A 2-Year Analysis of 30-Day Hospital Readmissions and Cost Benefits of Septicemia Outpatient Treatment in a Physician Office Infusion Center (POIC)

Barry Statte, MD CM, FRCP, FIDSA; Fernando S. Alvarado, MD, MPH, TMP; Brian Metzger, MD, MPH; Richard M. Mandel, MD, FIDSA; Jorge R. Bernet, MD; H. Barry Barker, MD, FACFP; Alfred E. Bacon III, MD; Claudia P. Schroeder, PharmD, PhD; Lucinda J. Van Anglen, PharmD

BACKGROUND: Hospitalization costs associated with septicemia include inpatient costs, outpatient costs, and costs attributable to readmissions. Outpatient parenteral antimicrobial therapy (OPAT) may offer benefit in reducing septicemia readmissions and hospital costs. Previous studies have found septicemia readmission rates ranging from 12% to 30% and, in one study, costs associated with treating septicemia within an OPAT center were $292,000 per patient.

METHODS: A retrospective review of 325 sepsis patients treated receiving OPAT in 2013 and 2014 was conducted at an OPAT center. Data were extracted from the electronic medical record and from a database which recorded all OPAT patient visits and charges. The primary outcome was hospital readmission rate and cost savings associated with sepsis readmissions.

RESULTS: 325 patients with sepsis were treated at 12 nationwide ID/POICs, 29 of which were treated within 30 days of hospital discharge or OPAT initiation. The readmission rate was 30% and the average cost was $11,111 per readmission. The average stay was 2.7 days longer than those not readmitted, and the average costs were 3.0 times higher. The readmission rate was 13% for patients treated with OPAT compared to 15% for those not treated with OPAT.

CONCLUSION: Outpatient parenteral antimicrobial therapy (OPAT) offers potential cost savings for treating sepsis patients. Further studies are needed to confirm these findings.

REFERENCES: