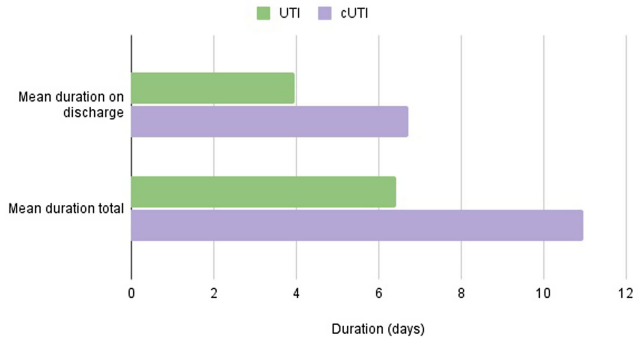
Figure 3. Duration of antimicrobial therapy



Conclusion: There is increased evidence favoring shorter courses of antimicrobial therapy for management of both simple and complicated UTIs. A 7-day course has been shown as effective duration of therapy for cUTI with appropriate source control, regardless of presence of bacteremia. Results from our single center-study show both sUTI and cUTI are subject to unnecessarily prolonged durations of therapy on hospital discharge. In addition we noted a significant use of fluoroquinolones in cUTI treatment. We believe stewardship interventions at time of discharge may particularly benefit shorter courses of therapy for cUTI as well as reduced quinolone use.

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Antimicrobial Stewardship Practice Changes Following a Statewide Educational Conference in Nebraska

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Background: In 2023, Nebraska held its 4th state antimicrobial stewardship (AS) educational conference, an annual one-day in-person event with continuing education offered for nurses, pharmacists, microbiology lab technicians, and physicians. One challenge of educational events is determining if content has been translated into practice. We sought to assess AS-related practice changes implemented by conference attendees. **Methods:** Conference attendees were sent 2 surveys by email following the conference. Survey 1 questions were integrated into the continuing education credit evaluation immediately following the conference. Survey 2 was sent three months later to all registered attendees. Qualitative responses were grouped by theme and descriptive statistics were used to evaluate **Results:** There were 203 attendees from across the state including a diverse group of learners (Table 1) representing metropolitan and rural areas of Nebraska (Figure 1) from acute care hospitals, critical access hospitals, long-term care settings, and public health. A total of 148 attendees (73%) answered questions in Survey 1 (Table 2), and 79 (39%) attendees responded to Survey 2. On Survey 1, 94% of respondents indicated that they intended to make practice changes, though 60% anticipated barriers including further staff training needs and lack of resources and health system support. On Survey 2, 83% of respondents indicated successful implementation of practice changes at three months after the conference. The most common practice changes included enhanced communication strategies, improved antibiotic tracking, monitoring, and review, policy and procedure updates, and AS tool implementation. On Survey 1, 26% (35/131) strongly agreed that their ability to treat patients was adequate prior to the conference; this increased to 55% (72/131) post-conference. On Survey 2, 56% (22/39) of respondents reported improvement in patient outcomes because of implemented practice changes following conference attendance. However, some also mentioned a short follow-up survey timeline as a limitation in assessing patient outcome improvements. Reported outcomes included improved receptiveness from providers, patients, and families to antibiotic use recommendations, shorter prescribed durations, and more appropriate initial antibiotic selection. Improved team performance was noted by 73% (27/37) of respondents. Themes included

Table 1: Professions of Survey Respondents

	n=148
Profession	**n (%)**
Nurse	78 (53)
Pharmacist	46 (31)
Physician	12 (8)
Medical Laboratory Scientist	3 (2)
Nurse Practitioner	2 (1)
Other	7 (5)
	n=79
Profession	**n (%)**
Nurse	38 (48)
Pharmacist	25 (32)
Licensed Practical Nurse	8 (10)
Physician	7 (9)
Nurse Practitioner	1 (1)

Figure 1: 63 Nebraska Cities with ≥1 Attendee at the Nebraska Antimicrobial Stewardship Conference

