Healthcare Associated Infections & Antibiotic Stewardship in Long Term Care

Host: Dr. Adrienne Mims
Facilitator: Dr. Howard Pitluk

Presenters:
Dr. Nimalie Stone, CDC
Dr. Susanne Salem-Schatz, HealthCare Quality Initiatives

**This is a recorded presentation.**
Adrienne Mims, MD MPH

Dr. Mims is board certified in family medicine and geriatrics with an expertise in clinical epidemiology and quality improvement. She is the Vice President and Chief Medical Officer for Medicare Quality Improvement for Alliant GMCF, the Quality Improvement Organization for Georgia. She serves as the current president of AHQA, the national trade association for QIOs.
Howard Pitluk, MD, MPH, FACS

Howard Pitluk, MD, MPH, FACS is Vice President for Medical Affairs and Chief Medical Officer for Health Services Advisory Group (HSAG) in Arizona. From 1979 through 1998, he was engaged in the full time practice of general and vascular surgery as well as consulting in critical care. In 2001, he completed his Masters Degree in Public Health at the University of Arizona and joined HSAG (www.hsag.com). His responsibilities include chart review, standard of care assessment of medical records, and quality improvement activities for hospitals, providers, and healthcare stakeholders at both the federal and state levels. He has authored over 2 dozen articles in peer reviewed medical publications and is a frequent speaker to physician groups and hospital staffs on topics related to quality improvement and healthcare delivery. Dr. Pitluk holds board certification by the American Board of Surgery, and is a Fellow of the American College of Surgeons.
Today’s Presenters

Nimalie Stone, MD, MS

Dr. Nimalie Stone is the Medical Epidemiologist for Long-term at the Centers for Disease Control and Prevention (CDC). She is a Board-certified infectious disease physician who has a research and clinical background in managing infections and antibiotic resistant pathogens in the elderly long-term care population. In her role at the CDC she develops guidelines, educational resources and quality improvement programs to promote infection prevention and surveillance in the long-term care setting. She has participated in several state-based and national initiatives which support long-term care facilities in infection prevention activities and raised awareness of the importance of including long-term care providers in efforts to reduce healthcare-associated infections.
Susanne Salem-Schatz, Sc.D.

Dr. Salem-Schatz has worked for over a decade as an independent consultant in the areas of quality improvement and health care program evaluation. She brings to this work a background in health services research, with a focus on behavioral approaches to clinical practice improvement and physician decision-making.
Presentations
National priorities for healthcare-associated infection prevention in nursing homes

Nimalie Stone, MD, MS
Medical Epidemiologist for LTC Dialysis and LTC Team
Division of Healthcare Quality Promotion

AHQA Physician Leadership Network
March 19, 2014
Presentation learning objectives

- Describe the national priority areas for healthcare-associated infection (HAI) prevention in nursing homes
- Highlight the role of antibiotic stewardship in reducing HAIs and antibiotic-resistance
- Describe examples of current national and state programs supporting HAI prevention activities in nursing homes
National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination

- Action Plan Development
- Phase 1: Acute-Care Hospitals
- Phase 2: Ambulatory Surgical Centers, End-Stage Renal Disease Facilities, and Increasing Influenza Vaccination Among Health Care Personnel
- Phase 3 Long-Term Care Facilities
- Evaluation of the Health Care-Associated Infections Action Plan
- State HAI Prevention Plans

http://www.hhs.gov/ash/initiatives/hai/actionplan/index.html
Priorities for infection prevention in LTC

Priority areas for skilled nursing facilities and nursing homes:

- Promoting enrollment and reporting into the NHSN LTCF Component
- Reporting *Clostridium difficile* infections (CDI) in NHSN
- Reporting Urinary tract infections (UTI) in NHSN
- Increasing resident influenza and pneumococcal vaccination coverage reported in the CMS Minimum Data Set 3.0
- Increasing Healthcare Personnel (HCP) influenza vaccination coverage during each annual influenza season
National infection reporting system

- CDC managed web-based system designed for healthcare facility reporting of infections
- Uses standardized infection definitions to identify events
- Data used by facilities for surveillance and internal quality improvement
- Data used by CDC to establish national benchmarks and track overall improvement in efforts to prevent healthcare-associated infections
NHSN Long-term care facility component

- NHSN reporting option specifically for LTCFs
- 161 facilities have enrolled since its launch in Sept 2012

National Healthcare Safety Network (NHSN)

Tracking Infections in Long-term Care Facilities

Eliminating infections, many of which are preventable, is a significant way to improve care and decrease costs. CDC’s National Healthcare Safety Network provides long-term care facilities with a customized system to track infections in a streamlined and systematic way. When facilities track infections, they can identify problems and track progress toward stopping infections. On the national level, data entered into NHSN will gauge progress toward national healthcare-associated infection goals.

