 is: 1.303

<table>
<thead>
<tr>
<th>LTCF-Onset Incident CDI Rate</th>
<th>Aug-17</th>
<th>Sep-17</th>
<th>Oct-17</th>
<th>Nov-17</th>
<th>Dec-17</th>
<th>Jan-18</th>
<th>Feb-18</th>
<th>Mar-18</th>
<th>Apr-18</th>
<th>May-18</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># Incident LTCF-Onset C.diff Events</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td># Resident Days</td>
<td>6,337</td>
<td>5,957</td>
<td>6,310</td>
<td>5,905</td>
<td>6,153</td>
<td>6,251</td>
<td>5,700</td>
<td>6,369</td>
<td>6,077</td>
<td>6,356</td>
<td>61,415</td>
</tr>
<tr>
<td>Your Facility's Rate</td>
<td>1.578</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1.625</td>
<td>0.000</td>
<td>3.509</td>
<td>1.570</td>
<td>1.646</td>
<td>3.147</td>
<td>1.303</td>
</tr>
<tr>
<td>Participating SNFs in State Group Rate</td>
<td>0.843</td>
<td>0.401</td>
<td>0.518</td>
<td>0.532</td>
<td>0.775</td>
<td>0.385</td>
<td>0.714</td>
<td>0.802</td>
<td>0.691</td>
<td>1.396</td>
<td>0.706</td>
</tr>
</tbody>
</table>

LTCF-Onset Incident CDI Rate = # Incident LTCF-Onset C.diff Events / # Resident Days *10,000

Your Facility's Rate
Participating SNFs in State Group Rate
Goal Rate (0.873)
Targeted Assistance

Using National Healthcare Safety Network data (NHSN), facilities with the highest C. diff rates were identified. Low performers received facility-specific coaching calls, assistance overcoming barriers and frequent outreach from HQI.

The 10% of nursing home facilities with the highest CDI rates received one-on-one consultation & training from HQI.
Targeted Assistance

Small Changes Drive Noteworthy Improvement

**Expert Advisors**: A team of experts in epidemiology, long-term care and infection prevention identified interventions and topics for maximum impact and participated in facility-specific coaching calls and regional webinars.

**Collaborative Learning**: During monthly sharing calls, nursing homes discussed their successes and challenges and heard best practices from high performers and our expert advisors.

**Focused Topics**: Nursing homes were challenged to *Do One Thing Differently* each month by highlighting topics that make the greatest impact (i.e., hand hygiene, environmental cleaning, *C. diff* testing). The topics were reinforced through email campaigns, learning events and coaching calls.
Data Engagement

• Add data to every meeting – make it applicable and interesting

• Create charts and graphs that are visible around the facility

• Coach employees on what it means to see and use data

• Bring employees, residents, and families into the conversation

• Create a culture based on integrity that begins with doing the right thing
Prepare

- Staff Education *C. diff* etiology, criteria
- Assessment of Current CDI Prevention Activities
- Make A Team
- Make a CDI Prevention and Control Policy

- Develop/Use A CDI Response Algorithm
Prepare: Staff Education

https://qioprogram.org/nursing-home-training-sessions

Nursing Home Training Sessions Introduction

1. TeamSTEPPS® in LTC: Communication Strategies to Promote Quality and Safety

2. Exploring Antibiotics and their Role in Fighting Bacterial Infections

3. Antibiotic Resistance: How it Happens and Strategies to Decrease the Spread of Resistance

4. Antibiotic Stewardship

5. *Clostridium difficile* Part One: Clinical Overview

6. *Clostridium difficile* Part Two: Strategies to Prevent, Track, and Monitor *C. difficile*

We hope that you find these training tools and resources helpful in your work to implement antibiotic stewardship and prevent *C. difficile* infections in your residents. All are welcome to explore this site and use the information as applicable to you and your organization. Thank you for your dedication to preventing infections in residents (and staff, too) and promoting appropriate antibiotic use.

