Long Term Care (LTC) Facility Infection Prevention Assessment Project Results

Presented to Volunteer LTC Facilities
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Objectives

1. Describe purpose of LTC Facility infection prevention assessment project
2. Review core infection prevention strategies related for
   - CAUTI, CLABSI, pneumonia, and CDI
3. Describe project methods and facility selection process
4. Present key findings
5. Discuss conclusions and next steps

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Project Purpose

- Expand on an existing CDC-funded project performed in LTAC hospitals
- Perform assessment of current LTC facility infection prevention program and practices
- Observe resident care activities
  - Focus on residents at highest risk for HAI and readmission to acute care, i.e. with invasive devices
  - Observe adherence with evidence-based prevention practices
    - CDC core and supplemental prevention strategies
- Provide consultation to improve infection prevention practices and strategies

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Contemporary Tenets of IP Programs

IP **expected** to

- Review, know, and teach evidence-based care practices (e.g. per CDC guidelines)
- Evaluate **your** facility's adoption of recommended practices
  - What is actually going on versus what is recommended?
  - Collect data to understand current practice
- Implement recommended practice guidelines
  - Educate staff --- ALL healthcare stakeholders
  - Change care practices where necessary
- Educate patients/residents regarding infection risks and their role in prevention

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Contemporary Tenets of Infection Prevention - 2

- Perform standardized surveillance for infections
  - Understand the current state
  - Set prevention target (% reduction goal or elimination)
  - **Monitor progress** in reducing infections
- Monitor adherence / compliance with care practices (processes) until an established target has been reached
  - Provide feedback on observational data to all stakeholders
- Continue to monitor process measures periodically to ensure sustainability

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The Evidence Base for HAI Prevention

CDC Prevention Strategies

Core Strategies
- High levels of scientific evidence
- Demonstrated feasibility

- Should become standard practice

Supplemental Strategies
- Some scientific evidence
- Variable levels of feasibility

- Consider implementing in addition to Core when infections persist or rates are high

CDC Home

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

A-Z Index A B C D E F G H I J K L M N O P Q R S T U V W X

Healthcare-associated Infections (HAIs)

- **Healthcare-associated Infections**
- HAIs: The Burden
- Monitoring HAIs
- Types of Infections
- Diseases and Organisms
- Preventing HAIs
- Map: HAI Prevention Activities
- Research
- Patient Safety
- Outpatient Settings
- ▶ **Long-term Care Settings**
- Laboratory Resources
- Outbreak and Patient Notifications
- Widgets, Buttons and Badges

Healthcare-associated Infections

Recommend 4 Tweet Share

Long-term Care Settings

Long-term care facilities (LTCFs) may be defined as i
skilled nursing facilities that provide healthcare to pe
independently in the community. This care may repre
or short-term rehabilitative services. Approximately
homes and skilled nursing facilities participating in th
point during 2008. In addition, nearly one million per
growing complexity of care being delivered in LTCFs
infection control and prevention of healthcare-assoc
decades.

Long-Term Care Toolkit

- Long Term Care baseline Prevention Practices Ass
  Establishing HAI Prevention Collaboratives Using
- Long Term Care Assessment Tool [Word - 205
- Inter-facility Infection Control Transfer Form [P
  Inter-facility Infection Control Transfer Form [W

Related Links

Guidelines and Recommendations

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CAUTI Prevention Strategies

Core Strategies

- Insert catheters only for appropriate indication
- Leave in place only as long as needed
- Only properly trained persons insert and maintain
- Hand hygiene
- Aseptic technique & sterile equipment for insertion
- Maintain closed drainage system & unobstructed urine flow
- Implement improvement program to achieve appropriate use of catheters

Supplemental Strategies

- Alternatives to indwelling urinary catheters
- Portable ultrasound devices to assess urinary retention, reduce unnecessary catheterizations
- Antimicrobial/antiseptic impregnated catheters

http://www.cdc.gov/hicpac/pdf/cauti/cautiguideline2009final.pdf

Use Indwelling Urinary Catheters ***ONLY*** for Appropriate Indications

1. Acute urinary retention or obstruction
2. Peri-operative use in selected surgeries
3. Assist healing of perineal and sacral wounds in incontinent patients
4. Hospice, comfort care, palliative care
5. Required immobilization for trauma or surgery
6. Chronic indwelling urinary catheter on admission
7. Accurate measurement of urinary output in critically ill patients (intensive care)

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http://www.cdc.gov/hicpac/pdf/cauti/cautiguideline2009final.pdf

Not Recommended for UTI Prevention

- No evidence to support the following practices
  - Complex urinary drainage systems
  - Routinely changing catheters or drainage bags
  - Routine antimicrobial prophylaxis
  - Cleaning the periurethral area with antiseptics
  - Antimicrobial irrigation of the bladder
  - Antiseptic / antimicrobial solution instillation into drainage bags
  - Routine screening for asymptomatic bacteriuria

▫Gould C., Catheter-Associated Urinary Tract infection (CAUTI) Toolkit, CDC

CLABSI Prevention Strategies

Core Strategies

- Remove unnecessary central lines
- Proper insertion practices
- Hand hygiene
- Skin asepsis
- Lower risk insertion sites
- Hub & access port disinfection
- Educate on central line insertion & maintenance

