Table 1: Patient and Facility Characteristics

	COVID-19 Courses of Therapy (n = 630)
Race, n (%)	
White	609 (96.7)
Black or African American	14 (2.2)
Hispanic or Latino	5 (0.8)
Other	2 (0.3)
COVID-19 Vaccination Status, n (%)	
Fully vaccinated and boosted	409 (64.9)
Fully vaccinated, not eligible for booster	7 (1.1)
Fully vaccinated, eligible for booster but not received	165 (26.2)
Partially vaccinated	17 (2.7)
Unvaccinated	30 (4.8)
Unknown	2 (0.3)
eGFR (mL/min), n (%)	
>60	316 (50.2)
30-60	209 (33.2)
<30	105 (16.6)
Severely immunocompromised (Y/N), n (%)	
Yes	2 (0.3)
No	628 (99.7)
Severe hepatic impairment (Y/N), n (%)	
Yes	3 (0.5)
No	627 (99.5)
Facility Type, n (%)	
Assisted Living Facility	217 (34.4)
Long-Term Care Facility	413 (65.6)
Medication dispensed, n (%)	
Nirmatrelvir/ritonavir	319 (50.6)
Molnupiravir	311 (49.4)
Counties dispensed in Nebraska, n (%) (Out of 93 counties in Nebraska)	37 (39.8)
Average time from symptom onset to prescription	1.6 (0-6)

request process for oral antivirals. A REDCap survey hosted on a dedicated program webpage was used to collect requests for treatment submitted by any LTCF in Nebraska, including assisted living facilities. An ASAP pharmacist reviewed each survey submission for renal and hepatic function, drug-drug interactions, date of symptom onset, and ability to take oral medications. After pharmacist approval, delivery of the appropriate COVID-19 therapeutic to the LTCF was coordinated with the dispensing pharmacy. The pharmacists recorded the specific interventions for each treatment in the program database. Descriptive analyses were used to study the program impact. Results: In total, 630 courses of oral COVID-19 antivirals were administered to Nebraska LTCF residents through the ASAP program in 2022. The median patient age was 84 years, and 59% were female. Most dispensed courses (n = 410, 65%) needed pharmaceutical interventions upon review for 506 individual interventions. The most frequent intervention was to hold or adjust doses of concomitant medications in 205 patients (33%), followed by antiviral dose adjustment for renal function in 117 patients (19%), and selecting an alternative COVID-19 therapy due to drug-drug interactions in 108 patients (17%). COVID-19 therapeutic agents were changed upon ASAP intervention to be in compliance with the National Institute of Health COVID-19 treatment guidelines in 37 patients (6%). Conclusions: Pharmacist review of oral antiviral prescriptions for COVID-19 through a public health-supported initiative identified and prevented potential patient safety issues in LTCF residents. Future studies should analyze the impact of similar interventions on patient outcomes.

Disclosures: None

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## Presentation Type:

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Subject Category: Antibiotic Stewardship

Antibiotic practice and stewardship in the management of neutropenic fever: A survey of US institutions

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Background: Neutropenic fever management decisions are complex and result in prolonged duration of broad-spectrum antibiotics. Strategies for antibiotic stewardship in this context have been studied, including de-escalation of antibiotics prior to resolution of neutropenia, with unclear implementation. Here, we present the first survey study to describe real-world neutropenic fever management practices in US healthcare institutions, with particular emphasis on de-escalation strategies after initiation of broad-spectrum antibiotics. Methods: Using REDCap, we conducted a survey of US healthcare institutions through the SHEA Research Network (SRN). Questions pertained to antimicrobial prophylaxis and supportive care in the management of oncology patients and neutropenic fever management (including specific antimicrobial choices and clinical scenarios). Hematologic malignancy hospitalization (2020) and bone-marrow transplantation (2016-2020) volumes were obtained from CMS and Health Resources & Services Administration databases, respectively. Results: Overall, 23 complete responses were recorded (response rate, 35.4%). Collectively, these entities account for ~11.0% of hematologic malignancy hospitalizations and 13.3% bone marrow transplantations nationwide. Of 23 facilities, 19 had institutional guidelines for neutropenic fever management and 18 had institutional guidelines for prophylaxis, with similar definitions for neutropenic fever. Firstline treatment universally utilized antipseudomonal broad-spectrum IV antibiotics (20 of 23 use cephalosporin, 3 of 23 use penicillin agent, and no respondents use carbapenem). Fluoroquinolone prophylaxis was common for leukemia induction patients (18 of 23) but was mixed for bone-marrow transplantation (10 of 23). We observed significant heterogeneity in treatment decisions. For stable neutropenic fever patients with no clinical source of infection identified, 13 of 23 respondents continued IV antibiotics until ANC (absolute neutrophil count) recovery. The remainder had criteria for de-escalation back to prophylaxis prior to this (eg, a fever-free period). Respondents were more willing to de-escalate prior to ANC recovery in patients with identified clinical sources (14 of 23 de-escalations in patients with pneumonia) or microbiological sources (15 of 23 de-escalations in patients with bacteremia) after dedicated treatment courses. In free-text responses, several respondents described opportunities for more systemic de-escalation for antimicrobial stewardship in these scenarios. Conclusions: Our results illustrate the real-world management of neutropenic fever in US hospitals, including initiation of therapy, prophylaxis, and treatment duration. We found significant heterogeneity in de-escalation of empiric antibiotics relative to ANC recovery, highlighting a need for more robust evidence for and adoption of this practice.

## Disclosures: None

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