Training sessions and resources for nursing homes to support:

- Implementation of principles and practices of antibiotic stewardship
- Prevention and management of *Clostridium difficile* infections

*C. difficile* harms residents!
Prepare: Assess Education Efforts

Clostridium difficile PRE-WORK KNOWLEDGE TEST for LTC Providers

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☑</td>
<td>C. difficile spores can be transferred to and between residents via hands of healthcare workers who have touched a contaminated surface or item.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>After treatment, repeat testing is not recommended if the resident’s symptoms have completely resolved.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>C. difficile spores live in the feces of infected residents, and using alcohol or alcohol based hand rub to wipe down surfaces that come in contact with the feces kills the spores.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>New onset of unexplained diarrhea (3 loose stools in 24 hours) should trigger the need to test for C. difficile in a nursing home resident.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>C. difficile spores can live on inanimate surfaces for up to 7 days.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>The judicious use of antibiotics and contact precautions for infected residents are key C. difficile prevention strategies in the healthcare setting.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>The consequences that can result from a C. difficile infection include all of the following: pseudomembranous colitis, toxic megacolon, perforated colon, dehydration, sepsis, and even death.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>When testing for C. difficile in a resident who has diarrhea, the presence of toxin production found in the stool is the most reliable indicator.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>Vigorous handwashing with soap and water instead of alcohol based hand rub is recommended after contact with the C. difficile infected resident, contact with all surfaces in the infected resident’s room, and contact with any equipment that has been used by that resident.</td>
</tr>
<tr>
<td>☐</td>
<td>☑</td>
<td>C. difficile prevention strategies in the healthcare setting include all of the following: performing hand hygiene before and after gloving, wearing gloves and gowns when entering the room of a C. difficile infected resident and placing the resident in a private room whenever possible.</td>
</tr>
</tbody>
</table>

Adapted from Arizona Department of Health Services, Arizona Healthcare Associated Infections (HAI) Program: Clostridium difficile (CDI) Prevention Toolkit – 2012
No One Left Behind...

Are you including Residents and Family in your *C. difficile* education?

Do I need to wash my hands too?
Prepare: Assess with Probing Questions

Prevent and Manage Infections Safely: C. difficile

Probing Questions

November 21, 2016

Why is our C. difficile infection (CDI) rate high?
- Is our CDI rate higher than in previous years?
- What is driving our high CDI rate?
- Are CDI rates high at the hospitals that frequently transfer residents to our nursing home?

Which groups are most affected?
- Are the CDI cases mainly happening with residents that have had a recent history of CDI? Or, are they brand new cases (incident cases)?
- Are CDI rates higher among residents that have been hospitalized within the last 30 days?
- Are CDI rates higher among residents who were admitted on antibiotics or who have recently (within past 2 weeks) received an antibiotic course?
- Are CDI cases happening throughout the nursing home or limited to one hallway or unit?
- Are new CDI cases happening among residents with roommates that have had a current or previous history of CDI?

Processes and Resources to Consider

Is there a process for early diagnosis and isolation of CDI?
- Do staff know the signs/symptoms of CDI?
## Prepare: Assess

### Current activities survey:

**SECTION 1. KNOWLEDGE AND COMPETENCY**

<table>
<thead>
<tr>
<th>Early identification</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1  Do direct care personnel* identify and communicate new or worsening diarrhea?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2  Do nursing personnel* obtain a stool specimen for <em>C. difficile</em> testing only when a resident is having watery diarrhea?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3  Do nursing personnel know the appropriate way to collect and submit a stool specimen for <em>C. difficile</em> testing?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4  Do medical personnel* know the <em>C. difficile</em> testing (e.g., EIA “toxin” vs. molecular “PCR”) being performed by the laboratory?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rapid containment**

| Q5  Do healthcare personnel* know what precautions are used to prevent the spread of *C. difficile*? |     |    |     |
| Q6  Do nursing personnel know to implement contact precautions for residents known or suspected of having CDI? |     |    |     |
| Q7  Do residents with CDI and their family members receive education about the use of hand washing and contact precautions to prevent transmission of CDI? |     |    |     |

**SECTION 2. INFECTION PREVENTION POLICIES AND INFRASTRUCTURE**

<table>
<thead>
<tr>
<th>Early identification</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1  Is there a protocol for notifying medical personnel when a resident develops new or worsening diarrhea?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2  Does your nursing home have a policy that allows nursing personnel to collect and order a stool for <em>C. difficile</em> testing?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3  Is there a protocol for notifying medical personnel of the results of a <em>C. difficile</em> test?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* *
Introducing!