Supplemental Strategies

- Chlorhexidine bathing
- Antimicrobial-impregnated catheters
- Chlorhexidine-impregnated dressings

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http://www.cdc.gov/hicpac/pdf/guidelines/bsi-guidelines-2011-pdf

CDI Prevention Strategies

Core Strategies

- Antimicrobial stewardship
- Rapid testing and immediate notification of positive test results
- Contact precautions for duration of diarrhea
- Hand hygiene
- Cleaning and disinfection of equipment and environment
- Comprehensive CDI education

Supplemental Strategies

- Extend use of Contact Precautions beyond duration of diarrhea
- Presumptive isolation for patients with diarrhea
- Limit hand hygiene to only handwashing
- Universal glove use
- Sodium hypochlorite (bleach) agents for environmental cleaning

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Pneumonia / VAP Prevention Strategies

CORE = Modifiable Risk Factors

- Immunize against respiratory diseases – pneumococcal vaccination, annual influenza
- Prevent aspiration of secretions
  - Maintain elevation of head of bed (HOB) (30-45 degrees)
  - Encourage early mobilization of patients with physical/occupational therapy
- Reduce duration of ventilation
- Prevent exposure to contaminated equipment
  - Use sterile H20 to rinse reusable respiratory equipment
  - Remove condensate from ventilatory circuits
  - Change ventilatory circuit only when malfunctioning or visibly soiled
  - Store and disinfect respiratory equipment effectively

Pneumonia Prevention - continued

- Reduce colonization of aero-digestive tract
  - Avoid acid suppressive therapy for patients not at high risk for stress ulcer or stress gastritis
    - Increases colonization of the digestive tract
  - Perform regular oral care with an antiseptic agent
  - Reduce the opportunities to introduce pathogens into the airway
    - Good hand hygiene
    - Glove use for contact with respiratory secretions or contaminated objects; follow with hand hygiene
    - Educate staff to avoid contaminating the ETT from patient's mouth, HCW hands, introducing pathogens from patient's other body sites or the environment

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LTC Facility Prevention Assessment Project
Methods

Facility Selection Process

- Project invitation sent by HAI Program in October 2013
  - 2013 attendees of Quality Care Health Foundation "LTCF Infection Prevention and Control" courses
  - Members of the California Association of Healthcare Facilities
  - LTCF associated with acute care hospitals known to be interested in the project

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Facility-Level Assessments

- Pre-visit survey of specific infection prevention practices
- Interviewed LTC staff about infection prevention program
  - Guidelines and practices related to use of invasive devices
    - Ventilator associated pneumonia (VAP)
    - Catheter associated urinary tract infections (CAUTI)
    - Central line blood stream infections (CLABSI)
  - MDRO-transmission prevention practices
  - Environmental cleaning and disinfection
  - Outbreak management

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Observational Tracers

- CDPH HAI Program Liaison IP performed a series of observations of infection prevention practices
  - Adherence should reflect LTC facility policies
- Observed common infection control practices; recorded missed opportunities in
  - Environmental services
  - Blood glucose monitoring
  - Enhanced/Contact precautions
  - Hand hygiene
- Adherence summarized and presented to facility staff at end of day

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Resident-Level Assessment

- Maximum of 10 residents observed
- Selected randomly from a list of facility residents with one or more invasive device
  - Ventilator
  - Indwelling urinary catheter
  - Central line
- Some residents had multiple devices
- Liaison IP was accompanied by a staff member, usually the Director of Staff Development
- Selected residents were observed
- Data collected on adherence with evidence-based infection prevention practices

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Summary-of-Findings Meeting

- Scheduled at the end of the day
  - LTC facility invited staff of their choice
  - Most meeting attended by LTC facility administration
- Results of the assessment tallied and reviewed
- Encouraged to ask further questions
- Stimulated dialogue for further surveillance
  - Re-evaluation of policies
  - Staff education
  - Need for more or different supplies/equipment

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LTC Facility Prevention Assessment Project
Results

Participating Facilities

- Over 80 facilities responded to invitation within 10 days
- 60 were scheduled for site visits
  - Prioritized by those interested/willing to enroll in NHSN for performing ongoing HAI surveillance
  - A waiting list was created
- 58 facilities completed the project
  - Site visits conducted Oct 2013 – Jan 2014
  - Full-day assessment
  - Performed by an HAI Program Liaison Infection Preventionist (IP)

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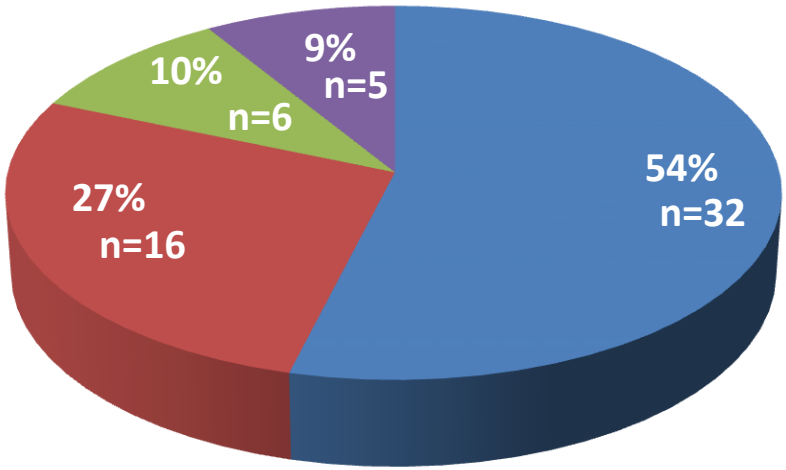
Facility Affiliation