NHSN’s long-term care component is ideal for use by: nursing homes, skilled nursing facilities, chronic care facilities, and assisted living and residential care facilities

To report C. difficile, MRSA, and other drug-resistant infections, click here.
- Enrollment into NHSN
- Forms
- Sponsors

To report urinary tract infections, click here.
- Enrollment into NHSN
- Forms
- Protocols

www.cdc.gov/nhsn/ltc
Modules & Events

- Healthcare-associated Infection Module
  - Urinary tract infection (UTI) events
    - Both catheter- and non catheter-associated

- Laboratory Identified (Lab-ID) Event Module
  - *C. difficile* infections (CDI)
  - Multidrug-resistance Organisms (MDRO)
    - Including: Methicillin-resistant *Staphylococcus aureus*, Vancomycin-resistant *Enterococcus*, Resistant *E. coli* and *Klebsiella*

- Preventions Process Measures Module
  - Hand hygiene adherence (observations)
  - Gown and glove use adherence (observations)
Priority Area 1: National Healthcare Safety Network Enrollment

- **Opportunity:**
  - To promote a standardized HAI surveillance methodology within nationally available reporting infrastructure for LTCFs
  - Obtain national data on incidence of targeted HAIs from the SNF/NHs

- **Challenges:**
  - Lack of experience with NHSN for reporting infections
  - Limited resources (e.g., staff, IT)

- **Goal:**
  - 5% of certified nursing homes enrolled by 2017
NHSN SNF/NH users by state

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

26 states: 160 facilities
~1% of eligible facilities
Priority Area 2&3: *C. difficile* infection and UTI reporting

- **Opportunity:**
  - To track the national incidence of nursing home (NH) associated *C. difficile* infections (CDI)
  - To track the national incidence of nursing home (NH) associated urinary tract infections, catheter and non-catheter associated

- **Challenges:**
  - Limited experience field testing validity and reliability of definitions
  - Insufficient data available to set benchmarks and targets

- **Goal:**
  - Evaluate first 3-5 years of reported data to establish national baselines
Reducing urinary tract infections

Reducing C. difficile infections

Reduced antibiotic use

Connecting infection prevention goals

HHS Action Plan priorities 2&3 for SNF/NHs
Antimicrobial use in NHs

- Over 3 million individuals receive care in nursing homes/skilled nursing facilities (NH) every year
  - The majority are coming directly from hospitals to receive skilled nursing care/rehabilitation

- Antimicrobials are frequently prescribed in NHs
  - Comprise ~40% of all NH prescriptions
  - Over the course of a year, 50-70% of residents will receive a systemic antimicrobial

- 25-75% of antimicrobial use in NHs may be inappropriate

Daneman N et al. JAMAIntMed 2013; 173:673-82
Benoit et al. JAGS 2008; 56: 2039-2044
Nicolle LE et al. ICHE 2000; 21:537-545
Antibiotics are misused in a variety of ways

- Given when they are not needed
- Administered at the wrong dose
- Continued when they are no longer necessary
- The wrong antibiotic selected
  - Drug doesn’t match the susceptibility of the bug
  - Broad spectrum agents are used to treat very susceptible bacteria
- Used without appropriate monitoring
  - Side effects, drug interactions

http://www.cdc.gov/getsmt/healthcare/inpatient-stewardship.html#Facts
Antibiotics are risk factors for an adverse drug events (ADE) in NHs

- 410 ADEs out of 2916 long-stay residents
- Antibiotic use carried highest risk for an ADE
- Antibiotics are the 2nd most common drug class associated with ADEs in nursing home residents