**Goal:** Prevent harm (adverse events, abuse & neglect) for nursing home residents

✓ Covers a wide range of strategies and actions to promote resident safety

Prepare: Develop A Team of Optimists

“I just work here”

- Clear roles, responsibilities, expectations
- Identify peer mentors
- Have a clear, valued, and shared vision
- Optimize your resources
- Have strong engaged leadership
- Engage in a regular staff feedback
- Develop strong sense of collective trust and confidence
- Listen to staff feedback and implement needed change

(Salas, et al., 2004)
Prepare: Make a Team

CDI Prevention Team

- Infection Prevention
- Environmental Services
- Medical Staff
- Laboratory
- Pharmacy
- Administration
- Resident Care Staff
Prepare: Develop Your CDI Policy

Use evidence-based materials

**McGeer**
- McGeer/Stone – already incorporated into AHRQ’s “SBAR for suspected UTI”
- Developed for Surveillance

**Loeb**
- Developed to establish a clinical diagnosis of infection of LTC residents
- Minimum criteria to initiate antibiotics

**IDSA/SHEA**

*Clostridium difficile* Clinical Practice Guideline
https://www.idsociety.org/practice-guideline/clostridium-difficile/
https://www.shea-online.org/index.php/practice-resources

**CDC/SHEA Position Statement: Surveillance Definitions of Infections in Long-Term Care Facilities: Revisiting the McGeer Criteria**

**SHEA/APIC Guideline: infection prevention and control in the long-term care facility**
Identification of Key Partners

- Maryland Department of Health
- University of Md School of Pharmacy and Peter Lamy Center
- Maryland Department of Health’s Campaign for Appropriate Antibiotic Use (CAAUSE)
- APIC Delmarva LTC
- Cross Task Events such as Care Transitions Meetings
- Infectious Disease Specialists

“Alone we can do so little; together we can do so much.”
- Helen Keller
Prepare: Develop Your CDI Policy

Does your current policy address:

- Early recognition of CDI
- Laboratory Testing
- Contact Precautions
- Room Placement
- Occupational and Physical Therapy
- Social and Activity Precautions
- Environmental Cleaning
- Laundry
- Prevention
Prepare: CDI Response Algorithm

CDI Response Algorithm

- Implement Transmission-based Precautions:
  - Determine appropriate room placement
  - Hand hygiene
  - Special environmental disinfection
  - Notify internal personnel and departments
  - Provide resident and visitor education

- Call MD/Obtain MD order for lab test
- Send specimen to lab
- Results received back from lab

- Test is positive:
  - Obtain MD order to start antibiotics
  - Continue Transmission-based Precautions
  - Evaluate resolution of symptoms (diarrhea) daily
- Test is negative:
  - Consider other infectious and non-infectious conditions (keep precautions until determined non-infectious)

- >3 days since last episode of diarrhea?
  - Yes: Discontinue Transmission-based Precautions
  - No: Continue Transmission-based Precautions

Minnesota Department of Health
Infectious Disease Epidemiology, Prevention and Control
PO Box 64975, St. Paul, MN 55164
651-201-5414
www.health.state.mn.us

04/2018

To obtain this information in a different format, call: 651-201-5414.
Detect: Early Recognition

A1. Early Recognition and Testing

- Resident experiencing new onset of diarrhea
  - Has the resident had 2 or 3 unformed stools in a 24 hour period?
    - No: Do not test asymptomatic residents for CDI
    - Yes: Have other potential causes of loose stool been ruled out? (i.e., other underlying conditions, use of laxatives or stool softeners, tube feeding etc.)
    - Think critically before testing for CDI
  - Contact provider, order lab test for CDI. Do not start empiric treatment before collecting sample.
    - Collect and submit fresh stool sample
    - Only unformed stools should be collected
    - Collect specimen in clean, watertight container
    - Refrigerate (2-8°C; 36-46°F) until testing can be done

While test results are pending:
- Discontinue all non-essential antibiotics and all anti-peristaltic medications
- Initiate fluid replacement if not contraindicated
- Initiate pre-emptive Contact Precautions (gowns, gloves)

Positive Test results:
- Contact provider regarding treatment (see IDSA Guidelines)
- Place resident in appropriate room
- Do not perform a “test of cure” or re-test if resident is responding to treatment

