Urinary Tract Infection (UTI) Event for Long-term Care Facilities

Background: The urinary tract is one of the most common sites of healthcare-associated infections, accounting for 20-30% of infections reported by long-term care facilities (LTCFs). In the LTC resident, risk factors for developing bacteriuria and UTI include age-related changes to the genitourinary tract, comorbid conditions resulting in neurogenic bladder, and instrumentation required to manage bladder voiding. The point prevalence of asymptomatic bacteriuria in LTC residents can range from 25-50%. Although the incidence of symptomatic UTI is lower, it still comprises a significant proportion of infections manifesting in LTCFs and results in a large amount of antibiotic use.

Though prevalence of indwelling urinary catheter use in LTCFs is lower than in the acute care setting, catheter-associated UTI (CAUTI) can lead to such complications as cystitis, pyelonephritis, bacteremia, and septic shock. These complications associated with CAUTI can result in decline in resident function and mobility, acute care hospitalizations, and increased mortality. Prevention of CAUTIs is discussed in the CDC/HICPAC document, *Guideline for Prevention of Catheter-associated Urinary Tract Infections*[1].

Efforts to examine antibiotic use practices for UTI have demonstrated a discrepancy between the number UTI events identified through the application of evidence-based surveillance criteria with the numbers of clinically identified and treated UTI[2]. Consistent tracking and reporting symptomatic UTIs using surveillance criteria identify opportunities to examine, understand and address larger differences between surveillance events and clinically identified events.

1: Healthcare Infection Control Practices Advisory Committee (HICPAC) approved guidelines for the Prevention of catheter-associated urinary tract infections, 2009. Available at www.cdc.gov/hicpac/pdf/CAUTI/CAUTIguideline2009final.pdf
2: Juthani-Mehta M et al. JAGS 2007; 55: 1072-77 and Wang L. et al. Eur J Clin Microbiol Infect Dis. 2012. 31(8):1797-804).

Settings: UTI Event reporting is currently available for certified skilled nursing facilities/nursing homes (LTC:SKILLNURS), and intermediate/chronic care facilities for the developmentally disabled (LTC:DEVDIS). Infection surveillance for UTIs should be performed facility-wide (FacWideIN).

Only UTI events presenting > 2 calendar days after admission (where date of admission= day 1) are considered facility onset events.

Example: NHSN Classification of reportable LTCF UTI Events				
Admission date June 4th	June 5th	June 6th	June 7th	June 8th
day 1	day 2	day 3	day 4	day 5
Not a LTCF reportable UTI event		**LTCF reportable UTI event**		

NOTE: If a resident is transferred from an acute care facility and develops signs/symptoms of a UTI within the first 2 calendar days of admission to the LTCF, it would be considered present at the time of transfer to the LTCF. An event present at the time of transfer should be reported back to the transferring facility and not reported to NHSN as a LTCF UTI event.
Requirements: Facilities must indicate their surveillance for UTI in the *Monthly Reporting Plan for LTCF* (CDC 57.141). UTI surveillance must be reported for at least 6 consecutive months to provide meaningful measures.

Definitions:

Date of Event is defined as the date when the *first clinical evidence (signs/symptoms) of the UTI appeared* or the *date the specimen was collected* that was used to make or confirm the diagnosis, **whichever comes first**.

Urinary tract infections (UTI) are defined using a combination of clinical signs and symptoms and laboratory criteria (See Figure 1 and Table 1).

Symptomatic UTI (SUTI) events occur when the resident manifests signs and symptoms such as acute dysuria, new and/or marked increase in urinary frequency, suprapubic tenderness, etc. which localize the infection to the urinary tract. These events can occur in residents without urinary devices or managed with urinary devices other than indwelling urinary catheters, such as suprapubic catheters, straight in-and-out catheters and condom catheters. Events occurring in residents with indwelling urinary catheters (defined below) are a sub-set of SUTIs referred to as catheter-associated SUTI (CA-SUTI) events.

Catheter-associated SUTIs (CA-SUTI) events occur when a resident develops signs and symptoms localizing to the urinary tract while having an indwelling urinary catheter in place or removed within the 2 calendar days prior to the date of event (where day of catheter removal = day 1).

NOTE: An indwelling urinary catheter should be in place for a minimum of 2 calendar days before infection onset (where day of catheter insertion = day 1) in order for the SUTI to be catheter-associated

NOTE: If a resident is transferred to your facility with an indwelling urinary catheter and you replace that catheter with a new one while the resident is in your care, then the date of insertion of the device corresponds to the date the new catheter was placed in your facility.