- Multi-facility (chain/corporatioion)
- Independent, free-standing
- Hospital system, attached
- Hospital system, free-standing

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Demographics

Facility Demographics	# (%)
Average # Beds (Range)	108 (56-299)
Northern California	28 (48%)
Southern California	30 (52%)

Facility Ownership	
For profit	46 (79%)
Not for profit	10 (17%)
Government	1 (1.7%)
Veteran's Affairs	1 (1.7%)

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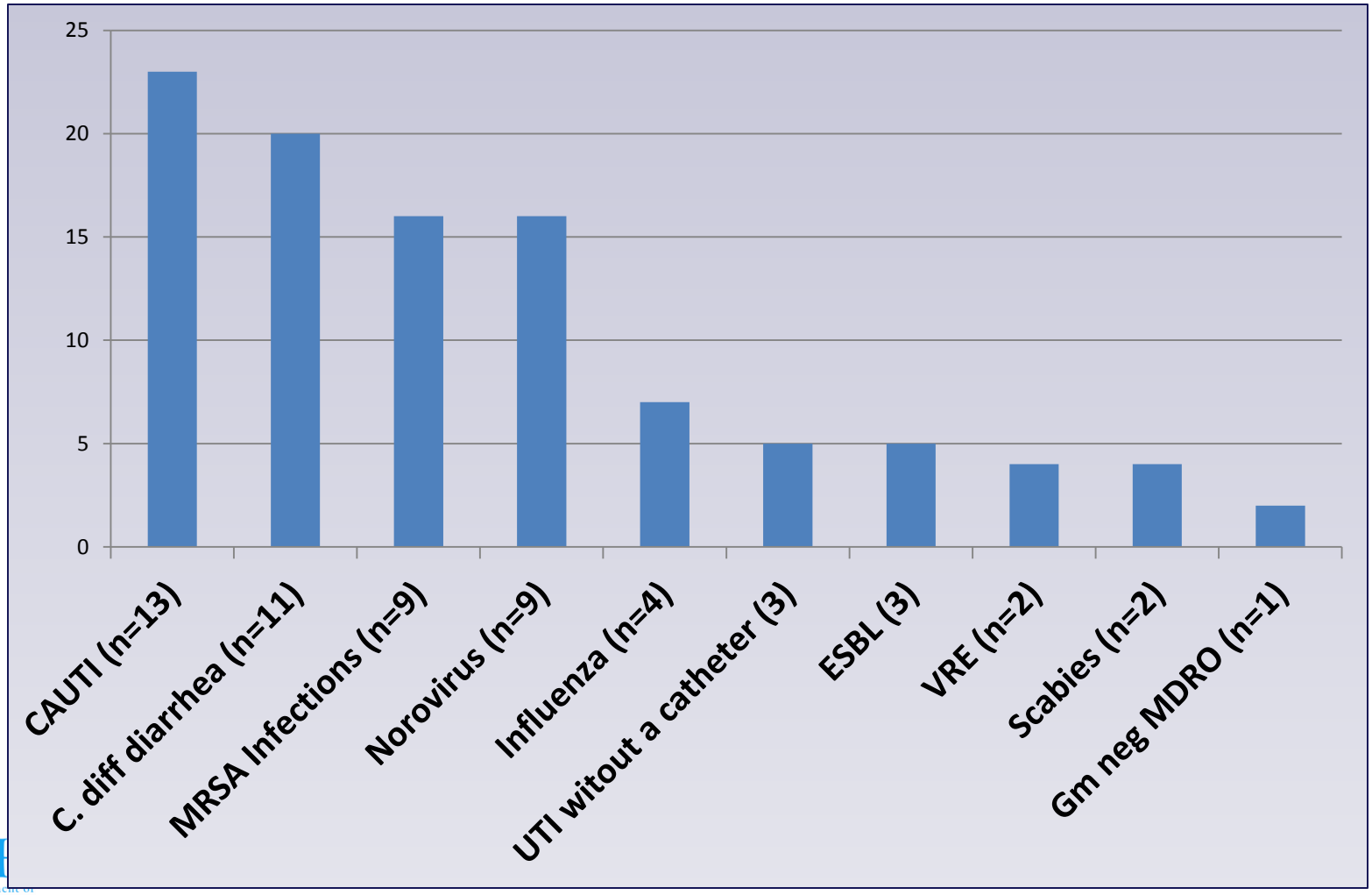
Survey of Facility IP: Which HAI Presents Greatest Challenge?



