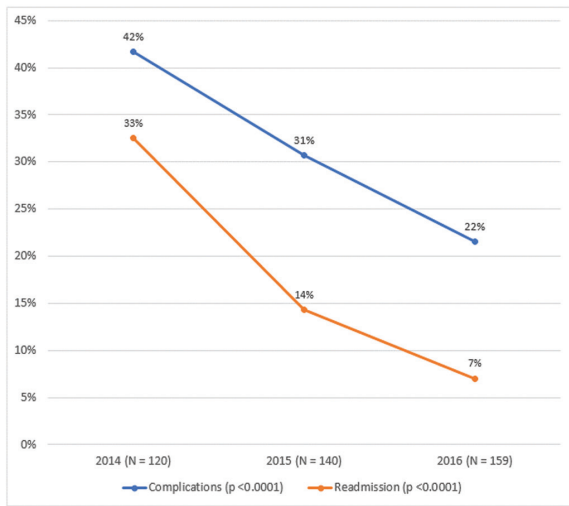


Figure 1: Effect of Combined OPAT and ASP Program on Medication Complications and Readmission



**Disclosures.** All authors: No reported disclosures.

**1938. Sustained Reduction in 30-Day Readmission Rates After Implementation of an OPAT Program in an Academic Medical Center**

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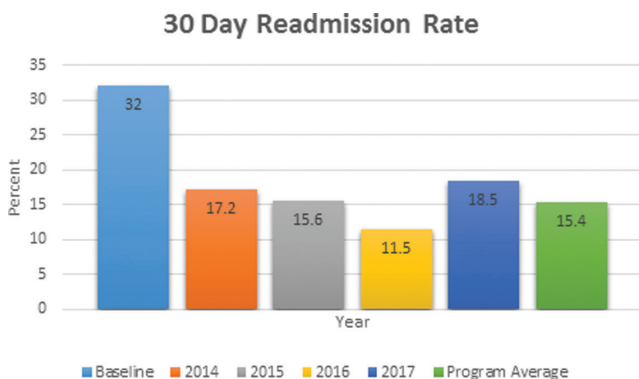
**Background.** The Outpatient Parenteral Antibiotic Therapy Program at the University of Pittsburgh Medical Center began in December 2013. UPMC Presbyterian is a Level I center consisting of 775 beds (150 ICU beds). Prior to program implementation, the 30-day readmission rate for patients discharged from our facility on an IV antibiotic was 32%.

**Methods.** Our Program is a multidisciplinary team consisting of physicians, advance practice providers, pharmacists, nurses, and coordinators. We use a pharmacist-based monitoring program to review weekly laboratories and adjust dosing through a collaborative practice agreement. ID fellows participate in the management of patients while receiving IV antibiotics. Patients are evaluated one week post discharge and prior to end of therapy in the ID clinic. Weekly laboratories are monitored as per the IDSA Society Guidelines. In addition, all patients all reviewed in our weekly huddle prior to end of therapy. We also conduct a monthly M&M to review readmissions.

**Results.** Our overall patient population has increased from 847 in 2014 to 1,234 in 2015 to 1,569 in 2016 and 1,512 patients in 2017. Post-implementation, we have demonstrated an ongoing reduction in 30-day readmission rates. In 2014, our rate decreased to 17.2%, in 2015 to 15.6%, in 2016 to 11.5% and in 2017 to 18.5% (see Figure 1). 2,337 (54%) of patients were male; the average age of our patients was 56.4 years. 35% were diabetics; 35% have chronic kidney disease, 25.4% have CAD and 43.7% have HTN. More patients are discharged home (n = 2,246) vs. to a facility (n = 1,583). Over half of our patients receive vancomycin.

**Conclusion.** A pharmacist managed OPAT Program can successfully reduce and maintain lower 30-day readmission rates in an academic facility.

Figure 1.