Indwelling urinary catheter: a drainage tube that is inserted into the urinary bladder *through the urethra*, is left in place, and is connected to a closed collection system; also called a Foley catheter. Indwelling urinary catheters do not include straight in-and-out catheters or suprapubic catheters.

NOTE: UTIs in residents managed with suprapubic, in and out, or condom (males only) catheters will be captured as SUTIs, not CA-SUTIs.

Asymptomatic Bacteremic UTI (ABUTI) events occur when the resident has NO signs or symptoms localizing to the urinary tract but has *urine and blood cultures positive* for at least one common organism (See Table 1) regardless of whether a catheter is in place or not.

Table 1. Examples of ''sameness'' by organism speciation

Culture	Companion Culture	Report as.
S epidermidis	Coagulase-negative staphylococci	S epidermidis
Klebsiella oxytoca	Klebsiella spp.	K oxytoca
S salivarius	Strep viridans	S salivarius

Numerator and Denominator Data:

Numerator Data: The *Urinary Tract Infection (UTI) for LTCF* form (CDC 57.140) is used to collect and report each SUTI, CA-SUTI or ABUTI that is identified during the month selected for surveillance. The *Tables of Instructions* includes information on how to complete this form.

The UTI form includes resident demographic information and information on whether or not a catheter (or other urinary device) was present. Additional data include the specific clinical criteria evidence (signs and symptoms) and laboratory and diagnostic testing that were used for identifying the UTI; whether the resident developed a secondary bloodstream infection; whether the resident was transferred to an acute care facility for any reason or died from any cause within 7 days of the UTI event; and the organisms isolated from cultures and their antimicrobial susceptibilities.

NOTE: When a urine specimen is being collected from a resident with a chronic indwelling urinary catheter (in place >14 days), it is recommended that the original catheter be changed prior to specimen collection.

Denominator data: Catheter-days, resident-days, and new antibiotic starts for UTI indication are used for denominators. Catheter-days, defined as the number of residents with an indwelling urinary (Foley) catheter, are collected daily for all residents in the facility using the *Denominators for LTCF* form *(CDC 57.142).*

NOTE: None of the following urinary management devices should be included when counting indwelling catheter-days: suprapubic catheters, straight in-and-out catheters or condom catheters.

NOTE: If a resident is transferred to an acute care facility for a suspected UTI, no additional indwelling catheter-days are reported after the day of transfer.

Resident-days are calculated using the daily census of residents in the facility each day of the month. These daily counts are summed and only the total for the month is entered into NHSN, under Summary Data.

New antibiotic starts for UTI indication may be collected daily or summarized at the end of each month. A "new antibiotic start" refers to a new prescription for an antibiotic ordered for a resident who is suspected or diagnosed with having a urinary tract infection (both catheter-associated and not catheter associated) regardless of whether that UTI meets the NHSN event definition. There is no minimum number of doses or days of therapy which define a new antibiotic start—count all new orders.

Include only antibiotics which are started while the resident is receiving care in the facility, either by clinical providers working in the facility or by outside physicians who see the resident in an outpatient clinic or Emergency department. Do not include antibiotic courses started by another healthcare facility prior to the resident's admission or readmission back to your facility even if the resident continues to take that antibiotic while in the facility.

Data Analyses:

Line lists of UTI events and UTI events by catheter status will be available as part of the UTI event within the NHSN LTCF component. Below are measures and calculations which will be incorporated into the analytics output that will be available for use in 2013.

Calculated UTI Rates and Metrics
Data will be stratified by time (e.g., month, quarter) and aggregated across the entire facility.

Total UTI incidence rate/1,000 resident-days = Number of UTI Events (i.e., SUTI+CA-SUTI+ABUTI) / Total resident-days x 1,000.

> *Percent* that is SUTI = Number of SUTI Events / Total number of UTI Events x 100.
>
> *Percent* that is CA-SUTI = Number of CA-SUTI Events / Total number of UTI Events x 100.
>
> *Percent* that is ABUTI = Number of ABUTI Events / Total number of UTI Events x 100.

SUTI incidence rate/1,000 resident-days = Number of SUTI Events / (Total resident-days – catheter-days) x 1,000.

NOTE: Only SUTIs which are NOT catheter-associated will be included in the SUTI incidence rate.

