antimicrobial was recorded in Belgium (patients ≥65 years: 29.6% (95% CI 28.5-30.7%), < 6 5 years : 26.5% (95%CI 25.3-27.6%)) . Following the challenges posed by the COVID-19 pandemic, the 2022 ECDC-PPS aimed to reassess AU levels. **Method:** A cross-sectional study was conducted between September and November 2022 in 57 representative acute care Belgian hospital sites (35 mergers), following the ECDC-PPS protocol version 6.0. All patients present in surveyed wards at 8 a.m. on the PPS day and not discharged at that time were included. Infection prevention and control teams collected comprehensive data on hospitals, wards, and AU, including agents and indications. **Results:** Among the 10,142 included inpatients, 29.3% (95%CI 28.4-30.2) were receiving at least one antimicrobial (patients ≥65 years: 31.1% (95% CI 29.7-32.4%), < 6 5 years : 27.1% (95%CI 25.6-28.6%)). Intensive care units (56.3%), surgical (38.7%), and medical wards (33.1%) demonstrated the highest AU prevalence, while psychiatric wards exhibited the lowest (3.0%). A total of 3,549 antimicrobials were recorded, commonly prescribed for treating community-acquired infections (48.6%) and HAIs (30.3%, including 4.2% of long-term care facility acquired infections), as well as for surgical and medical prophylaxis (12.4 and 6.6%, respectively). Notably, only 22.7% of surgical prophylaxis courses (n=100/440) lasted more than one day. The top three most used antimicrobial agents consisted of amoxicillin in combination with a beta-lactamase inhibitor (J01CR02, 20.0%), cefazolin (J01DB04, 9.8%) and piperacillin in combination with a beta-lactamase inhibitor (J01CR05, 9.6%). The most frequently reported diagnoses for medical antimicrobial treatment were pneumonia (25.7%) and urinary tract infections (17.1%). The reason for AU was available in 80.0% of the medical notes. **Conclusion:** The 2022 PPS reveals an increased AU prevalence (+1.2%) in Belgian acute care hospitals, especially in patients over 65 years of age (+1.5%). This increase was less pronounced in younger patients (< 6 5y) (+0.6%). Future investigations are crucial to delve into prescription attitudes and modifiable practices, emphasizing the urgent need for robust antimicrobial stewardship programs in these healthcare settings.

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Subject Category: Surveillance
Impact of Point Prevalence Surveillance on Transmission of Candida auris Within an Acute Care Health System
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Background: Patients infected or colonized with Candida auris can serve as a transmission source for other patients. Screening patients for Candida auris colonization allows facilities to implement infection prevention and control measures and minimize the risk of transmission. The Centers for Disease Control and Prevention (CDC) recommends healthcare facilities perform three types of screening; admission screening in patients with specific risks, close contact screening of patients who overlap a confirmed positive case for 3 or more days or point prevalence surveillance if there is evidence of ongoing transmission within the facility. The CDC further recommends that patients being screened for Candida auris be maintained in transmission-based precautions while awaiting **Results:** In 2022-2023 there was ongoing transmission of Candida auris occurring in a community served by a large multi-state healthcare system. Close contact and point prevalence surveillance screening for both acute and non-acute healthcare facilities were implemented by the local health jurisdiction. **Methods:** A composite swab of the bilateral axilla and groin was used to screen close contacts of patients confirmed to be infected or colonized with Candida auris. Close contact was defined as having been on the same unit as the positive patient for 3 or more days while the patient was not in transmission-based precautions. Point prevalence surveillance was performed on all patients currently housed on units where close contact screen-positive patients resided. Potentially exposed patients who had been discharged were not screened. Patients were placed in contact transmission-based precautions until results were received. In 1657 patients in six acute care facilities were identified for Candida auris screening. 161 patients refused or were unable to be screened. Of the 1496 patients screened, 40 screened positive, demonstrating a 2.67% secondary attack rate. Of the 40 screen-positive patients, 5 were identified through point prevalence and 35 through close contact screening. **Conclusion:** Performing point prevalence surveillance in acute care facilities is operationally challenging and costly with little benefit in the prevention of Candida auris transmission. More robust collection and reporting of screening data is needed to inform surveillance protocols and prevention strategies specific to different healthcare settings. Limitations of this study include the lack of screening completion in discharged patients identified as close contact or point prevalence surveillance eligible. Additionally, some patients had a history of contact with healthcare facilities outside of this healthcare system, with unknown exposure risks or prevention strategies.

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An Improved Algorithm for the Detection of Ventilator Associated Pneumonia
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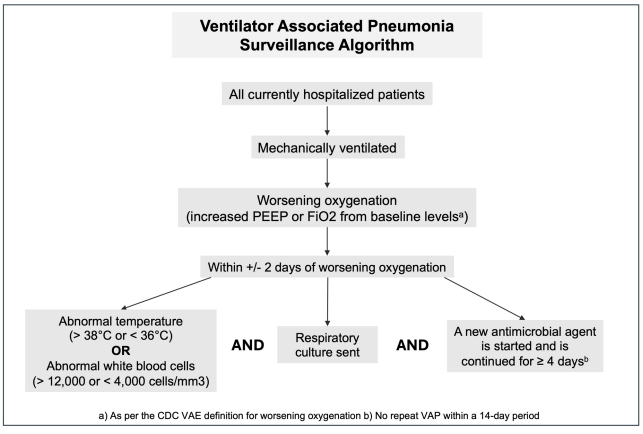
Background: Ventilator associated pneumonia (VAP) is associated with significant rates of morbidity and all-cause mortality. Active VAP surveillance can identify risk factors for which targeted preventive measures can be implemented. However, surveillance efforts are complicated by challenges associated with accurate VAP diagnosis. We aimed to improve the accuracy and automation of existing VAP diagnostic algorithms to better identify patients at risk. **Methods:** The study was conducted at NYU Langone Health from June 2022 through December 2023. We created a semi-automated VAP surveillance system using the Centers for Disease



