

onset and weekly for 4 weeks of follow-up to assess viral shedding. Influenza, respiratory syncytial virus (RSV), rhinovirus (RV), coronavirus (229E, NL63, OC43, HKU1), parainfluenzavirus (PIV 1–4), metapneumovirus (MPV), adenovirus (AdV), bocavirus (BoV), enterovirus, parechovirus, and *M. pneumoniae* were tested by the Fast Track Diagnostics Respiratory Pathogens 21 real-time RT-PCR panel.

Results. Subset with research specimen collection: Among 79 residents (aged 0–20 years, median = 8), 60 ARI episodes were reported in 37 (47%) residents. Swabs were obtained at illness onset for 53/60 ARI episodes; among these, there were 25 single-virus detections and five co-detections. An additional 33 single- and five co-detections occurred in 175 follow-up swabs (table). Molecular typing of 32 RV+ specimens identified 13 RV types.

All residents: During the 2016–2017 influenza season, 308/322 (96%) age-eligible residents received influenza vaccine and 168/364 (46%) received prophylactic antivirals for influenza exposures. Although influenza was not detected in research swabs, it was detected in 3/200 tests conducted for clinical purposes.

Conclusion. ARI were common among residents of three PCCFs, and a variety of respiratory viruses were detected. The rarity of influenza may reflect strong infection control practices in these facilities, including vaccination and prophylactic use of antivirals.

Table: Viral Detections by Timing of Collection ($n = 53$ ARI Episodes)

| | Viral Detections | |
|----------------------------|------------------|-----------|
| | Onset | Follow-up |
| Single detections | | |
| RV | 14 | 8 |
| 229E | 1 | 1 |
| OC43 | 3 | 2 |
| MPV | 1 | 3 |
| BoV | 3 | 17 |
| RSV | 2 | 2 |
| Co-detections ^a | 5 | 5 |
| Total | 30 | 38 |

Note: There were no detections for pathogens not shown.

^aCo-detections also included PIV3 and AdV.

Disclosures. All authors: No reported disclosures.

1242. Quantitative Analysis of Microbial Burden on LTCF Environmental Surfaces

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Session: 138. Healthcare Epidemiology: Non-acute Care Settings
Friday, October 5, 2018: 12:30 PM

Background. There is a lack of data on environmental surface contamination in long-term care facilities (LTCF), despite multiple reports of outbreaks of multi-drug-resistant organisms in these settings. Therefore, we conducted a quantitative analysis of the microbial burden and prevalence of epidemiologically important pathogens (EIP) found on LTCF environmental surfaces.

Methods. Microbiological samples were collected using Rodac plates from resident rooms and common areas in five LTCFs. At each facility, five samples from up to 10 different available environmental surfaces were collected from a room of a resident reported to be colonized with EIP, as well as from a room of a resident reported to be non-colonized. In addition, five samples from up to 10 different environmental surfaces were collected from two common areas in the facility. EIPs were defined as MRSA, VRE, *C. difficile* and multi-drug-resistant Gram negative bacilli. Data were analyzed for each environmental site sampled in a resident room or common area based on total bacterial colony forming units (CFU), mean CFU per Rodac, total EIP by site, and mean EIP counts per Rodac.

Results. The below table summarizes total EIP recovered from environmental sites by reported EIP colonization status of the resident. Rooms of residents with reported colonization had much greater EIP counts per Rodac (8.32, 95% CI 8.05, 8.60) than rooms of non-colonized residents (0.78, 95% CI 0.70, 0.86). MRSA was the most common EIP recovered from Rodacs, followed by *C. difficile*. Very few EIPs were recovered from the common areas sampled at these LTCFs.

Conclusion. We found varying levels of CFU and EIP on environmental sites at LTCFs. Colonization status of a resident was a strong predictor of higher levels of EIP being recovered from his/her room.