CA-SUTI incidence rate/1,000 catheter-days = Number of CA-SUTI events/ Catheter-days x 1,000

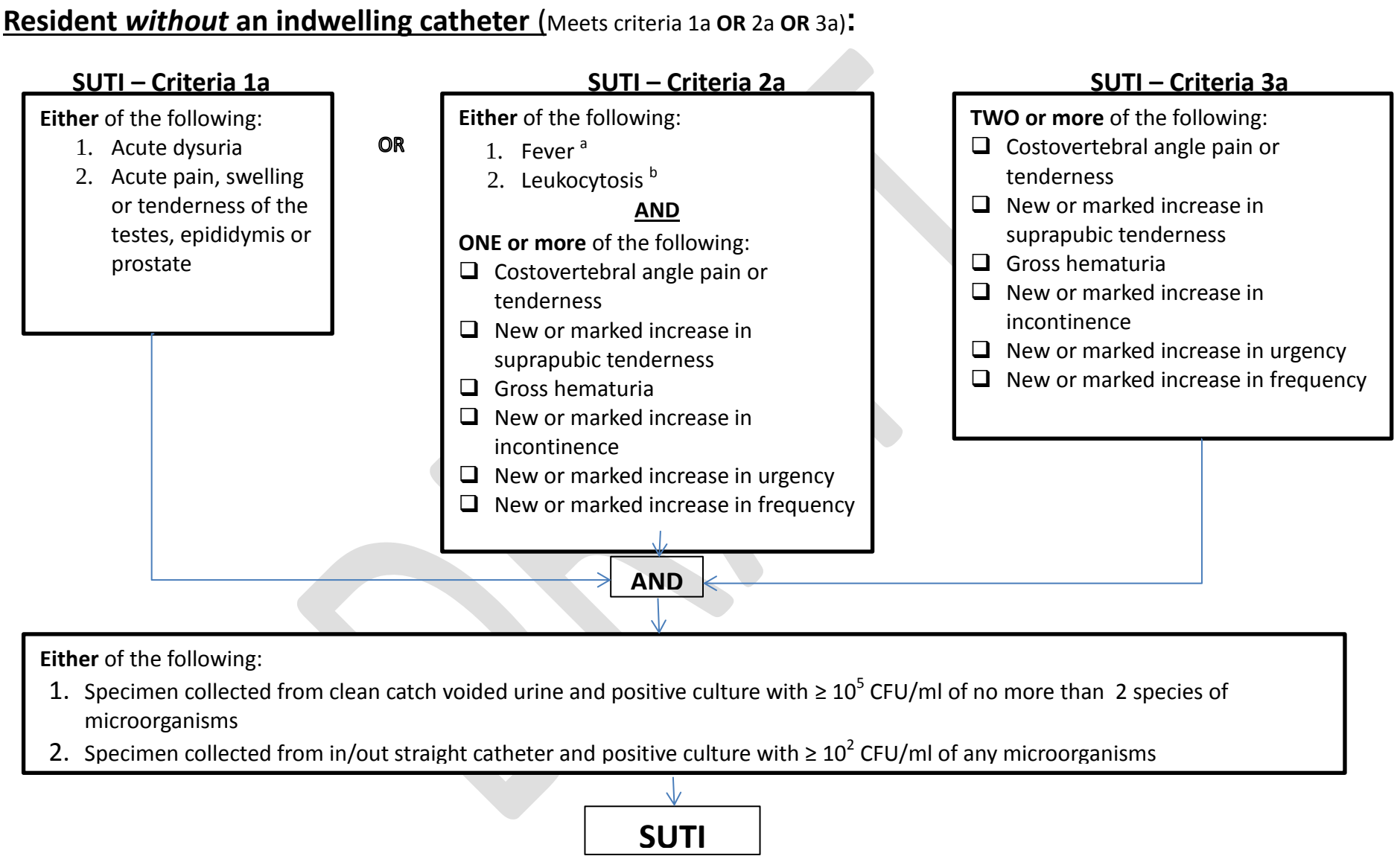
NOTE: Only symptomatic events which develop at the time an indwelling catheter is in place or recently removed (within last 2 calendar days) will contribute to the CA-SUTI rate.

Urinary Catheter Utilization Ratio = Total urinary catheters-days / Total resident-days.

UTI treatment ratio = New antibiotic starts for UTI / Total UTI Count (SUTI + ABUTI + CASUTI)

NOTE: When the UTI treatment ratio is <1, there are fewer reported antibiotic starts for UTI than symptomatic UTI events submitted; when the UTI treatment ratio equals 1, there are the same number of new antibiotic starts for UTI and symptomatic UTI events submitted; when the UTI treatment ratio is >1, there are more reported antibiotic starts for UTI than symptomatic UTI events submitted

Figure 1: Criteria for Defining UTI Events in NHSN LTCF Component.