Negative Test results:
- Consider other causes of loose stool; perform testing for other enteric pathogens
- If all testing is negative and symptoms continue
  - Clinically reassess resident. If PCR was initial testing method, do not re-test for C. diff. If initial C. diff testing method was relatively insensitive (e.g., EIA) and no other cause of diarrhea is found, consider performing additional diagnostic testing for C. diff as clinically indicated

http://www.health.state.mn.us/divs/idepc/diseases/cdiff/hcp/ltcalgorithm_hms.pdf
### Colonization v. Active Infection

<table>
<thead>
<tr>
<th><strong>C. diff Colonization</strong></th>
<th><strong>C. diff Infection</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- The person displays no clinical symptoms of <em>C. diff</em> such as: <strong>3 or more watery unformed diarrhea stools above the norm</strong></td>
<td>- Person exhibits symptoms of <em>C. diff</em></td>
</tr>
<tr>
<td>- Lab tests positive or <em>C. diff</em> organism and or <em>C. diff</em> toxin</td>
<td>- <strong>Person tests positive for C. diff organism</strong></td>
</tr>
<tr>
<td>- <em>C. diff</em> may be transmitted, but not easily</td>
<td>- <strong>C. diff</strong> may be easily transmitted</td>
</tr>
</tbody>
</table>

*HQI*
Practice Testing Stewardship

- **Criteria:** 3 or more *unformed* stools in a 24-hour period that conforms to shape of the container
- No laxative use
- Use a standardized chart: Bristol Tool (types 5-7)
- Consider other reasons for loose stools (laxatives, Proton Pump Inhibitors) or underlying conditions such as Crohn’s
- Do not test asymptomatic residents which leads to over testing and over-reporting in NHSN
- Must be refrigerated until submitted ASAP to lab
- Lab Rejection Policy
- Test Types: Covered under MDH slides
What were commonly identified issues across SNFs?

- No hand hygiene audits performed
- No hand hygiene observed with active *C. diff* residents
- Residents not offered hand hygiene product before meals
- No hand hygiene before or after donning gloves
Critical Element Pathway

**Hand Hygiene Observation:**

- Staff wash hands with soap & water when visibly soiled or after caring for resident with known/suspected *C. diff* or norovirus. ABHR is not appropriate under these circumstances.

- Staff perform hand hygiene (even if gloves are used):
  - Before and after contact with the resident
  - After contact w/blood, body fluids, or visibly contaminated surfaces
  - After removing PPE (gloves, gown, facemask)
  - Before performing aseptic task/procedure (cath insertion, dressings)

- When assisted by staff, resident hand hygiene is performed after toileting and before meals.

**Did staff implement appropriate hand hygiene?**

Yes ☐  No ☐  =F880
How Are You Assessing, Monitoring, and Documenting Hand Hygiene?

Use the Hand Hygiene Assessment Checklist free from the National Nursing Home Quality Improvement Campaign

https://www.nhqualitycampaign.org/files/HandHygiene_Assessment.pdf

### Assessment of Current CDI Prevention Activities
#### Hand Hygiene

December 28, 2016

**Background/Rationale:**
- Hand hygiene is the most important way to prevent the spread of bacteria which cause infections.
- Improving healthcare personnel adherence to hand hygiene practices can reduce both infections and the spread of antibiotic-resistant bacteria.
- Although most bacteria and viruses are effectively killed by alcohol-based hand rubs or washing with soap and water, C. difficile spores are not killed by alcohol hand rubs or removed by hand washing.
- Use of gloves in addition to hand hygiene is very important to prevent hand contamination from C. difficile. But, gloves are not a substitute for performing hand hygiene.
- Hand hygiene adherence among healthcare personnel remains disappointingly low; many studies report less than half of health care personnel perform appropriate hand hygiene.
- Proper hand hygiene must be understood by all people working in a healthcare facility.
- Effective hand hygiene programs must go beyond training to identify and address barriers to hand hygiene, including availability of and satisfaction with hand hygiene products.
- Providing feedback about hand hygiene performance can raise hand hygiene awareness and promote better adherence among healthcare personnel.