Table: Total EIP Recovered From Environmental Sites in Residential Rooms

| Site | Number of Rodac Samples | Total EIP by Site | Mean EIP Counts per Rodac | Number of Rodac Samples | | Mean EIP Counts per Rodac |
|-----------------------|-------------------------|-------------------|---------------------------|------------------------------|--------------------------|---------------------------|
| | | | | Non-Colonized Resident Rooms | Colonized Resident Rooms | |
| Bathroom Floor | 54 | 35 | 0.65 | 55 | 1820 | 33.09 |
| Bed Rail | 48 | 20 | 0.42 | 45 | 614 | 13.64 |
| Over Bed Table | 48 | 24 | 0.50 | 55 | 123 | 2.24 |
| Nightstand | 55 | 1 | 0.02 | 49 | 223 | 4.55 |
| Sink | 55 | 251 | 4.56 | 49 | 371 | 7.57 |
| Chair | 35 | 1 | 0.03 | 44 | 361 | 8.20 |
| Overall Sites Sampled | 433 | 337 | 0.78 | 428 | 3561 | 8.32 |

Disclosures. All authors: No reported disclosures.

1243. Comparative Analysis of Antimicrobial-related Adverse Events in the Outpatient Treatment of Staphylococcal Infections

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Session: 138. Healthcare Epidemiology: Non-acute Care Settings
Friday, October 5, 2018: 12:30 PM

Background. Limited data exist to evaluate safety-related outcomes in Outpatient Parenteral Antimicrobial Therapy (OPAT) patients treated with antimicrobial agents for Gram-positive infections.

Methods. This retrospective, single-center study enrolled Mayo Clinic OPAT patients between 2013 and 2017. The primary objective of the study compared rates of therapy modification due to drug-related toxicity for staphylococcal infections treated with ceftriaxone, ceftazidime, ceftazidime/avibactam, vancomycin, daptomycin, ceftaroline, linezolid, or ertapenem. Secondary objectives included determination of the frequency and type of adverse drug events (ADEs) attributed to OPAT and rate of readmission due to ADEs attributed to OPAT.

Results. One hundred seventy-two patients were identified (cefazolin $n = 54$, ceftriaxone $n = 49$, vancomycin $n = 30$, daptomycin $n = 16$, nafcillin $n = 9$, ertapenem $n = 6$, ceftaroline $n = 4$, oxacillin $n = 3$, linezolid $n = 1$). The overall treatment completion rates were high (153/172, 89.0%). Patients completed an average of 35.3 days (7 to 95) of therapy with their original antibiotic. Fourteen patients required change to a different antibiotic due to antimicrobial toxicity (ceftriaxone=5; vancomycin=2; ceftazidime=2; daptomycin=2; ceftaroline=1; nafcillin=1; oxacillin=1) and five patients experienced treatment failure required an additional agent (ceftriaxone=2; nafcillin=2; linezolid=1). Adverse drug events (ADEs) were the most common reason for antimicrobial adjustment (14/19, 73.7%). The most common ADEs were hypokalemia (28/172, 16.3%) and diarrhea (25/172, 14.5%). There were only two cases of *Clostridium difficile*. Thirty-day readmissions due to antimicrobial therapy were low with 11 patients.

Conclusion. OPAT with Gram-positive agents used for staphylococcal infections is effective, but antimicrobial modifications still occur. Clinicians should be aware of the risk of ADEs and readmissions in OPAT patients. A multidisciplinary approach may enhance management of ADEs and possibly preventing readmissions

Disclosures. All authors: No reported disclosures.

1244. Evaluation of Antibiotic Prescribing Practices for Geriatric Patients in the Outpatient Setting in a Veterans Affairs Hospital: Identification of Stewardship Targets

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Session: 138. Healthcare Epidemiology: Non-acute Care Settings
Friday, October 5, 2018: 12:30 PM

Background. Antibiotics are frequently overused in the outpatient setting, however it is unknown how antibiotic use differs with age. Infections are a leading cause of hospitalization in elderly patients. Prescribing appropriateness for patients less than 65 years old was compared with patients at or above ≥65 years old in order to identify targets for antimicrobial stewardship in this population.

Methods. A retrospective review of all outpatient antibiotic prescriptions between June and September of 2017. Prescriptions were reviewed based on alerts in the electronic medical record when orders for antibiotics were signed by the provider. Appropriateness of antibiotics was assessed based on clinical practice guidelines. Retreatment and hospital admissions were documented. Those aged <65 were compared with those ≥65 years of age using Student's *t*-test and chi-squared tests. A multivariate logistic regression model was constructed to identify risk factors for inappropriate use of antibiotics between the two age groups.