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CAUTI Prevention: Comparing Policy to Practice

Facility Level Assessment – CAUTI Policies

Catheter Associated UTI (CAUTI) Prevention	Yes/ total	Percent
Does your facility train staff or require demonstration/ competency in urinary catheter insertion and maintenance?	36/58	64%
Does your facility have a policy/procedure for appropriateness of urinary catheters, e.g. only inserting when medically indicated?	46/58	79%
If **yes**, do you use a written checklist for appropriate indications?	23/58	40%
Do you have a nursing practice for systematic review and recommendation for removal of un-necessary urinary catheters?	43/58	74%
Do you use a bladder scanner to determine or confirm urinary retention?	9/58	16%
Does the resident with a urinary catheter receive routine "catheter care" per policy?	53/58	91%
Has your facility monitored adherence with hand hygiene or other clinical practices known to prevent HAI (such as Bundles)? If "yes"- what? **Hand Hygiene 96%, CLABSI 22%, CAUTI 26%**	39/58	67%

CAUTI Prevention - Observed Practices

Core- CAUTI Prevention Strategies	#Practices Observed	# Correct	% Adherence
Educate staff on catheter insertion & maintenance	44	55	80%
Maintain closed drainage system, seal intact between catheter & tubing	192	54	28%
Maintain unobstructed urine flow	217	189	87%
Document indwelling cath appropriateness	215	196	91%
Implement care improvement program to achieve only appropriate use of catheters	58 facilities	37 facilities	64%
Measures adherence to core CAUTI prevention practices	58 facilities	18 facilities	31%

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CAUTI Prevention- CAUTI Observed Practices

Supplemental- CAUTI Prevention Strategies	#Practices Observed	# Correct	% Adherence
Urine bag below level of bladder	218	205	94%
Urinary catheter secured to resident	190	12	65%
Portable ultrasound devices to assess urinary retention, reduce unnecessary catheterizations *(Supplementary strategy)*	58 facilities	10 facilities	17%

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CLABSI Prevention: Comparing Policy to Practice

Facility Level Assessment – CLABSI Policies

Central Line Associated Bloodstream Infection (CLABSI) Prevention	Yes/ total	Percent
Are central lines (PICC lines or others) inserted in your facility?	16/58	28%
If lines inserted or replaced, do you monitor adherence to evidence-based insertion practices, such as using a "CLIP" form?	3/16	19%
Do residents with a central line receive bathing with an agent containing chlorhexidine gluconate (CHG)?	1/16	6%
Infection prevention guidelines/practices	**Yes/ total**	**Percent**
Has your facility monitored adherence with hand hygiene or other clinical practices known to prevent HAI (such as Bundles)? If "yes"- what? **Hand Hygiene 96%, CLABSI 22%, CAUTI 26%**	39/58	67%

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CLABSI Prevention – Observed Practices

Core- CLABSI Prevention strategies	#Practice Observations	# Correct	% Adherence
Skin antisepsis using CHG	58 facilities	27	47%
Hub & access port scrubbed & disinfected prior to line access	12	7	58%
Need for central line reviewed daily	63	47	75%
Central lines in lower risk insertion sites (avoid femoral)	77	77	100%
Educate staff on central line maintenance & insertion	45	32	71%
Facility measures adherence to core CLABSI prevention practices	45	13	29%

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CLABSI Prevention – Observed Practices

Supplemental- CLABSI Prevention strategies	#Practice Observations	# Correct	% Adherence
Sterile transparent dressing used to cover catheter site	75	73	97%
Dressings changed promptly if wet, soiled or dislodged	79	73	92%
Chlorhexidine bathing (if facility practice)	0	0	
Antimicrobial-impregnated catheters	58	3	5%

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Pneumonia/VAP Prevention: Comparing Policy to Practice

Facility Level Assessment- VAP Policies

Pneumonia Prevention		
Does your facility have residents on mechanical ventilation?	8/58	14%
If yes, do you monitor adherence to a ventilator associated pneumonia (VAP) bundle?	1/8	13%
Does your facility have an **oral-hygiene program** for residents who are at risk for pneumonia, such as residents with swallowing difficulty, on enteral feedings and/or **ventilator**?	49/58	84
Same question: Of the 8 facilities with ventilator residents	5/8	62%

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Resident Level Assessment Ventilator Pneumonia Observed Practices

Core - Pneumonia Prevention Strategies	# Practices observed	# Correct	% Adherence
Daily oral care with chlorhexidine (CHG)	45	17	38%
Head of bed 30-45° unless contraindicated	67	64	96%
Additional "Bundle" Practices			
Deep vein thrombosis (DVT) prophylaxis	60	29	48%
Facility measures adherence to core VAP prevention practices (8 facilities with vent)	8	1	13%

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Pneumonia Prevention: Observed Practices by Chart Review

Vaccination	# observations	# vaccinated	% adherence
Pneumococcal	337	214	64%
Influenza	338	226	67%

- The most common reason for non vaccination: "refused"
  - Was the resident/family educated about risks?
  - Often the family refused on the residents behalf

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CDI / MDRO Prevention: Comparing Policy to Practice

Pre-Visit Survey – CDI / MDRO Policy

C. difficile and MDRO Questions	Yes/ Response	Percent
Mechanism is place to identify, on admission, residents previously infected or colonized with MDRO	52/58	90%
Policies to implement isolation precautions	55/57	97%
Policies that address when to discontinue isolation	52/58	90%
Strategy for identifying appropriate roommate selection for residents admitted with an MDRO who cannot be placed in a private room	54/57	95%
Places residents with suspected C. *difficile* infection on contact precautions.	55/57	97%
Places residents with active (symptomatic) C. *difficile* infection on contact precautions.	57/57	100%
Places all residents with (symptomatic) C. difficile infection into private rooms.	29/57	51%

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Private room not always possible, so diligent education of staff on hand hygiene & environmental cleaning are crucial.