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>New admission</td>
<td>2.8</td>
<td>(1.5 – 5.2)</td>
</tr>
<tr>
<td>Number of Scheduled Medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5</td>
<td>1.0</td>
<td>(referent)</td>
</tr>
<tr>
<td>5-6</td>
<td>2.0</td>
<td>(1.2 – 3.2)</td>
</tr>
<tr>
<td>7-8</td>
<td>2.8</td>
<td>(1.7 – 4.7)</td>
</tr>
<tr>
<td>≥9</td>
<td>3.3</td>
<td>(1.9 – 5.6)</td>
</tr>
<tr>
<td>Current Medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotic</td>
<td>4.0</td>
<td>(2.5 – 6.2)</td>
</tr>
<tr>
<td>Antipsychotic</td>
<td>3.2</td>
<td>(2.1 – 4.9)</td>
</tr>
<tr>
<td>Antidepressant</td>
<td>1.5</td>
<td>(1.1 – 2.3)</td>
</tr>
<tr>
<td>Supplements</td>
<td>0.4</td>
<td>(0.3 – 0.6)</td>
</tr>
</tbody>
</table>

Antibiotic resistance in NH Residents

- High prevalence of colonization with antibiotic resistant organisms among NH residents
  - 40-50% with MRSA
  - 20% with gram-negative bacteria
  - 5-10% with VRE

**TABLE 5 Risk factors for not being colonized versus having new acquisition of AROs**

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Value for residents:</th>
<th>Having new acquisition of any ARO (n = 57)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not colonized with any ARO (n = 11)</td>
<td></td>
</tr>
<tr>
<td>PSMS, mean ± SD</td>
<td>15.9 ± 5.61</td>
<td>20.9 ± 5.35*</td>
</tr>
<tr>
<td>Charlson’s comorbidity score, mean ± SD</td>
<td>2.36 ± 2.34</td>
<td>2.51 ± 1.51</td>
</tr>
<tr>
<td>Any hospital visit, no./total (%)</td>
<td>1/11 (9)</td>
<td>16/57 (28)</td>
</tr>
<tr>
<td>Any antibiotic use, no./total (%)</td>
<td>6/11 (55)</td>
<td>42/57 (74)</td>
</tr>
<tr>
<td>Device use, no./total (%)</td>
<td>1/11 (9)</td>
<td>14/57 (25)</td>
</tr>
</tbody>
</table>

* P ≤ 0.05.

**References:**

Carbapenem-resistance in gram negative bacteria

- Growing threat in the treatment of infections
- Bacteria in the family Enterobacteriacea are common
  - *Klebsiella* spp. and *E. coli* are examples of *Enterobacteriacea*
  - Colonize the human GI tract
  - Often cause infections in both the community and healthcare settings
- Currently limited to people with high exposure to healthcare

http://www.cdc.gov/hai/organisms/cre/TrackingCRE.html#CREmap
**C. difficile infection (CDI) in LTC**

- CDI is the most common cause of acute diarrhea in LTC
- NH/SNF residents with multiple risk factors for colonization and infection
- CDI in older adults can be more severe – higher rates of death and hospitalization
- Antibiotics are a major driver of *C. difficile* acquisition and infection

McDonald LC et al Emerg Infect Dis 2006; Simor AS, J Am Geratrc Soc. 2010
## Infections

Deciding what you want to change is the first step of the quality improvement cycle. These goal descriptions provide general information about the goal and its benefits to share with your team.

Nursing home residents are at increased risk of infections for many reasons. As more people enter nursing homes following hospital stays, nursing homes are providing more hands-on, complex medical care to residents, such as wound care and maintenance of indwelling devices, which can lead to increased exposure to bacteria and infection. The shared living environment of a nursing home can allow the spread of easily transmissible viral infections which cause respiratory or...

<table>
<thead>
<tr>
<th>Explore Goal</th>
<th>Identify Baseline</th>
<th>Examine Process</th>
<th>Improve</th>
<th>Leadership</th>
<th>Monitor &amp; Sustain</th>
<th>Celebrate</th>
</tr>
</thead>
</table>

Let the Quality Improvement Cycle be your Guide...

**Click through the tabs** to view resources for each goal. The tabs represent each step of the quality improvement cycle.