Control & Prevention (CDC) ventilator associated event (VAE) definition as a base framework (Figure 1). We modified this definition to include additional elements, such as having a sputum culture ordered within 48 hours of worsening oxygen status, regardless of culture result. Using this algorithm—followed by manual clinician reviews—we retrospectively assessed possible VAP cases to determine the ability of our surveillance system to correctly identify VAP. **Results:** Of the 123 possible VAP cases identified through our automated system, 75 (61%) were correctly diagnosed as VAP after clinical review. This reflects a rate of 1.5 infections per 1000 ventilation days across the system and 1.85 infections per 100 patients ventilated for greater than 2 days. Of the 48 remaining patients without VAP after clinical review, 25% (n=12) were characterized as having hospital-acquired pneumonia, 21% (n=10) as acute respiratory distress syndrome or infection at another site and 10% (n=5) as pulmonary embolism/infarction. Among all patients identified through this automated system (VAP and non-VAP), 53% experienced in-hospital death. **Discussion:** Our automated VAP surveillance algorithm identified 123 cases of potential VAP, 61% of which were consistent with a clinical diagnosis of VAP upon manual chart review. Our VAP rate of 1.5 infections per 1000 ventilation days was similar to published rates at other North American hospital systems. The high in-hospital mortality rate among these patients highlights the need for improved surveillance systems and earlier interventions to reduce the risk of VAP. There are several limitations to the CDC's VAE definition, including its requirement of a positive microbiologic culture and focus on sputum quality. This potentially misses cases of culture-negative VAP in patients receiving antibiotics prior to sputum collection. Our goal is to continue to validate and improve our algorithm's ability to correctly identify patients with clinical VAP, so that targeted prevention efforts can be focused upon the patients with the highest risk for poor outcomes.

Disclosure: Madeline DiLorenzo: Stocks - Abbvie, Amgen Inc., Becton Dickinson, Biogen Inc., Bristol Myers and Squibb, CVS Health, Davita Inc., Elevance Health, Gilead, Henry Schein, Hologic Inc., Humana Inc., Jazz Pharmaceuticals, Laboratory Corp, Merck and Co., Quest Diagnostics, ResMed Inc., Teladoc Health, Vertex Pharmaceuticals, West Pharmaceuticals

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Outpatient Antibiotic Consumption Trends in Belgium: A Comparative Analysis of Reimbursement and Sales Data, 2013-2022

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Background: Antimicrobial resistance (AMR) is a global public health concern, necessitating close and timely monitoring of antibiotic consumption (AMC). In Belgium, AMC surveillance traditionally relies on reimbursement data, excluding over-the-counter non-reimbursed or imported products and involving a time lag. This study investigates disparities in AMC between reimbursement data and retail data, providing insights into AMC variations. Additionally this study seeks to critically evaluate the validity and representativeness of the reimbursed data in accurately reflecting the true extent of AMC in the country. **Method:** Utilizing reimbursement data from the National Institute for Health and Disability Insurance (NIHDI) and retail data (IQVIA Sales data; www.iqvia.com) for systemic antibacterials (ATC Group J01), outpatient consumption was estimated for the period 2013-2022. Volume of antimicrobials was measured in Defined Daily Doses (DDDs - WHO ATC/DDD Index 2023), while population data were extracted from Eurostat. Relative differences (RDs) in DDDs per 1000 inhabitants per day (DID) were computed, and validated through correlation analysis (Pearson's r) and Bland–Altman plots. **Result:** J01 antibacterial sales declined from 23.10 DID (2013) to 20.85 (2022). Non-linear decreases, notably during the Covid-19 pandemic (21.54 DID in 2019 to 16.69 in 2020), followed by a rebound to pre-pandemic quantities in 2022 were observed (Figure 1). Reimbursement NIHDI data slightly underestimated IQVIA sales, with RDs ranging from 2% (2013) to 9% (2022). Notable differences, especially in recent years were attributed to quinolone reimbursement criteria changes implemented by law in Belgium in 2018, reducing the reimbursed proportion from 99% (2017) to 35% (2022). ATC-3 level analysis revealed disparities in low-DID groups (J01B, J01E and J01G). Notably, a small proportion of amphenicols (J01B) were reimbursed (< 1 0%), with a congestion relieving combination product of tiamphenicol (+ N-acetylcysteine;

Figure 1. Evolution of outpatient reimbursement (NIHDI) and retail sales (IQVIA) data for systemic antibacterials (ATC J01) with (L) and without (R) fluoroquinolones (J01M) in Belgium from 2013 to 2022