[a] 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
[b] Leukocytosis: >14,000 cells/mm^3, or Left shift (> 6% or 1,500 bands/mm^3

Resident *with* an indwelling catheter:

CA-SUTI – Criteria

ONE or more of the following with no alternate source:

- ❑ Fever [a]
- ❑ Rigors
- ❑ New onset hypotension, with no alternate site of infection.
- ❑ New onset confusion/functional decline **AND** Leukocytosis [b]
- ❑ New costovertebral angle pain or tenderness
- ❑ New or marked increase in suprapubic tenderness
- ❑ Acute pain, swelling or tenderness of the testes, epididymis or prostate
- ❑ Purulent discharge from around the catheter

↓

AND

↓

Any of the following:

If urinary catheter removed within last 2 calendar days:

1. Specimen collected from clean catch voided urine and positive culture with ≥ 10^5 CFU/ml of no more than 2 species of microorganisms
2. Specimen collected from in/out straight catheter and positive culture with ≥ 10^2 CFU/ml of any microorganisms

If urinary catheter in place:

3. Specimen collected from indwelling catheter and positive culture with ≥ 10^5 CFU/ml of any microorganisms [c]

↓

CA-SUTI

[a] 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

[b] Leukocytosis: >14,000 cells/mm^3, or Left shift (> 6% or 1,500 bands/mm^3

[c] Indwelling urinary catheters which have been in place for >14 days should be changed prior to specimen collection

Resident *with or without* an indwelling catheter:

ABUTI –Criteria

Resident has **no localizing urinary signs or symptoms** (i.e., no urgency, frequency, acute dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness). *If no catheter is in place, fever as only sign would not exclude ABUTI if other positive culture criteria are met.*

AND

Any of the following:

1. Specimen collected from clean catch voided urine and positive culture with ≥ 10^5 CFU/ml of no more than 2 species of microorganisms
2. Specimen collected from in/out straight catheter and positive culture with ≥ 10^2 CFU/ml of any microorganisms
3. Specimen collected from indwelling catheter and positive culture with ≥ 10^5 CFU/ml of any microorganisms

AND

Positive blood culture with at least 1 matching organism in urine culture

ABUTI

Table 1. Criteria for Defining UTI Events in NHSN LTCF Component.

Criterion	**Symptomatic Urinary Tract Infection (SUTI)** *For residents **without** an indwelling catheter:*
1a	**Either** of the following (Signs & Symptoms): 1. Acute dysuria 2. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate **AND** **Either** of the following (Laboratory and Diagnostic Testing): 1. Specimen collected from clean catch voided urine and positive culture with $\geq 10^5$ CFU/ml of no more than 2 species of microorganisms 2. Specimen collected from in/out straight catheter and positive culture with $\geq 10^2$ CFU/ml of any microorganisms
2a	**Either** of the following: *1.* Fever (Signs and Symptoms) [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] *2.* Leukocytosis (Laboratory and Diagnostic Testing) (>14,000 cells/mm3) or Left shift (>6% or 1,500 bands/mm3) **AND** **One or more** of the following (New and/or marked increase): 3. Costovertebral angle pain or tenderness, 4. Suprapubic tenderness, 5. Visible (Gross) hematuria, 6. New or marked increase incontinence 7. New or marked increase urgency 8. New or marked increase frequency **AND** **Either** of the following (Laboratory and Diagnostic Testing): 1. Specimen collected from clean catch voided urine and positive culture with $\geq 10^5$ CFU/ml of no more than 2 species of microorganisms 2. Specimen collected from in/out straight catheter and positive culture with $\geq 10^2$ CFU/ml of any microorganisms

3a	**<u>Two</u> or more** of the following (New and/or marked increase): 1. Costovertebral angle pain or tenderness, 2. New or marked increase incontinence 3. New or marked increase urgency 4. New or marked increase frequency 5. Suprapubic tenderness 6. Visible (gross) hematuria **<u>AND</u>** **Either** of the following (Laboratory and Diagnostic Testing): 1. Specimen collected from clean catch voided urine and positive culture with $\geq 10^5$ CFU/ml of no more than 2 species of microorganisms 2. Specimen collected from in/out straight catheter and positive culture with $\geq 10^2$ CFU/ml of any microorganisms
Criterion	**Cather-associated Symptomatic Urinary Tract Infection (SUTI) – CA-SUTI** *For residents **with** an indwelling catheter in place or removed within 2 calendar days prior to event onset*
	<u>One</u> or more of the following (Signs and Symptoms and Laboratory and Diagnostic Testing): a. Fever b. Rigors c. New onset hypotension, with no alternate site of infection. d. New onset confusion/functional decline with no alternate diagnosis ***<u>AND</u>*** leukocytosis e. New onset suprapubic pain or costovertebral angle pain or tenderness f. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate. g. Purulent discharge from around the catheter **<u>AND</u>** **Any** of the following: *<u>If urinary catheter removed within last 2 calendar days</u>:* 1. Specimen collected from clean catch voided urine and positive culture with $\geq 10^5$ CFU/ml of no more than 2 species of microorganisms 2. Specimen collected from in/out straight catheter and positive culture with $\geq 10^2$ CFU/ml of any microorganisms *<u>If urinary catheter in place</u>:* 3. Specimen collected from indwelling catheter and positive culture with $\geq 10^5$ CFU/ml of any microorganisms