Facility-Level Assessment – CDI/MDRO Policy

Prevent MDRO Transmission/Promote Antibiotic Stewardship and surveillance	Yes/ total	Percent
Staff, residents & family are educated on MDRO transmission precautions to include hand hygiene and proper use of PPE	48/58	83%
The facility has established systems with a Clinical microbiology laboratory that promptly notifies the ☐IP, ☐medical staff, and/or ☐nursing staff when a novel resistance pattern is detected.	52/58	90%
Are Enhanced Precautions implemented to limit transmission of pathogens from affected residents ?	55/58	95%
Do antibiotic orders include an indication for use?	49/58	84%
Do you use an interfacility transfer form when receiving or transferring residents to hospital or other facilities?	51/58	88%
If yes, does the form include information about residents with MDROs?	25/51	49%
Is there clear delineation of responsibility for this among healthcare personnel (i.e. a written list of who cleans what equipment, devices, surfaces)?	11/58	19%

Facility Level Assessment – MDRO/CDI Policy

Environmental Cleaning/Disinfection	Yes/ total	Percent
Cleaners and EPA-registered hospital disinfectants, including disposable wipes, are **used in accordance with manufacturer's instructions for** ☐ Dilute 90% ☐Shelf-life 90% ☐Storage 79% ☐ Contact time 59%	32/58	55% Overall
Is a check list of surfaces to be cleaned used for routine cleaning? (particularly high touch areas)	27/58	47%
Do you monitor environmental staff to assess the quality of cleaning? If yes, how? ☐ Direct observation of staff while cleaning. 41/49 (84%) ☐ Use of ATP or Bioluminescence 6/49 (12%) ☐Formal rounding for cleanliness 17/49 (35%)	49/58	84%
Do you share feedback with your environmental staff about the quality of their cleaning?	43/49	88%

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CDI / MDRO Prevention: Interview of Practices

Core - CDI Preventing Strategies	#Practice Observations	# Correct	% Adherence
Enhanced precautions used for duration of diarrhea or other MDRO infection	56	54	96%
Lab based alert system for immediate notification of positive results	56	48	86%
Educate HCW, housekeeping, admin, residents, families	58	46	80%
Implement an antimicrobial stewardship program	56	29	51%

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CDI / MDRO Prevention: Interview and Observed Practices

Supplemental- MDRO/CDI Interview Preventing Strategies	#Practice Observations	# Correct	% Adherence
Extended use of enhanced/contact precautions beyond duration of symptoms	51	37	73%
Presumptive isolation for patients with diarrhea pending confirmation of CDI	54	42	78%
Handwashing (soap and water) before exiting room of CDI patient	6	13	46%
	Direct Observation		
Implement universal glove use on units with high CDI rates	43	10	23%
Use sodium hypochlorite (bleach) agents for environmental cleaning (as adjunct to core)	54	53	98%
Track use of antibiotics associated with CDI	58	13	23%

Observational Tracer Summary

Observations	# Practices observed	# Correct	% Adherence
Blood Glucose Monitoring	512	434	85%
Enhanced/Contact Precautions	214	250	80%
Environmental Services	445	366	82%
Hand Hygiene	884	576	65%

Resident Level Assessment	# Residents	# Facilities
On mechanical ventilator	66	8
With indwelling urinary catheter	227	55
Currently with central line	86	37

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LTC Facility Prevention Assessment Project
Summary & Recommendations

Summary of Findings

1. LTC facilities showed high variability in their adoption of and observed adherence to CDC recommended prevention practices.
2. Initial aggregate facility concerns regarding adherence rates to hand hygiene and CAUTI, CDI, and MDRO prevention practices were validated in the observational assessment results.
3. Infection prevention policies were in place, however measurement of adherence to prevention practices and provision of feedback to staff was varied.
4. LTC facility staff overall were very engaged and "want to do the right thing."

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Recommendations

1. Use checklists/ tools for ongoing monitoring of adherence to CDC core prevention practices
   - Bundle activities around care of residents with devices
   - Environmental cleaning
2. Perform scehduled reviews of adherence to ensure sustainability of improvements
3. Perform surveillance for HAI to monitor infection trends and to focus prevention activities
   - Consistently apply McGeer's LTC HAI definitions
4. Provide feedback of BOTH adherence monitoring results and infection rates to staff

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HAI Surveillance in LTC Facilities

HAI Surveillance

- To reduce infections you must know how many you have
- When LTC facilities track HAI they
  - Identify problems and can plan targeted prevention efforts
  - Track progress toward preventing infections
- Good surveillance requires consistency
  - Consistently review and apply McGeer criteria for LTC Facility HAI surveillance
- The National Healthcare Safety Network (NHSN) provides a system for LTC facilities to monitor HAI
  - Uses McGeer's definitions
  - Each LTC facilities' data entered into NHSN helps to
    1. establish benchmarks to help **you** interpret your rates
    2. gauge progress toward national HAI prevention goals

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National Healthcare Safety Network (NHSN)

Tracking Infections in Long-term Care Facilities

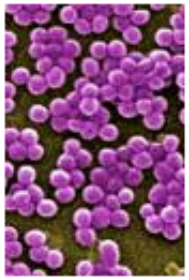
Eliminating infections, many of which are preventable, is a significant way to improve care and decrease costs. CDC's National Healthcare Safety Network provides long-term care facilities with a customized system to track infections in a streamlined and systematic way. When facilities track infections, 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

1 to 3 million serious infections occur every year in long-term care.