**Getting Started** provides an overview of the complete quality improvement cycle.

www.nhqualitycampaign.org
Resources for the AE Infection goal

- Fact sheets about *C. difficile* infection prevention
  - Consumers; nursing home staff; leadership
- Assessment checklists for 4 prevention strategies
  - Early identification/containment; Hand hygiene
  - Environmental cleaning/disinfection; Antibiotic stewardship
- Links to websites with tools and resources to help address gaps identified by the assessment checklists
- Resources developed by the AE working group in partnership with CDC
  - Representing nursing home expertise in infection prevention, clinical care, and quality improvement
State prevention collaboratives engaging LTCFs

- **Vermont, Sept 2010-ongoing, focus on MDRO/CDI**
  - Acute care and LTCFs partnered into local “healthcare clusters”
  - Fostered new relationships and improved communication across care transitions
  - Developed infrastructure to extract electronic data from acute and LTCF sharing laboratory services

- **Kentucky, 2011-ongoing, focus on CDI/UTI**
  - Working with NH/SNFs across the state to reduce CDI through better UTI management

- **Georgia, Feb 2013-ongoing, focus on CRE**
  - Bringing both acute and long-term care facilities together
  - Creating processes for laboratory identification of Carbapenem-resistance and communication during transfer
State HAI prevention programs for nursing home providers

http://www.cdc.gov/hai/stateplans/states-w-LTC-collaborative.html
For additional infection prevention resources: CDC LTC website

www.cdc.gov/longtermcare
Benefits to getting involved now

- SNF/NHs need to invest in their infection prevention program activities
  - National infrastructure to support HAI surveillance and prevention programs are available and growing
  - State HAI programs are working closely with LTC providers

- Key focus areas include reducing CDI, UTI, and improving antibiotic use
  - These activities will lead to better resident outcomes; fewer hospitalizations; and less antibiotic resistance

- Engaged nursing homes will be prepared for future opportunities
  - Data for QAPI programs; Available for partnerships like accountable care organizations
Thank you!!

Email: nstone@cdc.gov with questions/comments

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Healthcare Associated Infection (HAI) Prevention and Antibiotic Stewardship Collaboratives: Massachusetts lessons for success

March 19, 2014

Susanne Salem-Schatz, Sc.D.
HealthCare Quality Initiatives

For the Massachusetts Coalition for the Prevention of Medical Errors

sss@hcqi.com
www.macoalition.org
History of HAI & Stewardship learning collaboratives in Massachusetts

Acute care
• Infection prevention collaborative (2007-2010)
• *C. difficile* infection (CDI) Prevention Collaborative (2010-2011)

Long term care and cross continuum
• CDI Prevention Partnership Collaborative (2011-2012)
• *Appropriate evaluation and treatment of UTI in the Elderly* (2013-2014)

Funding
• CDC funded through competitive grant to Mass. Department of Public health
Appropriate Evaluation and Treatment of UTI in the Elderly Collaborative Design

10/30 Kickoff Workshop
12/4 Webinar Clinical Content Review
12/11 Coaching Call
1/8 Webinar Evaluating altered mental status
2/26,27 Regional workshops focus on engagement strategies
3/14 Webinar Antibiotic stewardship across the continuum
4/12 Coaching, sharing & learning call
6/17 Closing Workshop

Individual Check-in and Coaching Calls

MEASURE / MONITOR
A team approach

**Massachusetts Infection Prevention Partnership**

- Massachusetts Department of Public Health
- Massachusetts Coalition for the Prevention of Medical Errors
- Massachusetts Senior Care Association

**Consultants with expertise in:**

- LTC Infection prevention
- Organizational change & front line engagement
- Clinical: Geriatrics, Infection Prevention, Emergency medicine
Frameworks

• Quality improvement tools and processes
• Adaptive approaches to front line engagement
Value of an improvement framework: aims, measures and small tests of change

AIMS

MEASURES

CHANGES

Act

Plan

Study

Do
Value of an improvement framework: sometimes they really get it!
Value of Adaptive / Behavioral Change Strategies

• Theories of adult learning and organizational behavior change
• Front line engagement
  – positive deviance
  – other liberating structures, engagements strategies
• Everyone is invited to participate
• Solutions come from those closest to the work
Engaging front line staff: Why it matters

4% known to top
9% known to middle
74% known to supervisors
100% known to the front line & patients