Criterion	**Asymptomatic Bacteremic Urinary Tract Infection (ABUTI)** *Resident **with or without** an indwelling urinary catheter*
1	**No** signs or symptoms (i.e., no urgency, frequency, acute dysuria, suprapubic tenderness, or costovertebral angle pain or tenderness). *If no catheter is in place, fever alone would not exclude ABUTI if other criteria are met.* **AND** **One** of the following: 1. Specimen collected from clean catch voided urine and positive culture with $\geq 10^5$ CFU/ml of no more than 2 species of microorganisms 2. Specimen collected from in/out straight catheter and positive culture with $\geq 10^2$ CFU/ml of any microorganisms 3. Specimen collected from indwelling catheter and positive culture with $\geq 10^5$ CFU/ml of any microorganisms . **AND** A positive blood culture with at least 1 matching organism in urine culture.

Table 2. Instructions for Completion of the Long-term Care Facility Component - Denominators for LTCF (CDC 57.142)

Data Field	Instructions for Form Completion
Facility ID	**Required**. The NHSN-assigned facility ID will be auto-entered by the system.
Location Code	**Required**: Enter the code for the location where surveillance was performed. For Long-term Care Facilities this code will be FacWideIN (Facility-wide Inpatient).
Month	**Required**. Record the 2-digit month during which the data were collected.
Year	**Required.** Record the 4-digit year during which the data were collected.
Number of residents	**Required.** For each day of the month, record the number of residents in the facility. Do not include residents for whom a bed is being held but are not actually present in the facility.
Number of residents with a urinary catheter	***Conditionally required***. Complete only if you are performing urinary tract infection (UTI) surveillance for this month. For each day of the month, count and record the number of residents in the facility that have an *indwelling urinary catheter*. Indwelling urinary catheter is a drainage tube that is inserted into the urinary bladder *through the urethra*, is left in place, and is connected to a closed collection system; also called a Foley catheter. Do not include straight in-and-out catheters, suprapubic catheters , or condom catheters in your count.
New antibiotic starts for UTI indication	***Conditionally required***. Complete only if you are performing urinary tract infection (UTI) surveillance for this month. For each day of the month, count and record the number of new prescriptions for an antibiotic given for residents suspected or diagnosed with having a urinary tract infection, (both catheter-associated and not catheter associated), in the facility. Capture all new antibiotic starts, regardless of total duration of treatment.

Data Field	Instructions for Form Completion
	Include only antibiotics which are started while the resident is receiving care in the facility, either by clinical providers working in the facility or by outside physicians who see the resident in an outpatient clinic or Emergency department. Do not include antibiotic courses started by another healthcare facility prior to the resident's admission or readmission back to your facility.
Number of admissions	**Required**. For each day of the month, count and record the number of residents admitted to the facility. Include both new admissions and re-admissions.
Number of admissions on *C.diff* treatment	***Conditionally required***. Complete only if you are performing LabID event for *C.difficile* surveillance for this month. For each day of the month, count and record the number of residents who are receiving antibiotic therapy for *C.difficile* infection at the time of admission. Include both new admissions and re-admissions.
Total (for Resident-days, Urinary catheter-days, New antibiotic starts for UTI indication, Resident admissions)	**Required**. A total for each column should be calculated by summing the numbers recorded for each individual day of the month. Alternatively, if available, these monthly totals can be obtained from LTCF administrate data sources in place of performing daily counts. Only the monthly total will be entered into the NHSN application.

Data Field	Instructions for Form Completion
Custom Fields	*Optional*. Up to 50 fields may be customized for local or group use in any combination of the following formats: date (MMDDYYY), numeric, or alphanumeric. **NOTE:** Each Custom Field must be set up in the Facility/Custom Options section of NHSN before the field can be selected for use.