As many as 380,000 patients die of the infections they contract.

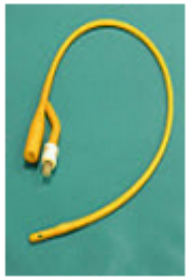
Infections are among the most frequent reasons LTC patients get admitted to hospitals



MDRO/CDI - Surveillance for *C. difficile*, MRSA, and Other Drug-Resistant Infections

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

Track your CDI and MDRO infections



To report urinary tract infections, cl here.

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

Track and trend UTI rates/results of your prevention activities

To report prevention process measures including hand hygiene adherence, click here.

- Training
- Protocols
- Forms
- Support Materials
- Analysis Resources
- FAQs

Monitor Hand Hygiene adherence

For resources to help prevent infec long-term care facilities, click here.

- Guidelines
- Toolkits
- Publications
- Key contacts

Many free tools to help in your prevention strategies

www.cdc.gov/nhsn/LTC

Step 1: Enroll Facility in NHSN

NHSN Facility Administrator Enrollment Guide

www.cdc.gov/nhsn/PDFs/FacilityAdminEnrollmentGuideCurrent.pdf

How Does an NHSN Facility Get Started?

After completing the required training, you're ready to enroll your facility following these steps.

Review and Accept NHSN Rules of Behavior

↓

Register Facility with NHSN
*You will receive two emails (NHSN and SAMS) with information for completing the SAMS registration

↓

Review and Accept SAMS Rules of Behavior

↓

Complete SAMS Registration Information
*You will receive an email (SAMS) with instructions for submitting identity verification documentation

↓

Submit Identity Proofing Documentation
*You will receive an email (SAMS) notification when your SAMS access has been approved

↓

Access SAMS to Complete NHSN Facility Enrollment and Survey Information
*You will receive an email (NHSN) confirmation that the enrollment was submitted successfully

↓

Print, Sign, and Return Signed NHSN Agreement to Participate and Consent Form
*You will receive an email (NHSN) with instructions for accessing NHSN Reporting

↓

Enrollment is Complete! Access NHSN Reporting via SAMS

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Step 2: Perform Surveillance

EXAMPLE: Apply LTC facility UTI Surveillance definitions

- Two types of UTI, based on presence of device
  - UTI
  - CAUTI
- Definitions include laboratory data and constitutional criteria, including
  - Fever
  - Leukocytosis
  - Acute change in mental status from baseline
  - Acute functional decline

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▫National Healthcare Safety Network, CDC, as **updated January 2014**

NHSN Optional Paper Worksheet for UTI Surveillance

Event Details

*Specify Criteria Used: (check all that apply)

Signs & Symptoms

- ☐ Fever: Single temperature ≥ 37.8°C (>100°F), or > 37.2°C (>99°F) on repeated occasions, or an increase of >1.1°C (>2°F) over baseline
- ☐ Rigors
- ☐ New onset hypotension
- ☐ New onset confusion/functional decline
- ☐ Acute pain, swelling, or tenderness of the testes, epididymis, or prostate
- ☐ Acute dysuria
- ☐ Purulent drainage at catheter insertion site

New and/or marked increase in (check all that apply):

- ☐ Urgency
- ☐ Costovertebral angle pain or tenderness
- ☐ Frequency
- ☐ Suprapubic tenderness
- ☐ Incontinence
- ☐ Visible (gross) hematuria

Laboratory & Diagnostic Testing

- ☐ Specimen collected from clean catch voided urine and positive culture with ≥ 10^5 CFU/ml of no more than 2 species of microorganisms
- ☐ Specimen collected from in/out straight catheter and positive culture with ≥ 10^2 CFU/ml of any microorganisms
- ☐ Specimen collected from indwelling catheter and positive culture with ≥ 10^5 CFU/ml of any microorganisms
- ☐ Leukocytosis (> 14,000 cells/mm^3), or Left shift (> 6% or 1,500 bands/mm^3)
- ☐ Positive blood culture with 1 matching organism in urine culture

*Specific Event (Check one):

☐ Symptomatic UTI (SUTI) ☐ Symptomatic CA-UTI (CA-SUTI) ☐ Asymptomatic Bacteremic UTI (ABUTI)

Secondary Bloodstream Infection: Yes No	Died within 7 days of date of event: Yes No
*Transfer to acute care facility within 7 days: Yes No	
*Pathogens identified: Yes No *If Yes, specify on page 2	

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Step 3: Begin Entering Data

NHSN - National Healthcare Safety Network

NHSN Home
Alerts
Reporting Plan
Resident
Event
- Add
- Find
- Incomplete

Summary Data
Analysis
Surveys
Users
Facility
Group
Log Out

Logged into State Memorial Long-term Care Facility (ID 30203) as VICKI.
Facility State Memorial Long-term Care Facility (ID 30203) is following the LTCF component.

