P2288 Incidence of emergency department visits and hospitalisations after outpatient treatment with an oral antibiotic among patients with acute bacterial skin and skin structure infections

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**Background:** Acute bacterial skin and skin structure infection (ABSSSI) places a substantial burden on the healthcare system. While most patients with ABSSSIs present to the emergency department (ED), over 20% of patients in the United States are initially treated in outpatient settings. This study assessed the frequency of ED visits/hospitalization among patients with ABSSSIs who initially received one of the most commonly used oral antibiotics for ABSSSI in outpatient settings.

**Materials/methods:** This was a retrospective cohort study of patients with ABSSSI in the Geisinger integrated delivery system who were initially treated as outpatients between 2010 and 2015. Inclusion criteria: age $\geq$ 18 years; ICD-9 code in outpatient setting for ABSSSI; $\geq$1-year enrollment before index ABSSSI ICD-9 code; and receipt of trimethoprim/sulfamethoxazole (TMP-SMX), clindamycin (CLI) or cephalexin (CEP) as an outpatient. Patients with ICD-9 codes in outpatient settings for osteomyelitis, septic arthritis, necrotizing fasciitis, infected decubitus ulcer, or severe sepsis/septic shock were excluded. The outcome measured was ED visit or hospitalization with an ABSSSI ICD-9 code within 30 days after initial outpatient oral antibiotic treatment.

**Results:** During the study, 14,450 patients had an ABSSSI and received TMP-SMX, CLI or CEP in outpatient settings. Among these, 711 patients received additional care in the ED (476 patients) and/or were hospitalized (286 patients) within 30 days of outpatient oral antibiotic treatment. Figure 1 shows the proportions of ABSSSI patients treated with each of the oral antibiotics in outpatient settings who received additional care in the ED/hospital within 30 days.

**Conclusions:** Overall, 1 in 20 patients who received TMP-SMX, CLI or CEP as an outpatient for an ABSSSI subsequently received care within 30 days in the ED or hospital. The observed incidence of subsequent ED visits/hospitalization was highest with CLI (9.0%). Additional analyses are needed to determine ABSSSI patients at greatest risk for ED visits/hospitalizations after initial treatment in outpatient settings with TMP-SMX, CLI or CEP, and if alternative oral antibiotics can reduce subsequent ED visit/hospitalization rates.