Table 3. Instructions for Completion of the Long-term Care Facility Component - Annual Facility Survey (CDC 57.137)

Data Field	Instructions for Form Completion
Facility ID	**Required**. The NHSN-assigned facility ID will be auto-entered by the system.
Survey Year	**Required**. Select the calendar year for which this survey was completed. The survey year should represent the last full calendar year. For example, in 2011, a facility would complete a 2010 survey.
National Provider ID	**Required**. Enter your facility National Provider ID (10-digit number).
State Provider ID	*Optional*. If available, enter your facility State Provider ID.
Facility Characteristics	
Ownership	**Required**. Select the appropriate ownership of this facility (check one). • For profit • Not for profit, including church • Government (Not VA) • Veterans Affairs
Certification	**Required**. Select the appropriate certification of this facility (check one). • Dual Medicare/Medicaid • Medicare only • Medicaid only • State only
Affiliation	**Required**. Select the appropriate affiliation for this facility (check one): • Independent, free-standing - The facility does not share a building, staff, or policies (such as infection control) with any other healthcare institution. • Independent, continuing care retirement community – This facility is not affiliated with any other healthcare system, but is part of a campus containing other levels of elder care services. • Multi-facility organization (chain) - The facility is part of a regional or national network of specialty facilities. Facilities share policies (such as infection control), corporate leadership, and a common business structure. • Hospital system, attached - The facility is affiliated with a local healthcare system. Facility shares policies (such as infection control) with other institutions within the hospital system. The facility is physically connected to the hospital within the system. • Hospital system, free-standing - The facility is affiliated with a local healthcare system. Facility shares policies (such as infection control) with other institutions within the hospital system. The facility is not physically connected to the hospital within the system.

Average daily census	**Required**. Enter the average daily census for your facility during the last full calendar year (12 months).
Total number of short-stay residents	**Required**. Enter the total number of residents that stayed ≤ 100 days in the previous calendar year.
Total number of long-stay residents	**Required**. Enter the total number of residents that stayed > 100 days in the previous calendar year.
Average length of stay for short-stay residents	*Optional*. Enter the average length of stay for short-stay residents for your facility during the last full calendar year.
Average length of stay for long-stay residents	*Optional*. Enter average length of stay for long-stay residents for your facility during the last full calendar year.
Number of new admissions	**Required**. Enter the total number new admissions to your facility during the last full calendar year.
Number of Beds	**Required**. Enter the total number of beds (including any pediatric beds) for your facility.
Number of Pediatric (age < 21) Beds	**Required**. Enter the number of pediatric beds for your facility. Pediatric beds are defined as those beds dedicated to residents that are less than 21 years of age. If you have no pediatric beds at your facility report zero.
Indicate which of the following primary service types are provided by your facility. For each service indicated: On the day of this survey, how many residents are receiving care in your facility by the following primary service types	**Required**. For each primary service type listed, check the box only if your facility provides this primary service type. For the primary service types your facility provides (those with boxes checked) indicate the number of residents primarily receiving that service on the day this survey is completed. Only list one service type per resident and this should be the primary service (or most specialized care) the resident is receiving. For example, a resident may be admitted for skilled care while on a ventilator. That resident would be counted as "ventilator care". A resident who is long-stay but on a specialized dementia unit would be listed as "long-term dementia". The total of residents per service type reported should sum to the resident census on the day the survey is completed. • Long-term General Nursing: • Long-term Dementia: • Skilled nursing/short-term (sub-acute) rehab: • Long-term psychiatric (non-dementia): • Ventilator: • Bariatric: • Hospice/Palliative: • Other:

Facility Microbiology Laboratory Practices *Completion of this section may require the assistance from the microbiology laboratory.*	
1. Does your facility have its own laboratory that performs antimicrobial susceptibility testing?	**Required**. Select Yes if your laboratory performs antimicrobial susceptibility testing. Otherwise, select No.
If No, where is the facility's antimicrobial susceptibility testing performed? (check one)	***Conditionally Required***. Select the location where your facility's antimicrobial susceptibility testing is performed: Affiliated medical center or commercial referral laboratory. If multiple laboratories are used include the laboratory which performs the majority of the bacterial susceptibly testing.
2. Indicate whether your facility screens new admissions for any of the following multidrug-resistant organisms (check all that apply)	**Required.** Indicate by checking the appropriate boxes if your facility obtains screening cultures (Active Surveillance Testing) on newly admitted residents for the following multidrug-resistant organisms (MDROs) (check all that apply). If your facility <u>does not</u> obtain screening cultures on new admissions for any of the MDROs listed, check the box indicating "We do not screen new admissions for MDROs" only. • We do not screen new admissions for MDROs • Methicillin-resistant Staphylococcus aureus (MRSA) • Vancomycin-resistant Enterococcus (VRE) • Multidrug-resistant gram-negative rods (includes carbapenemase-resistant • Enterobacteriaceae; multidrug-resistant Acinetobacter, etc.)
For the MDROs checked, indicate the specimen types sent for screening (check all that apply)	*MRSA:* ***Conditionally required***. • Nasal swabs • Wound swabs • Sputum • Other skin site *VRE:* ***Conditionally required***. • Rectal swabs • Wound swabs • Urine Multidrug-resistant gram-negative rods*:* ***Conditionally required***. • Rectal swabs • Wound swabs • Sputum • Urine
3. What is the primary testing method for *C. difficile* used most often by your facility's laboratory or the outside laboratory where your facility's testing is	**Required.** Select from the choices listed the testing methods used to perform *C. difficile* testing by your facility's laboratory or the outside laboratory where your facility's testing is done. If 'Other' is selected, please specify. Note: "Other" should not be used to name specific laboratories, reference laboratories, or the brand names of C. *difficile* tests; most methods can be