View Event

NHSN data screen for entering resident infections

Mandatory fields marked with *
Fields required for record completion marked with **

Resident Information HELP

Facility ID*: State Memorial Long-term Care Facility (30203)
Event # 2046
Resident ID*: 102157
Social Security #*: 444-55-6666
Medicare number (or comparable railroad insurance number):
Last Name: KIDNEYSTONE
First Name: FRED
Middle Name: E.
Gender*: M - Male
Date of Birth*: 01/01/1920
Ethnicity: NOHISP - Not Hispanic or Not Latino
Race: ☐ American Indian/Alaska Native ☐ Asian ☐ Black or African American ☐ Native Hawaiian/Other Pacific Islander ☑ White

Resident type*: LS - Long Stay
Date of First Admission to Facility*: 06/28/2012
Date of Current Admission to Facility*: 06/28/2012

Event Information

Event Type*: UTI - Urinary Tract Infection
Date of Event*: 01/08/2013
Resident Care Location*: Z-1E - Z-FIRST FLOOR EAST
Primary Resident Service Type*: GENNUR - Long-term general nursing
Has resident been transferred from an acute care facility to your facility in the past 3 months*? N - No
Indwelling Urinary Catheter status at time of event onset*: INPLACE - In place
If indwelling urinary catheter status In place or Removed within last 2 calendar days:
Site where indwelling urinary catheter Inserted*: FAC - Your facility
Date of indwelling urinary catheter Insertion: 11/15/2012

What type of infection are you reporting & was there a catheter in place?

Specify Criteria Used* (check all that apply):

Signs & Symptoms

- [x] Fever: Single temperature > 37.8° C (>100° F) or >37.2°C (>99°F) on repeated occasions, or an increase of > 1.1°C (>2°F) over baseline
- [ ] Rigors
- [ ] New onset confusion/functional decline
- [ ] New onset hypotension
- [ ] Acute pain, swelling or tenderness of the testes, epididymis, or prostate
- [ ] Acute dysuria
- [ ] Purulent drainage at catheter insertion site

New and/or marked increase in (check all that apply):

- [ ] Urgency
- [ ] Frequency
- [ ] Incontinence
- [ ] Costovertebral angle pain or tenderness
- [ ] Suprapubic tenderness
- [ ] Visible (gross) hematuria

Laboratory & Diagnostic Testing

- [ ] Specimen collected from clean catch voided urine and positive culture with >= 10^5 CFU/ml of no more than 2 species of microorganisms
- [ ] Specimen collected from in/out straight catheter and positive culture with >= 10^2 CFU/ml of any microorganisms
- [x] Specimen collected from indwelling catheter and positive culture with >= 10^5 CFU/ml of any microorganisms
- [ ] Leukocytosis (14,000 cells/mm^3) or left shift (>6% or 1,500 bands/mm^3)
- [x] Positive blood culture with 1 matching organism in urine

Click the symptoms that helped you apply the surveillance definition.

NHSN will automatically populate the field with the correct infection type that meets the HAI definition.

Specific Event**: CA-SUTI - Catheter-associated symptomatic UTI

Secondary Bloodstream Infection*: Y - Yes

Transfer to acute care facility within 7 days*: N - No

Pathogens identified*: Y - Yes If Yes, specify below ->

Pathogens

Pathogen 1: *Escherichia coli - EC* 22 drugs required

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Step 4: Create NHSN Reports of YOUR Data

EXAMPLE: Sample line listing of CDI

- Includes information on LTC residents transferred from acute care

Org ID	Resident ID	Date of Current Admission	Event ID	Event Date	Specific Organism	Specimen Source	Location	Transferred from Acute Care Faciliy in Past 3 Months?	Onset
30203	0123456	08/13/2012	2045	01/15/2013	CDIF	STOOL	Z-1E	N	LO
30203	111222	12/19/2012	2047	02/07/2013	CDIF	STOOL	Z-1E	Y	LO
30203	H0000000234	02/25/2013	2072	03/18/2013	CDIF	STOOL	Z-1W	Y	ACT-LO
30203	5456765	04/04/2013	2074	04/20/2013	CDIF	STOOL	Z-1E	Y	ACT-LO
30203	1235	04/17/2013	2058	04/20/2013	CDIF	STOOL	Z-1W	Y	ACT-LO
30203	44444451	05/17/2013	2061	05/30/2013	CDIF	STOOL	Z-1W	Y	ACT-LO
30203	WI12345	06/21/2013	609	07/01/2013	CDIF	STOOL	3F	Y	ACT-LO
30203	H0000000234	02/25/2013	1128	07/01/2013	CDIF	STOOL	Z-1N	N	LO
30203	608906	06/02/2013	2065	07/17/2013	CDIF	STOOL	Z-1W	Y	LO
30203	1235	06/09/2011	1081	07/31/2013	CDIF	STOOL	Z-1N	N	LO
30203	7261963	06/22/2013	2067	08/03/2013	CDIF	STOOL	Z-1E	N	LO
30203	1235	06/09/2011	1080	08/19/2013	CDIF	STOOL	Z-1N	N	LO
30203	0123456	08/13/2013	765	08/31/2013	CDIF	STOOL	Z-1E	N	LO
30203	123456	08/12/2013	778	09/09/2013	CDIF	STOOL	Z-1N	Y	ACT-LO
30203	123456	01/25/2012	991	09/28/2013	CDIF	STOOL	S	N	LO
30203	8989	10/10/2013	2069	10/12/2013	CDIF	STOOL	Z-1W	Y	CO
30203	987987	10/01/2013	2070	11/09/2013	CDIF	STOOL	Z-1W	Y	LO