Table 2: Survey 1 Responses

	Strongly Agree	Agree	Neither agree/ disagree	Disagree	Strongly Disagree
I am better able to discuss antimicrobial stewardship principles and implementation strategies.	88/143 61.5%	53/143 37%	1/143 0.7%	0/143 0%	1/143 0.7%
I am better able to identify the roles and responsibilities of the multidisciplinary team.	85/143 59%	55/143 38%	2/143 1.4%	0/143 0%	1/143 0.7%
I am better able to describe how to use antibiotic stewardship tools.	87/143 60.8%	54/143 37.7%	1/143 0.7%	0/143 0%	1/143 0.7%
Materials are based on best practices, current science, evidence, and clinical reasoning.	90/142 63%	50/142 35%	1/142 0.7%	0/142 0%	1/142 0.7%
The format of this education was an effective way to deliver content.	89/142 62.7%	49/142 34.5%	2/142 1.4%	1/142 0.7%	1/142 0.7%
My level of knowledge was adequate before attending the Nebraska Antimicrobial Stewardship Summit.	32/142 22.5%	83/142 58%	23/142 16%	2/142 1.4%	2/142 1.4%
My level of knowledge was enhanced after attending the Nebraska Antimicrobial Stewardship Summit.	76/142 53.5%	62/142 44%	3/142 2%	0/142 0%	1/142 0.7%
My ability to treat patients was adequate before attending the Nebraska Antimicrobial Stewardship Summit.	35/131 26.7%	76/131 58%	16/131 12.2%	3/131 2.3%	1/131 0.8%
My ability to treat patients was enhanced after attending the Nebraska Antimicrobial Stewardship Summit.	72/131 55%	54/131 41.2%	4/131 3%	0/131 0%	1/131 0.8%
I would recommend attending the Nebraska Antimicrobial Stewardship Summit to others.	91/142 64%	48/142 33.8%	2/142 1.4%	0/142 0%	1/142 0.7%

improved communication with internal and external stakeholders, more collaborative team discussions, increased confidence in recommendations, expanded provider and staff engagement, and increased leadership involvement. **Conclusions:** In addition to improved knowledge and understanding for a variety of AS-related areas, attendees of the conference also reported a high rate of practice changes that led to perceived improvements in patient outcomes and team function.

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Antimicrobial Use Rates by Patient Care Units using NHSN Antimicrobial Use Option in TN Reporting Facilities, 2015–2023
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Background: Tracking antimicrobial use (AU) is a Core Element of Hospital Antimicrobial Stewardship Programs and important to help curb the public health threat of antimicrobial resistance. The National Healthcare Safety Network's (NHSN) AU Option serves as a way for facilities, healthcare systems, and health departments to track and report AU rates within their jurisdictions. Many analyses at the state and national levels do not assess unit-level AU rates. This study investigates AU rates among patient care units in Tennessee reporting facilities from 2015 to 2023 and the most frequently used antimicrobial agents based on AU rates within select unit types. **Methods:** A retrospective analysis was conducted utilizing data obtained from the NHSN AU Option for inpatient units in Tennessee acute care hospitals. Units were defined as critical care (including neonatal), ward, oncology ward, stepdown, operating room (OR), and mixed acuity and specialty care areas, termed 'other'. Unit types with fewer than five facilities represented were excluded. AU rates were determined by Antimicrobial Days of Therapy (DOT) per 1000 Days Present (DP). Statistical analyses , including descriptive statistics and comparison among the units by ANOVA test , were calculated using SAS Version 9.4. **Results:** Eighty-three facilities reported at least one month of data into the NHSN AU Option between 2015–2023. Among 70 facilities reporting inpatient units, the highest AU rate was observed in oncology ward units (n=12, 1114.6 DOT/1000 DP). A significant difference in AU rates was observed between oncology ward units compared to different unit types ($p < 0.001$). Vancomycin, ceftriaxone, and piperacillin/tazobactam were the most used antimicrobials with AU rates of 83, 76, and 65 DOT/1000 DP, respectively. Vancomycin AU rates were significantly higher in oncology ward units compared to stepdown, ward, other, and OR units ($p < 0.0001$). Ceftriaxone AU rate was significantly higher in stepdown units compared to oncology ward, other, and OR units ($p < 0.0001$). Piperacillin/tazobactam AU rate was significantly higher in critical care units compared to different unit types ($p < 0.0001$). **Conclusion:** During the study period, the AU rate varied across hospital inpatient units in Tennessee, with the highest AU rate in oncology wards. This unit-specific approach is critical to address the diverse antimicrobial prescribing behaviors observed, indicating that interventions should be customized to each unit's distinct antimicrobial usage patterns for successful stewardship efforts. Targeted strategies focused on individual wards rather than facility-wide initiatives appear essential for effective reduction in antibiotic usage.