performed? (check one)	categorized accurately by selecting from the options provided. Please ask your laboratory or conduct a search for further guidance on selecting the correct option to report.
4. Does your laboratory provide a report summarizing the percent of antibiotic resistance seen in common organisms identified in cultures sent from your facility (often called an antibiogram)? If yes, indicate how often this summary reported is received	**Required.** Select Yes if your laboratory provides your facility with a report which summarizes the percent susceptibility to a list of common antibiotics for the bacterial organisms most frequently identified by cultures sent to the microbiology lab. This summary is NOT the same as antibiotic susceptibility testing provided on culture reports for individual residents. Otherwise, select No. *Conditionally Required*. If 'Yes', indicate whether the antibiogram is provided once a year, every 2 years, or Other and specify the frequency.
Infection Control Practices	
5. Number of staff hours dedicated to infection control activities in the facility	**Required**. Enter average total hours per week that are dedicated to ALL infection control activities in your facility. If multiple staff members are responsible for parts of the infection control program, include the hours spent per week by each person.
a. Total hours per week performing surveillance	**Required**. Enter the number of hours per week engaged in activities designed to find and report healthcare-associated infections and the appropriate denominators.
b. Total hours per week for infection prevention activities other than surveillance	**Required**. Enter the number of hours per week spent on infection prevention and control activities other than surveillance. These activities include, but are not limited to, education, prevention, meetings, etc.
6. Does the facility routinely require use of gowns/gloves for care of residents infected or colonized with MRSA?	**Required.** Select the single best choice from the choices listed that most accurately describes the primary approach to using gowns/gloves for care of residents with methicillin resistant *Staphylococcus aureus* (MRSA) at your facility. Select 'No' if your facility does not routinely use gowns/gloves during care of residents infected or colonized with MRSA
7. Does the facility routinely require use of gowns/gloves for care of residents infected or colonized with VRE?	**Required.** Select the single best choice from the choices listed that most accurately describes the primary approach to using gowns/gloves for care of residents with vancomycin resistant *Eterococcus* (VRE) at your facility. Select 'No' if your facility does not routinely use gowns/gloves during care of residents infected or colonized with VRE
8. Does the facility routinely require use of gowns/gloves for care of residents infected or colonized with CRE	**Required.** Select the single best choice from the choices listed that most accurately describes the primary approach to using gowns/gloves for care of residents with carbapenem resistant *Enterobacteriaceae* (CRE) at your facility. Select 'No' if your facility does not routinely use gowns/gloves during care of residents infected or colonized with CRE NOTE: The term "*Enterobacteriaceae"* refers to a family of common gram negative bacteria which can colonize the GI or urinary tract of frail and/or older adults. Examples of these bacteria include *E. coli*, *Klebsiella* and *Enterobacter*