Adapted from study conducted by Sidney Yoshida, initially presented at the International Quality Symposium
Putting theory to work

1. *C. difficile* Prevention Collaborative
   - August 2009 – July 2011

2. Appropriate evaluation and treatment of UTI in the elderly
   - 2012-2013
   - 2013-2014
C. difficile Prevention Collaborative

• *C difficile* learning collaborative
  – 24 month project with teams from 27 acute care hospitals.
  – Funding through CDC under American Recovery and Reinvestment Act

• RESULTS: 25% decrease in *C. difficile* infection among participating hospitals
HA-CDI Reduction in MA Collaborative

<table>
<thead>
<tr>
<th>CHANGE IN HA-CDI / 10,000 Patient Days</th>
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<tbody>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>Jan-April '10</td>
</tr>
<tr>
<td>CASES</td>
</tr>
<tr>
<td>PT DAYS</td>
</tr>
<tr>
<td>RATE</td>
</tr>
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</table>
The right tools for the job: program design considerations

• Strong evidence base for best practices in many areas
• Site-specific variation that requires customization
• Challenges in implementation
• Heavy emphasis on front line engagement and adaptive strategies.
Common set of recommendations

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>PRACTICE RECOMMENDATION OPTIONS</th>
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<tbody>
<tr>
<td>Identification of patients with suspect CDI</td>
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</tbody>
</table>
| Patient assessment | 1. Develop list of risk factors for CDI  
2. Assess all patients with signs and symptoms of CDI and risk factors |
| Microbiological testing | 1. Develop guidelines for testing for optimal results and efficiency of response; how many samples per day, quality of specimens, consistency of stool, how many samples per hospital stay or exacerbation of symptoms  
2. Utilize appropriate method of testing for C. difficile  
3. Develop mechanism for immediate notification of test results to MD/Unit Bed management/IC/ES |
| Histoplastical testing | Send sample from surgical or endoscopic procedure for identification of pseudomembranous colitis.  
• Send report to IC as well for CDI surveillance |
| Prevent transmission | Private room for patients suspect or confirmed with CDI in decreasing preference:  
• Cohort CDI confirmed patient with patient with confirmed CDI, and no other infectious communicable disease  
• Cohort with patient suspect with CDI, and no other communicable infectious disease  
• Cohort with non CDI patient, with no other communicable infectious disease utilize commode elimination only |
| Patient Placement | 1. Establish hospital hand hygiene protocol for patients with CDI.  
• For every encounter with the CDI patient environment or patient care activity, wash with soap and water after removing gloves and when hands are soiled.  
• Change with alcohol hand rub when出动 path or increased incidence of CDI or unit or |
| Hand hygiene | 1. Establish hospital hand hygiene protocol for patients with CDI.  
• For every encounter with the CDI patient environment or patient care activity, wash with soap and water after removing gloves and when hands are soiled.  
• Change with alcohol hand rub when出动 path or increased incidence of CDI or unit or |
Encourage local adaptation
Train the trainer: the evidence and front line engagement strategies
Balance serious messages with creative approaches to engage staff and support culture of quality
12 different posters of children and animals, 8 ½ x 11 inches, laminated, washable.

Got Hands?
Wash ‘em!
Keep our patients infection free.

Got Paws?
Wash ‘em!
Keep our patients infection free.
Emphasis on measurement for learning to track improvement and solve problems

Hospital #7
CDI/10,000 Patient Days
UTI in the Elderly Collaboratives

**GOAL:** Decrease unnecessary urine testing and subsequent antibiotic use for suspected urinary tract infections, in the context of a high false positive rate for urine tests in residential elderly

- **2012-2013**
  - Enrolled 31 long term care facilities and 9 hospital emergency departments
  - 16 submitted data for analysis
  - Target practices within facilities and across the continuum
  - Share long term care facility experience here
  - Significant decreases in urine cultures, reported UTIs and CDI.