LO=LTC onset

ACT-LO=Acute Care Transfer LTC Onset

NHSN Report Options - *Examples*

Community-onset (CO) CDI

Summary Yr/Qtr	Months	Location	Total CDI Count	CDI CO Count	CDI CO Percent
2013Q1	3	FACWIDEIN	3	0	0
2013Q2	3	FACWIDEIN	3	0	0
2013Q3	3	FACWIDEIN	9	0	0
2013Q4	3	FACWIDEIN	2	1	50

CDI Acquired in LTC Facility (LO) and CDI in Acute Care Transfers (ACT-LO)

Summary Yr/Qtr	Months	Location	Total CDI Count	CDI LO Count	CDI LO Percent	CDI ACT-LO Count	CDI ACT-LO Percent
2013Q1	3	FACWIDEIN	3	2	66.667	1	33.333
2013Q2	3	FACWIDEIN	3	0	0	3	100
2013Q3	3	FACWIDEIN	9	7	77.778	2	22.222
2013Q4	3	FACWIDEIN	2	1	50	0	0

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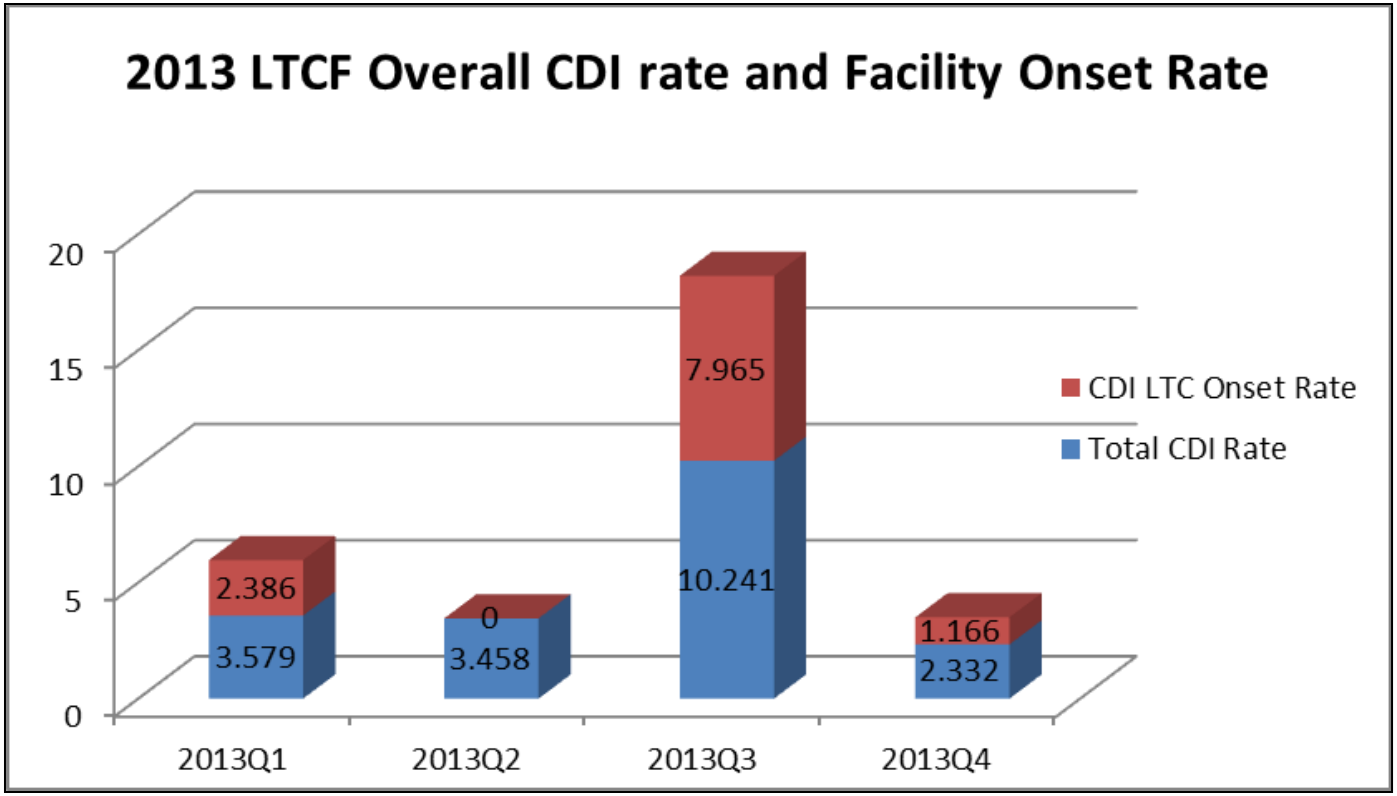
Step 5: Create Graphics Using YOUR Data

Graphics allow you to better present your HAI data to other LTC facility staff and administration

- Data may be exported to Excel –or- beginning in 2015, just use charts/ graphs available in NHSN



Next Steps

- The HAI Program can assist participant LTC facilities with NHSN enrollment for ongoing HAI surveillance
  - Convene monthly calls for support (if interest)
- Present aggregate findings to other LTC Facilities
- Use findings to identify infection prevention gaps and priority needs
  - Develop educational programs/partnerships
  - Seek additional project / grant resources for HAI prevention in LTCF

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Questions ?

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