**Disclosures.** All authors: No reported disclosures.

**1939. Socioeconomic Predictors of Hospital Readmission in Outpatient Parenteral Antimicrobial Therapy (OPAT) Patients**

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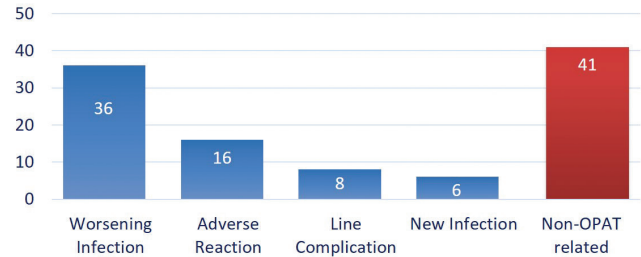
**Background.** OPAT is a safe and effective treatment strategy, but hospital readmissions are common. Several studies have identified risk factors for readmission among OPAT patients, including comorbidities and care-related factors; however, no study has described such a relationship with socioeconomic factors. The purpose of this study was to identify socioeconomic predictors of hospital readmission in OPAT patients.

**Methods.** A retrospective review was conducted of 410 OPAT patients, treated at a major tertiary care medical center, from September 2016 to March 2017. OPAT related demographic, clinical, and laboratory data were collected. Factors found to be significant in univariate analysis were included in a multivariate logistic regression model that adjusted for comorbidities, infection diagnosis, antibiotic type, and duration of therapy to determine socioeconomic factors associated with unplanned OPAT readmission. The at-risk period for readmission was defined as duration of OPAT plus 7 days.

**Results.** Of the 410 patients, 101 (25%) experienced an unplanned readmission during the at risk period (41% females, mean age 56). OPAT-related admissions were primarily due to worsening infection (n = 36), or adverse drug reactions (n = 16), but 41% of readmissions were unrelated to OPAT or underlying infection, see figure. In an unadjusted analysis, factors associated with readmission were age, black race, CHF, valvular heart disease, PVD, length of hospital stay, ICU admission, and >1 hospitalization in the past year. Significant socioeconomic factors included living in an urban setting, lower income, and not having Medicare with secondary private insurance. In a multivariate logistic regression model, factors that remained significant included black race (OR 2, 95% CI 1.1-3.7), age 18-30 (OR 3.7, 95% CI 1.6-8.6), age 60-70 (OR 2, 95% CI 1.1-3.5), PVD (OR 2.3, 95% CI 1.1-5), and >1 hospitalization in the past year (OR 2.2, 95% CI 1.3-3.9), while having Medicare with private insurance was protective (OR 0.3, 95% CI 0.1-0.7).

**Conclusion.** Socioeconomic factors are significant contributors for unplanned hospital readmission among OPAT patients and should be included when identifying high-risk patients for targeted risk reduction interventions.

**Reasons for Unplanned Readmissions**



**Disclosures.** All authors: No reported disclosures.

**1940. Outcomes Among Patients Enrolled in an Outpatient Parenteral Antibiotic Therapy Program at an Academic Medical Center**

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**Background.** Outpatient parenteral antibiotic therapy (OPAT) is a key part of the treatment of severe infection. One indication for OPAT is methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia. Few data have been published regarding long-term follow-up and outcomes among patients in an OPAT program (OPAT-P). We describe OPAT-P outcomes at an academic medical center with a focus on MRSA bacteremia (MRSA-B).

**Methods.** A retrospective chart review was performed. Two cohorts of patients were studied. The first comprised all adult inpatients enrolled in OPAT-P at discharge from July 2016 to December 2017. The second cohort was a subset of these patients treated for MRSA-B. Outcomes (including readmissions, emergency room [ER] visits, microbiological recurrences, and death) were compared with outcomes among non-OPAT-P patients discharged on IV antibiotics for MRSA-B between January 2015 and December 2017. Statistical measures including chi squared tests or Fisher's exact tests were used.

**Results.** Five hundred sixty-one patients were enrolled in OPAT-P from July 2016 to December 2017. Common indications were osteomyelitis (n = 219, 39%), bacteremia (n = 73, 13%), and endocarditis (n = 73, 13%); 22% had polymicrobial infection. Sixty-one (11%) were rehospitalized and 24 (4%) had an ER visit for an infectious or OPAT issue while on therapy. Fifty-one adverse events occurred that did not result in ER visit or a readmission. Ninety-three (17%) required antibiotic dose changes.