SC UTI Toolkit
For Long-term Care Facilities

This toolkit provides an overview of a quality improvement process to improve your facility's long stay Quality Measure (QM) for the Percentage of Residents with a Urinary Tract Infection. It provides your team with actionable steps using evidence-based practice and tools.

Area for Improvement ➡ Urinary Tract Infection

Urinary tract infection (UTI) is one of the most common infections in nursing homes accounting for up to 20% of all reported infections in long-term care. It can lead to serious consequences including a hospital admission and even sepsis. In addition, the inappropriate use of antibiotics to treat asymptomatic bacteriuria is common and may lead to resistant bacterial strains as well as other adverse effects.

Up to 10% of nursing home residents will have an indwelling urinary catheter at some point during their stay placing them at increased risk for catheter-associated urinary tract infection (CAUTI). An estimated 50% of catheterized residents developed symptomatic CAUTI which may lead to complications such as cystitis, bacteremia, pyelonephritis, functional decline, and hospitalization.

Root Cause Analysis

Many health care facilities have difficulty achieving and maintaining low UTI rates despite efforts to implement comprehensive infection prevention programs. Common reasons include:

- Improper assessment and identification
- Lack of adherence to standardized criteria such as McGeer or LOEB for diagnosis
- Inaccurate MDS coding
- Lack of adherence to evidence-based protocols by medical providers and staff
- Use of Foley catheters
- Inappropriate UTI diagnosis with the use of antibiotics during hospital stay
- Inconsistent or inadequate hydration program
- Improper peri care
- Improper catheter care

Set a Goal

Tips for developing a comprehensive, concise SMART goal: Make it Specific, Measurable, Relevant, and Time-Bound.

SMART Goal Example: Decrease the percent of residents with UTIs in the Sunshine Nursing Home from 15.3% to 4.9% by June 30, 2021 using the CASPER data report for measurement.

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Strategies for Improvement

Select which barriers were revealed during root cause analysis and select those strategies which best address them.

Barriers	Strategies to Overcome Barriers
SECTION 1: **Improperly Assessing and Identifying UTIs**	• Ensure policies and procedures are evidence-based (e.g. APIC, CDC, WHO guidelines) and are updated regularly. Use any of the following: 1. https://www.cdc.gov/nhsn/pdfs/ltc/ltcf-uti-protocol-current.pdf 2. https://apic.org/professional-practice/implementation-guides/#implementaion-guide-7454 3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3878051/ 4. https://spice.unc.edu/wp-content/uploads/2017/03/UTI-Infection-Worksheet-NHSN-SPICE.pdf • Review the Suspected UTI Action Tool for a quick and easy process to identify UTIs. • Use INTERACT Care Path: Symptoms of UTI to review the steps for identification.

SECTION 2:
Inconsistent Use of Evidence-Based Protocols (EBP) across all disciplines
	• Meet with healthcare providers to discuss current processes and utilize EBP to update old practices. Use any of the following to establish your facility's standard of care:
	   ○ McGeer Criteria
	   ○ Loeb Criteria
	   ○ SHEA Guidelines
	• Review the checklist, Diagnosing the Elderly: It's NOT always a UTI!
	• Use the AHRQ toolkit to download tools including a mobile app decision tree for medical providers.
	• Inservice and pilot use of the AHRQ Suspected UTI SBAR for nurses.
	• Provide staff education about EBP for UTIs.
	• Provide family education about EBP for UTIs, both written and verbal.

SECTION 3: **Inconsistent Peri-Care, Hydration and General Nursing Care Strategies to Prevent Infections**	• Provide staff education about proper peri care including a return demonstration. Ensure content is provided regularly and offered during orientation. Use the Peri Care Audit tool to audit performance. • Utilize the Head to Toe Infection Prevention Handbook to develop prevention strategies for nursing staff. • Read the *Systematic Review of Interventions to Reduce UTIs in Nursing Home Residents* by J. Meddings, et. al. to examine which strategies produce the best results.

SECTION 4: **Poor Catheter Care**	• Provide staff education about proper catheter care including return demonstration. Ensure content is provided regularly and offered during orientation. • Review the CDC Guideline for Prevention of Catheter-Associated Urinary Tract Infections. • Review this AHRQ slide presentation on catheter care. • Review the AHRQ checklist for catheter maintenance. • Review the CMS Urinary Catheter or Urinary Tract Infections Critical Element Pathway, #20068. • Review this hospital UTI Bundle – Compliance, St Patrick Hospital
SECTION 5: **Inaccurate MDS Coding**	• Meet with MDS staff to review EBP and accurate coding of UTIs. • Review this Video presentation about the QM for UTIs in long-stay residents. • Review HQIN's Think 2 for UTIs for an easy look at coding. • Review the HQIN QM Tip Sheet UTI for an easy outline of MDS coding of UTIs. • Review the MDS 3.0 RAI Manual v1.17.1 October 2019
SECTION 6: **Overuse of Antibiotics**	• Use this Comprehensive list of resources, toolkits, and training information for antibiotic stewardship from CDC, CMS, and others. • Review CDC's Antibiotic Stewardship Program. • Review this Antibiotic Stewardship Antibiogram. • Review this Antibiotic Stewardship. • Use this Be Antibiotics Aware word search with staff during training.

Measure Your Success

Measurement is an important component of a performance improvement program which helps to identify areas of low performance and target future interventions. Both an outcome measure, i.e., number of UTI's each month and process measures should be part of the measurement process. Process measures are in response to the findings of root cause analysis and therefore are specific to each facility. They must be measurable either through audits or observation. Examples of process measures include:

1. Use of AHRQ Potential UTI SBAR by nurses when reporting to physician, NP, or PA.
2. Alignment of clinical documentation in the MR with MDS coding process.
3. Use of antibiogram by medical provider.
4. Use of peri care strategies frontline staff.

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Celebrate Success

Celebrate when staff make progress towards the goal of improving your facility level UTI rate. Utilize incentives, pizza parties, posters, raffles, small gift cards, and other rewards for excellence. Ensure that senior leadership demonstrates gratitude and encouragement during and following your campaign.

Help staff to understand how improving this quality measure by reducing UTIs not only improves quality of life for the resident, but it also reduces staff workload. At a facility level, a lower UTI rate improves the facility's overall star rating and this in turn impacts marketing and other areas. It is a win for everyone!