**Current activities survey:**

<table>
<thead>
<tr>
<th>SECTION 1. KNOWLEDGE AND COMPETENCY</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Does your facility have an annual hand hygiene training program for all healthcare personnel?</td>
<td></td>
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<tr>
<td>Q2 Can healthcare personnel describe situations when hand washing with soap and water is preferred over use of alcohol-based hand products?</td>
<td></td>
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<tr>
<td>Q3 Does your nursing home assess healthcare personnel hand hygiene technique (i.e., they do hand hygiene properly)?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Q4 Does your nursing home assess healthcare personnel knowledge of indications for hand hygiene during resident care activities?</td>
<td></td>
<td></td>
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<tr>
<td>Q5 Do residents and families receive education about the importance of hand hygiene in prevention the spread of infection?</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 2. INFECTION PREVENTION POLICIES AND INFRASTRUCTURE</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Does your nursing home have a written hand hygiene policy?</td>
<td></td>
<td></td>
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<tr>
<td>Q2 Has your nursing home assessed the availability of hand hygiene products in all resident care areas?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 Has your nursing home assessed healthcare personnel satisfaction with hand hygiene products available in all resident care areas?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4 Does your nursing home utilize cues to action (e.g., posters, pamphlets, resident engagement) to enhance healthcare personnel and visitor awareness and performance of appropriate hand hygiene?</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION 3. MONITORING PRACTICES</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Does your nursing home monitor healthcare personnel adherence to hand hygiene at regular intervals?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 Does your nursing home have a process for providing feedback to healthcare personnel about hand hygiene performance?</td>
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<td></td>
</tr>
</tbody>
</table>

* Healthcare personnel - All paid and unpaid personnel working in the healthcare setting. Resident care areas - Areas in the nursing home where direct resident care is provided (e.g., resident rooms, geriatric day centers, therapy rooms, prescribed medication rooms, etc.)

This material was prepared by Telgeger, National Nursing Home Quality Improvement Campaign Special Innovation Project contractor, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. / SIDM2199032 10/16/02
Audit (monitor & document) Hand Hygiene adherence and provide feedback among:

- Nursing: RNs, LPN, and CNAs
- Therapy: PT, OT, Speech
- Clinical: MDs, NPs, PAs
- Dietary including food-preparers
- Environmental services personnel
- Contract: Lab, Dialysis, Respiratory

Check your email later this month for a spectacular March 12th @ 11am webinar dedicated to Hand Hygiene with guest speakers representing JHM and a MD NH! Learn from your peers!
Hand Hygiene

Did you know you touch your eyes, nose and mouth about 25 times per hour?

With frequent handwashing you can reduce the number of people who get sick with diarrhea by 31%.

Do this one thing differently in handwashing – Use FRICTION!

- Rub your hands together with soap and water in circular motions, like you’re making a figure 8. Interlace your fingers to make sure you clean all sides.
- Wash your hands for at least 20 seconds – singing Happy Birthday twice.
- Dry both hands using a paper towel.

Check your Email for a new topic each month!
Common Citations include:

- **Not readily available – no restocking**
- **Improper donning and doffing**

*Put ON in this order:*
1. Wash or gel hands
2. Gown
3. Mask (if needed)
4. Eye cover (if needed)
5. Gloves

*Take OFF and DISPOSE in this order:*
1. Gloves
2. Eye cover (if used)
3. Gown
4. Mask (if used)
5. Wash or gel hands (even if gloves used)

- **Perform Competencies and Teach Back**
CDI Management/Treatment:

• Symptoms resolve in approximately 20% of patients after discontinuing the inciting antibiotic

• If symptoms do not resolve within 2-3 days after discontinuation of the inciting antibiotic, CDI testing should occur and administration of an appropriate course of antibiotics is recommended if the test is positive for *C. difficile*

• For treatment recommendations including dosage and duration, refer to the SHEA/IDSA guidelines

• Refer to the HQI Resource Center for On-Demand webinars to hear guest speaker ID physicians speak on treatment best practices

• Performing a “test of cure” is NOT recommended; only retest if symptoms persist or return within 10 days of starting treatment
Clean: EVC

• The facility has written cleaning / disinfection policies which include routine and terminal cleaning and disinfection of rooms of residents with *C. diff* contact precautions
  
  high-touch surface areas

  shared equipment

• The facility routinely audits (monitors and documents) quality of cleaning and disinfection procedures