9. Does the facility routinely require use of gowns/gloves for care of residents infected or colonized with ESBL-producing or extended spectrum cephalosporin resistant Enterobacteriaceae in contact precautions?	**Required.** Select the single best choice from the choices listed that most accurately describes the primary approach to using gowns/gloves for care of residents with extended-spectrum beta-lactamase producing (ESBL) or extended-spectrum cephalosporin resistant *Enterobacteriaceae* at your facility. Select 'No' if your facility does not routinely use gowns/gloves during care of residents infected or colonized with ESBL producing or extended cephalosporin resistant *Enterobacteriaceae.* NOTE: The term "*Enterobacteriaceae"* refers to a family of common gram negative bacteria which can colonize the GI or urinary tract of frail and/or older adults. Examples of these bacteria include *E. coli, Klebsiella* and *Enterobacter*
10. When a resident colonized or infected with an MDRO is transferred to another facility, does your facility communicate the resident's MDRO status to the receiving facility at the time of transfer?	**Required.** Select 'Yes' if your facility **routinely** communicates the status of a patient known to be colonized or infected with a multidrug-resistant organism (MDRO) to the receiving facility at the time of patient transfer; otherwise, select 'No'.
11. Among residents with an MDRO admitted to your facility from other healthcare facilities, what percentage of the time does your facility receive information from the transferring facility about the resident's MDRO status?	**Required.** Enter the estimated percentage of the time that your facility receives information from a transferring facility about the status of a resident known to be colonized or infected with a multidrug-resistant organism (MDRO)
Antibiotic Stewardship Practices. *Completion of this by section may require assistance from the consultant pharmacist, director of nursing and/or medical director who focus on efforts to improve antibiotic use and monitoring (known as Stewardship) for your facility*	
12. Is there a leader responsible for the impact of activities to improve use of antibiotics at your facility? If Yes, what is the position of this leader?	**Required** Select 'Yes' if any individual has been identified as a lead for antibiotic stewardship activities as evidenced by responsibility for improving antibiotic use in the job description or performance review, authority to coordinate activities of staff from multiple departments (e.g. laboratory, pharmacy, information technology), and/or responsibility to report to facility administration/senior leaders on the antibiotic stewardship program planning and outcomes. Select 'No' if the facility leadership has not specifically given a person the responsibility, support and authority to oversee antibiotic use and stewardship efforts in the facility. *Conditionally Required.* If 'Yes', specify the qualification or job title of the leader(s). More than choice one may be selected. If 'Other' is selected, please specify the position.
13. Does your facility have a policy that requires prescribers to document in the medical record or during order entry, a dose, duration,	**Required.** Select 'Yes' if your facility has a policy requiring documentation of dose, duration and indication for all antibiotics in the medical record or during order entry; otherwise, select 'No'.

and indication for all antibiotics? If Yes, has adherence to this documentation policy (dose, duration, and indication) been monitored?	*Conditionally Required.* If 'Yes' to question 13, select 'Yes' if charts are routinely being been reviewed to confirm documentation of dose, duration, and indication in patient medical records; otherwise, select 'No'.
14. Does your facility provide facility-specific treatment recommendations, based on national guidelines and local susceptibility, to assist with antibiotic decision making for common clinical conditions? If Yes, has adherence to facility-specific treatment recommendations been monitored?	**Required.** Select 'Yes' if there are facility-specific recommendations for antibiotic treatment selection based on evidence-based guidelines and/or local susceptibility reports for ANY common clinical infections diagnosed and treated (e.g., community required pneumonia, urinary tract infections, or skin and soft tissue infections); otherwise, select 'No'. *Conditionally Required.* If 'Yes' to question 14, a. Select 'Yes' charts have been audited to confirm adherence to facility-specific treatment guidelines for ANY of the common clinical conditions listed above; otherwise, select 'No'.
15. Is there a formal procedure for perform a follow-up assessment 2-3 days after a new antibiotic start to determine whether the antibiotic is still indicated and appropriate (e.g. antibiotic time out)?	**Required.** Select 'Yes' if your facility has developed a standardized way for clinicians or nurses caring for a resident to reassess the continuing need and choice of antibiotics between 2-3 days after a new antibiotic start in order to determine the following: confirm indication, review microbiology results, and review antibiotic choice, dose, and duration; Otherwise, select 'No'.
16. Does a physician, nurse or pharmacist review courses of therapy for specified antibiotic agents and communicate results with prescribers (i.e., audit with feedback) at your facility?	**Required.** Select 'Yes' if your facility has a physician, nurse or pharmacist knowledgeable in antibiotic use, *and not part of the treating team*, review courses of therapy for specified antibiotic agents **and** communicate the results to the providers caring for the resident; otherwise, select 'No'.
17. Does the pharmacy service provide a monthly report of antibiotic use (e.g., new orders, number of days of antibiotic treatment) for the facility?	**Required.** Select Yes if your pharmacy service provides your facility with a report which summarizes the antibiotic use in your facility on a monthly basis. This report could include a list of all antibiotics started each month or number of days of antibiotics used each month; Select No if no report specifically describing on antibiotic use is provided to the facility every month.
18. Has your facility provided education to clinicians and other relevant staff on improving antibiotic use in the past 12 months?	**Required**. Select 'Yes' if your facility has provided specific education on ways to improve antibiotic use to providers, nurses, and other relevant staff (e.g. in-service training, direct instruction, etc.); Otherwise, select 'No'.
Electronic Health Record Utilization	

Indicate whether any of the following are available in an electronic health record (check all that apply)	**Required**. Indicate by checking the appropriate boxes whether any of the following are available in an electronic health record at your facility (check all that apply). • Microbiology lab culture and antimicrobial susceptibility results • Medication orders • Medication administration record • Resident vital signs • Resident admission notes • Resident progress notes • Resident transfer or discharge notes • None of the above