In 2017, the CDC Emerging Infections Program (EIP) performed a prevalence survey of healthcare-associated infections and antibiotic use in 161 nursing homes from 10 states: California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New Mexico, New York, Oregon, and Tennessee. EIP staff reviewed resident medical records to collect demographic and clinical information, infection signs, symptoms, and diagnostic testing documented on the day an antibiotic was initiated and 6 days prior. We applied 4 criteria to determine whether initiation of treatment for UTI was supported: (1) the Loeb minimum clinical criteria (Loeb); (2) the Suspected UTI Situation, Background, Assessment, and Recommendation tool (UTI SBAR tool); (3) adaptation of Infectious Diseases Society of America UTI treatment guidelines for nursing home residents (Crnich & Drinka); and (4) diagnostic criteria for uncomplicated cystitis (cystitis consensus) (Fig. 1). We calculated the percentage of residents for whom initiating UTI treatment was appropriate by these criteria.

**Results:** Of 248 residents for whom UTI treatment was initiated in the nursing home, the median age was 79 years [IQR, 19], 63% were female, and 35% were admitted for postacute care. There was substantial variability in the percentage of residents with antibiotic initiation classified as appropriate by each of the criteria, ranging from 8% for the cystitis consensus, to 27% for Loeb, to 33% for the UTI SBAR tool, to 51% for Crnich and Drinka (Fig. 2).

**Conclusions:** Appropriate initiation of UTI treatment among nursing home residents remained low regardless of criteria used. At best only half of antibiotic treatment met published prescribing appropriateness of antibiotic prescribing among NH residents.

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**Conclusions:** Appropriate initiation of UTI treatment among nursing home residents remained low regardless of criteria used. At best only half of antibiotic treatment met published prescribing
criteria. Although insufficient documentation of infection signs, symptoms and testing may have contributed to the low percentages observed, adequate documentation in the medical record to support prescribing should be standard practice, as outlined in the CDC Core Elements of Antibiotic Stewardship for nursing homes. Standardized UTI prescribing criteria should be incorporated into nursing home stewardship activities to improve the assessment and documentation of symptomatic UTI and to reduce inappropriate antibiotic use.

**Funding:** None

**Disclosures:** None

**Doi:** 10.1017/ice.2020.637

**Presentation Type:**
Poster Presentation

**Area-Based Socioeconomic Status Measures and Incidence of Community-Associated ESBL-Producing Enterobacteriaceae, 2017**
Hannah E. Reses, Centers for Disease Control and Prevention; Cedric Brown, CDC Erin C. Phipps Kristina G. Flores; Ghinwa Dumyati, University of Rochester; Rebecca Tsay; Marion Kainer, Western Health; Daniel Muleta, Tennessee Department of Health; Nadezhda Duffy, Centers for Disease Control and Prevention; Isaac See, Centers for Disease Control and Prevention

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**Fig. 2.**

**Loeb Criteria**
- 27% appropriate (n=68)
  - Does the resident have an indwelling or suprapubic catheter?
    - YES: N=52
    - NO: N=196
  - Does the resident meet the signs of systemic infection or localizing urinary signs and symptoms
    - YES: N=35
    - NO: N=61
  - Does the resident have a positive culture?
    - YES: N=145
    - NO: N=138

**UTI SBAR Tool**
- 33% appropriate (n=81)
  - Does the resident have an indwelling catheter?
    - YES: N=49
    - NO: N=199
  - Does the resident meet the signs of systemic infection or localizing urinary signs and symptoms
    - YES: N=20
    - NO: N=29
  - Does the resident have a positive culture?
    - YES: N=61
    - NO: N=138

**Crnich & Drinka**
- 51% appropriate (n=126)
  - Does the resident have localizing urinary signs and symptoms?
    - YES: N=104
    - NO: N=199
  - Does the resident meet signs of systemic infection?
    - YES: N=61
    - NO: N=138
  - Did the resident have a urinalysis and urine culture completed?
    - YES: N=56
    - NO: N=16
  - Does the resident meet the signs of systemic infection or have a positive culture?
    - YES: N=76
    - NO: N=4

**Cystitis Consensus**
- 8% appropriate (n=17)
  - Does the resident have Dysuria and more than 1 cystitis symptom?
    - YES: N=17
    - NO: N=137
  - Does the resident have Hematuria and Suprapubic pain?
    - YES: N=0
    - NO: N=137

**Note:** Please refer to Figure 1 – the summary of criteria used to assess appropriateness of antibiotic treatment initiated for urinary tract infection, for signs of systemic infection and localizing urinary signs and symptoms for each of the criteria listed above.

1 Denominator for Cystitis Consensus is less than the total due to the exclusion of possible complicated urinary tract infections. These were residents with an indwelling catheter and/or signs and symptoms indicative of pyelonephritis, renal abscess, and prostatitis.