

awareness and improve engagement when potential OPAT needs are identified (Fig. 1).

Funding: None

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s58–s59

doi:10.1017/ash.2022.168

Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Patient Safety

Patient safety and quality care: Time to focus on nonventilator hospital-acquired pneumonia

Karen Giuliano and Dian Baker

Background: A growing body of evidence has reported on the harm and cost of nonventilator hospital-acquired pneumonia (NVHAP), currently the most common hospital-acquired infection (HAI). Although the US Congress and the Center for Medicare and Medicaid Services (CMS) have acted to reduce rates of some HAIs through the Hospital-Acquired Condition Reduction Program (HACRP), NVHAP is not currently included. Thus, most hospitals do not engage in active prevention. Here, we report the findings from our analysis of Medicare claims data on hospital length of stay (LOS), cost for patients with hospital-acquired pneumonia (HAP), including both ventilator-associated pneumonia and NVHAP, and mortality. **Methods:** We used Medicare claims data for Federal Fiscal Year 2019 for inpatient and postdischarge services. Beneficiaries who died, were without continuous Medicare Part A and B enrollment, and patients eligible for Medicare for end-stage renal disease were excluded. Inpatient payments and 30-, 60-, and 90-day postdischarge episodes for 2,457 beneficiaries with HAP were examined and compared to a non-HAP control group of 2,457 beneficiaries. Groups were matched on age, sex, race, and the diagnosis-related group (DRG) for their index hospitalization. **Results:** Most HAP was NVHAP (N = 2,222; 89%) versus VAP (N = 275; 11%). LOS stay was significantly (p HAP patients were 2.8 times more likely to die vs non-HAP. **Conclusions:** These findings provide additional support to previous research on the harm and cost associated with NVHAP. Previous HACRP HAI initiatives, such as catheter-associated urinary tract infection (CAUTI) and surgical-site infection (SSI), have resulted in measurable HAI reductions. Although recent evidence-based NVHAP and initiatives indicate that NVAHP is largely preventable, to date, no acute-care inpatient hospital quality improvement program implemented by Medicare includes measures for NVHAP prevention. The time is right to include NVHAP as an HACRP HAI initiative.

Funding: Stryker

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s59

doi:10.1017/ash.2022.169

Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Patient Safety

Retrospective cohort analysis of the safety of outpatient parenteral antimicrobial therapy (OPAT) in an academic hospital

Kaylyn Billmeyer; Alison Galdys; Susan Kline; Elizabeth Hirsch; Jennifer Ross and Michael Evans

Background: Although many infectious conditions can be safely treated with oral antimicrobials, select circumstances require parenteral antimicrobial therapy. Benefits of OPAT include prevention of hospital-associated conditions and significant cost savings. However, risks of OPAT include adverse drug events (ADEs) and vascular access device (VAD) complications. We analyzed the safety of OPAT regimens as part of implementing a collaborative OPAT program. **Methods:** We reviewed adult patients discharged home from an academic hospital between January 2019 and June 2021. Patients with cystic fibrosis were excluded. Data on OPAT agents, ADEs, and VAD complications were collected from electronic medical records by 2 reviewers using a standardized REDCap

Table 1. Frequencies of adverse drug events (ADEs) and vascular access device complications (VADs) among all single and multi-drug regimens, stratified by agent class.

| Agent class | Single-drug therapy (n=212) | | Multi-drug therapy (n=108) | | Any ADE (n=110) | | VAD Complications (n=72) | |
|---------------------------------------|-----------------------------|-------|----------------------------|-------|-----------------|-------|--------------------------|-------|
| | n | (%) | n | % | n | (%) | n | (%) |
| Aminoglycosides | 0 | 0.0% | 3 | 2.8% | 0 | 0.0% | 1 | 1.4% |
| Azoles | 0 | 0.0% | 2 | 1.9% | 1 | 0.9% | 0 | 0.0% |
| Beta-lactam/Beta-lactamase inhibitors | 13 | 6.1% | 4 | 3.7% | 4 | 3.6% | 6 | 8.3% |
| Carbapenems | 47 | 22.2% | 10 | 9.3% | 16 | 14.5% | 6 | 8.3% |
| Cephalosporins | 124 | 58.5% | 40 | 37.0% | 46 | 41.8% | 37 | 51.4% |
| Echinocandins | 1 | 0.5% | 5 | 4.6% | 4 | 3.6% | 2 | 2.8% |
| Lincosamides | 1 | 0.5% | 1 | 0.9% | 1 | 0.9% | 0 | 0.0% |
| Lipopeptides | 8 | 3.8% | 35 | 32.4% | 24 | 21.8% | 14 | 19.4% |
| Nitroimidazoles | 1 | 0.5% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Nucleoside analogs | 1 | 0.5% | 1 | 0.9% | 1 | 0.9% | 0 | 0.0% |
| Penicillins | 11 | 5.2% | 6 | 5.6% | 7 | 6.4% | 5 | 6.9% |
| Polyenes | 0 | 0.0% | 1 | 0.9% | 1 | 0.9% | 0 | 0.0% |
| Pyrophosphate analogs | 5 | 2.4% | 0 | 0.0% | 5 | 4.5% | 1 | 1.4% |

instrument. The institutional review board approved this study. **Results:** The cohort comprised 265 unique patients; 212 (80%) received single-drug therapy and 53 (20%) received multidrug therapy. In total, 81 patients (31%), who received a total of 110 antimicrobials, experienced an ADE. In total, 55 patients (21%), who received a total of 72 antimicrobials, experienced a VAD complication. Patients who received >1 antimicrobial were more likely to experience an ADE (53% vs 25%; $P = .0002$) or a VAD complication (32% vs 18%; $P = .04$). Cephalosporins were the most frequently prescribed antimicrobial class (Table 1). **Conclusions:** ADEs and VAD complications were frequent in patients on OPAT. Local data should inform (1) the selection of OPAT therapy and (2) the standardized monitoring of patients who receive OPAT going forward in the implementation of this collaborative OPAT program.

Funding: None

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s59

doi:10.1017/ash.2022.170

Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Patient Safety

Zoster on the brain: Clinical characteristics of patients PCR positive for varicella-zoster virus in cerebrospinal fluid and implications for transmission base

Mahmoud Al-Saadi; Michael Haden; Nora Colburn; Shandra Day and Christina Liscynsky

Background: Transmission-based precautions against varicella-zoster virus (VZV) in healthcare settings are determined by the extent of rash (localized vs disseminated) and the immune status of the host. At our facility, immunocompetent patients with localized disease are placed in standard precautions whereas patients with disseminated disease and/or immunocompromised status are placed in airborne and contact isolation. The use of molecular diagnostics has increased recently, and patients can have a PCR positive for VZV in cerebral spinal fluid (CSF) without evidence of pneumonia or disseminated rash. These patients are classified as disseminated disease, but it is unlikely that they are spreading VZV via respiratory aerosols in the absence of other symptoms. Infection prevention guidance is limited in this situation, and these patients may be in unneeded isolation, with the potential for adverse patient effects and overutilizing PPE resources. We have described the clinical characteristics of patients with a PCR positive for VZV in CSF, and we evaluated the risk for transmitting VZV via airborne aerosols. **Methods:** A retrospective, single-center chart review was performed on all patients admitted with a PCR positive for VZV in CSF between July 2017 and November 2021. Chart