commonly used antibiotics to manage cSSSI (vancomycin, linezolid, daptomycin, tigecycline and ceftaroline). A retrospective study was conducted using the Premier’s Perspective Comparative Database (2010-2013), which includes over 170 million inpatient records from ~500 hospitals in the US. Hospitalization records for adults (≥18 years) with a diagnosis of cSSSI (identified using ICD-9-CM codes) were selected. cSSSI was defined as infection with prices of each antibiotic agent (vancomycin, linezolid, daptomycin, tigecycline and ceftaroline were included. Using four separate logistic regression models propensity scores were estimated and patients in ceftriaxone group were matched with patients in vancomycin, daptomycin, linezolid and tigecycline groups separately. Outcomes including LOS, inpatient costs and in-hospital mortality were compared among patients in ceftriaxone group with the 4 other antibiotic groups using unadjusted (t-test and chi-square tests) tests. RESULTS: The sample sizes in the matched-pair analysis of propensity scores were as follows: a) ceftaroline vs vancomycin n=2,884 (each group); b) ceftaroline/daptomycin vs=2,651; c) ceftaroline/ tigecycline n=2,606; d) ceftaroline/linezolid n=2,554. Mean duration for the study antibiotics ranged from 3.9 (vancomycin) to 4.6 (tigecycline) days. Average LOS and inpatient costs were significantly (all P-values <0.001) lower among patients in the ceftriaxone group compared with patients in the vancomycin (mean LOS: 5.1 vs. 5.6; costs: $8,051 vs $10,889), linezolid (LOS: 5.1 vs 6.4; costs: $8,081 vs $12,029), daptomycin (LOS: 5.0 vs 6.3; costs: $7,854 vs $12,787), tigecycline (LOS: 5.2 vs 6.1; costs: $8,264 vs $11,355) groups. In-hospital mortality rate was ~1% for ceftaroline, vancomycin, tigecycline and daptomycin groups (except linezolid group 2%). CONCLUSIONS: Previously two large global clinical trials (CANDAS 1 and 2) confirmed clinical efficacy of ceftaroline in-comparison with vancomycin (standard-of-care) among patients with cSSSI. The current study serves as an initial step towards confirming real-world effectiveness of ceftaroline in comparison with other commonly used antibiotics for cSSSI.

PIN12 HEALTH IMPACT OF TRIVALENT, TRIVALENT HIGH DOSE AND QUADRIVALENT INFLUENZA VACCINES IN OLDER ADULTS IN ONTARIO, CANADA

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OBJECTIVES: New influenza vaccines were developed to improve vaccine efficacies by expanding influenza B coverage and boosting hemagglutinin (HA) concentration. This research aims to assess the health impact of the new vaccines – high dose (HD) and quadrivalent influenza vaccines (IV4), instead of IV3, in addition to the standard HD vaccine given under Ontario’s Universal Influenza Immunization Program (UIIP). METHODS: An analytical model of one flu season was developed using Ontario’s physician visits and ID uses, and Canadian influenza hospitalization and mortality rates with three age cohorts (65-74, 75-84, and 85 and above) at two levels of health risks (high and low). Ontario’s demographic data was from Statistics Canada. Vaccine efficacy and effectiveness against health outcomes were based on published studies. Sensitivity analyses with extreme values of all relevant parameters were done. RESULTS: Use of HD in place of IV3 would avert 13,271 hospitalizations (range: 51-175) and 33 deaths (range 17-57) avoided annually; as a result, 1,623 infections (range: 485-1,786), 772 hospitalizations (range: 442-1,223) and 341 deaths (range 177-565) in influenza-related health outcomes – 4,900 influenza cases (range: 3,364-11,817), 1,327 hospitalizations (range: 962-2,123) and 341 deaths (range 177-565). CONCLUSIONS: Use of HD in place of IIV3 would avert 13,271 hospitalizations and 33 deaths annually; as a result, 1,623 infections and 772 hospitalizations and 341 deaths are avoided annually. Ontario’s demographic data was from Statistics Canada. Vaccine efficacy and effectiveness against health outcomes were based on published studies. Sensitivity analyses with extreme values of all relevant parameters were done. Use of HD in place of IIV3 would avert 13,271 hospitalizations (range: 51-175) and 33 deaths (range 17-57) avoided annually; as a result, 1,623 infections (range: 485-1,786), 772 hospitalizations (range: 442-1,223) and 341 deaths (range 177-565) in influenza-related health outcomes – 4,900 influenza cases (range: 3,364-11,817), 1,327 hospitalizations (range: 962-2,123) and 341 deaths (range 177-565) are avoided annually. Use of HD in place of IIV3 would avert 13,271 hospitalizations and 33 deaths annually; as a result, 1,623 infections and 772 hospitalizations and 341 deaths are avoided annually.