• Audit your Cleaning Efforts (ATP Test) – Have another dept monitor it or the IP
Prevent: HQI Antibiotic Stewardship Resources

LTC Antibiotic Stewardship Resources  May 2017

Jump Start Your Antibiotic Stewardship Program (ASP)

The Centers for Disease Control and Prevention’s (CDC) The Core Elements of Antibiotic Stewardship for Nursing Homes adapts the CDC Core Elements of Hospital Antibiotic Stewardship into practical ways to initiate or expand antibiotic stewardship activities in nursing homes. Nursing homes are encouraged to work in a step-wise fashion, implementing one or two activities to start and gradually adding new strategies from each element over time. Any action taken to improve antibiotic use is expected to reduce adverse events, prevent emergence of resistance and lead to better outcomes for residents in this setting.

- The Core Elements of Antibiotic Stewardship for Nursing Homes
- Checklist: Core Elements of Antibiotic Stewardship for Nursing Homes
- Appendix A: Policy and practice actions to improve antibiotic use
- Appendix B: Measures of antibiotic prescribing, use and outcomes

Toolkits

The Agency for Healthcare Research and Quality (AHRQ) developed The Nursing Home Antimicrobial Stewardship Guide. The Guide includes a collection of instructions and turnkey materials that nursing homes can use to improve antibiotic use. Each nursing home can choose which toolkits, or parts of toolkits, best suit its needs.

- Nursing Home Antimicrobial Stewardship Guide
- Browse the Antimicrobial Stewardship Toolkit Contents

The Nursing Home Antimicrobial Stewardship Modules include four tested, evidence-based toolkits to help optimize antibiotic use in nursing homes. The modules are intended to assist nursing homes develop antimicrobial programs.

Resource List:

Antibiotic Stewardship Program Webinars on-demand:
Search
HQI.Solutions/resource-center
From the CDC: Pilot of a new tool to identify opportunities for CDI prevention practice improvement

• Target, Assess, Prevent (TAP)

• Aim to capture awareness and perceptions among facility staff related to CDI prevention policies and practices

• Staff Perception Assessment: Administered to a variety of staff including Frontline, Mid and Senior Level Management

• Lab and Antibiotic Assessment: Completed once by single staff member

• Feedback Report
Positive Outcomes

A Collaborative Approach to Reducing C. diff

To help long-term care facilities protect residents from Clostridium difficile (C. diff), Health Quality Innovators (HQI) brought together a diverse group of experts and partners to support 81 nursing homes in Maryland and Virginia.

Making a Difference

Over nine months, nursing homes in Maryland and Virginia exceeded their improvement goals.

- Saved more than $120,000 in medication costs (gray dot represents $1K)
- Prevented 56 C. diff infections (magenta dot represents number of cases across MD and VA)
- Achieved a 23.1% relative improvement rate

23.1%
NHSN Reporting Goal: 80% of enrolled SNFs will report monthly

Baseline Period March 2017-December 2017
Goal Measurement Period January 2018-December 2018

Maryland: 36 SNFs 106%
Virginia: 42 SNFs 98%

CDI Reduction Improvement Goal: 10% RIR in enrolled SNFs
January 2018-September 2018

Maryland: 12%
Virginia: 26%
IT HAS NEVER BEEN EASIER TO ACCESS HQI’S RESOURCE CENTER

Health Quality Innovators (HQI) recently launched a new online resource center. Now clinicians, partners and patients have easy access to a wide range of quality improvement resources at no cost.

Benefits include:

- **No log-in needed:** You can access all our tools and resources; no password or username required.

- **Multiple ways to search:** Either type in your search term(s) or sort by topic, audience or media type.

- **A wealth of materials covering all settings:** You will find videos, webinar recordings, tip sheets, patient education materials and more. Materials cover all settings and address a wide range of topics from quality improvement basics to strategies for engaging patients and families.
Send Us Your Questions

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*NHSN Reporting*

Lisa Mark, RN, BSN, QCP
Improvement Consultant
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*Education/Data Reports*
This material was prepared by Health Quality Innovators (HQI), the Medicare Quality Innovation Network-Quality Improvement Organization for Maryland and Virginia, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. HQI[11SOW|20190201-164410