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Long-term effect of intravenous antimicrobial use in a pharmacist-led ASP at a small Japanese acute care hospital
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Background: Antimicrobial resistance (AMR) remains a crucial, healthcare issue for which many countries have devised a national action plan. In Japan as well, antimicrobial stewardship programs (ASP) are being implemented in acute care hospitals under this policy framework. Clinical pharmacists play a central role in ASP, often jointly with infectious disease (ID) physicians. However, in Japan, a shortage of ID physicians has resulted in some ASP being led solely by pharmacists. While reports of the short-term effects of this situation are emerging, the long-term impact of pharmacist-led ASP is still largely unknown in Japan. The present study retrospectively examined the long-term effects of pharmacist-led ASP in a small, Japanese, acute care hospital. **Method:** The present study examined a pharmacist-led ASP in an acute care hospital (287 beds) in Japan which was launched in August 2015 and assessed the duration of therapy per 1000 patient-days (DOT) as the primary outcome by comparing the pre-intervention period (April 2013-July 2015) with the intervention period (August 2015-March 2023) using linear regression analysis. Additionally, segmented time-series analysis was conducted for each, additional intervention, and the impact of reduced activity due to the coronavirus disease 2019 (COVID-19) pandemic during the intervention. The DOT at the study center were compared with the national average of facilities implementing ASP. **Result:** While the DOT for all intravenous antimicrobials showed a slight increase on linear regression (r=0.01; P=0.1), the DOT of antipseudomonal intravenous antimicrobials significantly decreased (r=-0.027; $P < 0.01$). Moreover, a significant reduction in DOT was observed immediately after the initiation of prospective review and feedback for carbapenems and daily prospective review and feedback for all intravenous antimicrobials (-3.2 and -2.4; $P < 0.001$ for the intercept). An increase in DOT was observed during the COVID-19 pandemic-related reduction in activity time, and a rapid decline was observed upon the resumption of activities. Conversely, the average, nationwide DOT significantly increased for all intravenous antimicrobials as well as for antipseudomonal intravenous antimicrobials (r=0.02 and r=0.004; $P < 0.01$) **Conclusion:** Sustaining an effective, pharmacist-led antimicrobial stewardship program led to a continual decrease in the DOT of antipseudomonal intravenous antimicrobials in a small, Japanese, acute care hospital despite a nationwide increase in their use following implementation of the national AMR action plan. Detailed analysis of pharmacists' activities across multiple facilities is necessary to verify these effects.

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Nationwide analysis of antimicrobial prescription in Korean hospitals between 2018 and 2021: The 2023 KONAS report
Yong Chan Kim, Yongin Severance Hospital; I Ji Yun, Yongin Severance Hospital; Hyo Jun Park, SNUBH; Jungmi Chae, SNUBH; Hyungsook Kim, SNUBH; Song Mi Moon, SNUBH; Eunjeong Heo, SNUBH; Se Yoon Park, Ajou University Hospital Pharmacy; Dong Min Seo, Ajou University Hospital Pharmacy; Ha-Jin Chun, Ajou University Hospital Pharmacy; Myung Jin Lee, Yonsei University College of