

2013, 2014 and 2015. All adult patients who were discharged home from the ED with a diagnosis of pneumonia were included. Severity of pneumonia was graded based on the CRB-65 score as per the CAP guidelines. Primary outcome was type of antibiotic prescribed by the ED physician. Data was analyzed using simple descriptive statistics. **Results:** There were a total of 141 patients analyzed during the study period (N = 46 in 2013, N = 59 in 2014, N = 36 in 2015). Demographics and relevant comorbidities were similar across the years: age (2013: median = 53 years, range 20-92 years; 2014: 56, 21-83; 2015: 54, 20-81); preexisting lung disease (30%, 27%, 25% respectively); HIV positive status (9%, 7%, 17%). CRB-65 score was: low risk (0 points) = 70% in 2013, 66% in 2014, 75% in 2015; intermediate risk (1-2 points) = 30%, 34%, 25%; high risk (3-4 points) = 0% in all years. Percentage of patients discharged home with a documented prescription was 83%, 85%, and 94% respectively. In 2013, patients received azithromycin (AZM) (n = 17, 43% of antibiotic prescriptions that year); levofloxacin (LVX) (n = 10, 25%); AMC (n = 5, 13%); clarithromycin (CLR) (n = 5, 13%); trimethoprim-sulfamethoxazole (SXT) (n = 2, 5%); doxycycline (DOX) (n = 1, 3%). In 2014: AMC (n = 26, 51%); AZM (n = 12, 24%); LVX (n = 9, 18%); CLR (n = 2, 4%); DOX (n = 1, 2%); erythromycin (ERY) (n = 1, 2%). In 2015: AMC (n = 17, 47%); AZM (n = 12, 33%); LVX (n = 4, 11%); CLR (n = 1, 3%); SXT (n = 1, 3%); DOX (n = 1, 3%). Number of return ED visits within 2 weeks were: n = 16 (35%); n = 11 (19%); and n = 10 (28%) respectively. **Conclusion:** The results of this study show that there has been a change in antibiotic prescribing practices in the SMH ED since dissemination of the CAP guidelines, with AMC accounting for nearly half of antibiotic prescriptions. Further antimicrobial stewardship efforts will focus on evaluating factors influencing prescribing practices. **Keywords:** community-acquired pneumonia, quality improvement, antibiotic stewardship

#### LO069

##### **Current management of pharyngitis in the emergency department: a retrospective multicenter observational study**

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**Introduction:** Pharyngitis is a common presenting complaint at the emergency department (ED). Historically, acute pharyngitis has been overdiagnosed as the result of a bacterial etiology, leading to overprescription of antibiotics, and overuse of throat culturing. This study attempts to quantify the current management of acute pharyngitis in the ED, and compare to the theoretical management using a modified Centor score. **Methods:** This was a retrospective chart review of 1640 patients who presented to four EDs in the central zone of the Nova Scotia Health Authority that received a diagnosis of pharyngitis, bacterial pharyngitis or tonsillitis. The primary outcome was the observed rate of each diagnosis in the study population, the rate of antibiotic prescription, and the rate of throat swab cultures performed. The secondary outcomes were the rate of antibiotics and throat swabs ordered using a modified Centor score. Antibiotics as first-line treatment were indicated if the Centor score was three or greater, and throat cultures were indicated if the Centor score was two or greater. **Results:** A total of 1596 patients were included in the analysis. Antibiotics were given in 893 patients (0.559; 95% CI: {0.535, 0.584}). Cultures were sent on 863 patients (0.541 CI: {0.516, 0.565}). Using the modified Centor thresholds, we would have prescribed antibiotics as the first-line treatment in 77 cases (0.048 CI: {0.038, 0.060}), potentially saving 786 prescriptions, and ordered throat swabs on 502 patients

(0.315, CI: {0.292, 0.338}), saving 361 cultures. The most commonly prescribed antibiotic was penicillin, and the least prescribed was metronidazole. **Conclusion:** Over half of patients that present with acute pharyngitis receive an antibiotic, and over half have a throat swab culture performed. Utilizing a modified Centor score would result in decreased antibiotic prescription rate, and a diminished rate of throat cultures. Incorporation of these Centor criteria could result in diminished antibiotic prescription rates for acute pharyngitis in the ED.

**Keywords:** antibiotic, pharyngitis

#### LO071

##### **Influenza and pneumococcal vaccinations in the emergency department**

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**Introduction:** Influenza and pneumococcal disease are vaccine preventable diseases that account for significant morbidity and mortality in Canada. Influenza vaccination has been shown to reduce mortality and pneumococcal vaccination reduces invasive pneumococcal disease. Previous studies have shown that emergency department (ED) patients are often at high risk for influenza and pneumococcal disease and willing to be vaccinated during their ED stay. Our study set out to determine what proportion of adult patients in the ED qualify for and are willing to be vaccinated against influenza and pneumococcus during their ED visit. **Methods:** Our study used a convenience sample of patients presenting to the ED at a large Canadian tertiary care centre (Vancouver General Hospital). Inclusion criteria were: adult patients (19 years or greater); consenting to be screened for immunization status; and able to communicate in English. The exclusion criteria were: critically ill patients and patients in severe pain. The primary outcome was the proportion of patients presenting to the ED that could be immunized for influenza and pneumococcus (member of a high risk group, unvaccinated and willing to be vaccinated). Secondary outcomes included additional demographic characteristics and patient attitudes regarding vaccination. **Results:** We screened 413 patients of which 55 did not meet inclusion/exclusion criteria and 104 declined participation. A total of 254 patients completed the survey for a response rate of 71%. Our primary outcome was present in 20% of patients for influenza (high risk for complications, unvaccinated and willing to be vaccinated in the ED). For pneumococcus, 15% were at high risk, unvaccinated and willing to be vaccinated in the ED. In our population, 83% were at high risk of complications from influenza and 58% were at high risk of complications from pneumococcus. In total, 53% of patients would accept influenza vaccine and 44% would accept pneumococcal vaccine. **Conclusion:** Our study demonstrates that there is a significant high-risk population that is otherwise unreached and are willing to be vaccinated for influenza and pneumococcus in the ED. Our patient population has a very high prevalence of risk factors for complications of pneumonia and influenza. This data suggests that ED patients are a high-risk population and could be a target group for vaccination campaigns.

**Keywords:** influenza, pneumococcus, vaccination

#### LO072

##### **Fever in the returning traveller: a systematic review and critical appraisal of existing clinical practice guidelines and approaches to returning travellers presenting with fever**