- **2013-2014 in progress**
  - Enrolled 33 long term care, 1 long term acute care facilities
  - 2 hospitals attending for information
  - 85% of participating facilities submitting monthly data
The right tools for the job: program design considerations

• Solid evidence base for recommendations to long term care facilities
• Identified significant knowledge gaps
• Common myths about signs and symptoms of UTI

• Emphasize front line engagement and persuasive communication strategies
Multi-faceted approach

• Convening a program team with critical skill sets for success;
• Focus on active front line engagement
• Encouraging a QI approach with small tests of change and ongoing measurement to monitor progress
• Offering multiple opportunities for learning (workshops, webinars, coaching calls)
• Providing individual coaching;
• Developing materials and tools based on principles of behavioral science and adult learning ("academic detailing") to support facility level efforts and decision making;
• Measurement for improvement and program evaluation
**Common set of recommendations: ABCs for diagnosing UTI in long term care**

- **Evidence based guidance for urine testing in the elderly**
- **Research conducted in long term care, but applicable to other settings**
- **All tools available at** [www.macoalition.org/uti-elderly-tools](http://www.macoalition.org/uti-elderly-tools)
Clinician Education Sheet

- Support tool for clinician education
- Based on principles of adult learning, behavior change and “academic detailing”
- Additional tool available for acute care emergency departments
- Revision underway for LTAC and non-ED hospital units
When do you need an antibiotic?

- To educate residents and families about the importance of prudent use of antibiotics
- Additional brochure available developed for emergency departments
- If interest, will adapt for LTAC and non-ED hospital units
UTI & ASB in Long Term Care Residents

- 2 sided, print 2 per page
- Addresses specific issues around UTI and ASB in the elderly
- If interest, will adapt for LTAC and non-ED hospital units
Local Adaptation

Protocol for Monitoring Potential UTI*

At the first signs of a potential urinary tract infection:
– notify the MD/NP.
– Get permission to initiate the Potential Urinary Tract Infection Order Set.
– If at any time during the course of the monitoring the medical condition worsens call the MD/NP for further orders.

• Monitor vital signs every shift for 48 hours.
• Encourage increased fluids. Monitor I & O every shift for 48 hours.
• Thoroughly document the absence or presence of any of the following symptoms: hematuria, acute dysuria or pain, new or increased incontinence, urgency or frequency or change in the character of the urine every shift for 48 hours.
• Thoroughly document any acute change in resident’s baseline mental status or behavior every shift x 48 hours. If any of those symptoms exist explore other potential causes such as dehydration, constipation, adverse drug reaction, metabolic disorder.
• At the conclusion of 48 hours if at least 2 documented symptoms persist, call for an order for a Ua C&S.

*Participating facility 2013-2104
Long Term Care Facility Results

• Comparison of baseline (July ’12 – Oct ’12) to program period (Nov ’12 – June ‘13)

  – 28% decrease in urine cultures;
    • 41.3 to 29.8 / 10K resident days
  – 33% reduction in reported UTIs;
    • 18 to 12.1 / 10K resident days
  – 45% reduction in healthcare acquired *C. difficile*
    • 2.8 to 1.6 / 10K resident days
Results over time

Rate of Urinary Tract Infections and Urine Culture in Participating Long Term Care Facilities (n=17)

- Urine Culture Rate/10,000 patient days
- Facility UTI Rate /10,000 patient days
LTCF Results:
% of UTI meeting criteria for signs & symptoms

% of Long Term Care Facility Charts Reviewed Meeting Prevention Collaborative Urinary Tract Infection Signs and Symptoms (n=14)

begin intervention

begin intervention

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Nov-12 Dec-12 Jan-13 Feb-13 Mar-13 Apr-13 May-13 Jun-13

Met Criteria Did Not Meet Criteria
What we think really matters

• Theory based improvement
• Relationship – centered approach
• Build learning into tools
• Importance of engaging leadership and the front lines
• Create opportunities for active learning
• Combine existing evidence with opportunities for discovery and reinvention
My Best Measures of Success

OUR UNIT'S INFECTION RATE HAS DROPPED CONSIDERABLY THIS HAS PROCESSED COMING AT THESE WORK SHOPS HAS LED ME TO LOOK AT OTHER PROBLEMS AND ADOPTING WAYS TO LOOK AT PROBLEMS DIFFERENTLY

Mike
EvenT0E.
Thank you!

Susanne Salem-Schatz, Sc.D.
HealthCare Quality Initiatives

For the Massachusetts Coalition for the Prevention of Medical Errors

sss@hcqi.com
www.macoalition.org
Discussion/Q&A