

Twenty-five patients were treated for MRSA-B; 83 additional non-OPAT-P patients were discharged on IV therapy for MRSA-B from January 2015 to December 2017. Common sources of bacteremia included central line ($n = 24$, 22%), cellulitis ($n = 18$, 16%), and osteomyelitis ($n = 9$, 8%). No MRSA-B patients died within 30 days of discharge. Overall 6-month readmission and ER visit rates did not differ based on OPAT-P enrollment (54%, $P = 0.46$ and 57%, $P = 0.43$, respectively). Three of 25 (12%) MRSA-B OPAT-P patients and 9/83 (74%) MRSA-B non-OPAT-P patients were readmitted for OPAT or infectious complications ($P = NS$). Microbiological recurrence was rare.

Conclusion. Adverse events in OPAT are common and antibiotic monitoring is crucial for OPAT safety. A dedicated OPAT-P has the potential to proactively identify adverse events and change therapy to prevent unplanned admission or ER visit. Further data are needed to clarify whether an OPAT-P may improve MRSA-B post-discharge outcomes.

Disclosures. All authors: No reported disclosures.

1941. Comparison of Patient Outcomes in a Pharmacist-Led Outpatient Parenteral Antimicrobial Therapy (OPAT) Program

Zachary Howe, PharmD Candidate 2019 and Jennifer McCann, PharmD, BCCCP, Butler University College of Pharmacy and Health Sciences, Indianapolis, Indiana

Session: 226. Clinical Practice Issues: OPAT
Saturday, October 6, 2018: 12:30 PM

Background. Despite the benefits of OPAT programs, readmission rates of up to 20% have been reported. In November 2016 at Franciscan Alliance Indianapolis, a dedicated pharmacist was assigned to build a formal OPAT program for all patients discharged on IV antimicrobials under the care of the infectious disease physician group. This study juxtaposed 30-day readmission rates and other patient outcomes for patients with and without an OPAT consult in order to assess how the program impacted patient care.

Methods. This was a retrospective cohort study comparing patients discharged on IV antimicrobials between December 1, 2016 and May 31, 2017. These patients were grouped based on whether they had a consult from the OPAT program. Thirty-day readmission rate, antimicrobial selection, discharge disposition, and treatment duration were collected and compared between groups. For the primary objective, at least 87 patients were needed to attain a power of 80% and detect a 30% difference between treatment groups.

Results. Out of 1,502 patients screened, 117 were deemed eligible and included (95 patients with a consult and 22 patients without). No statistically significant difference between the readmission rates of the consult group and the nonconsult group was observed (14.74% vs. 31.80%, $P = 0.07$). However, the consult group exhibited lower utilization of antipseudomonal coverage (38.95% vs. 86.40%, $P < 0.0001$) and ceftriaxone (9.47% vs. 45.45%, $P < 0.001$). Use of agents requiring closer therapeutic drug monitoring was higher in the nonconsult group, specifically vancomycin (86.36% vs. 41.05%, $P < 0.001$) and gentamicin (6.32% vs. 22.73%, $P < 0.05$), despite the diminished intensity of follow-up for patients not followed by the service.

Conclusion. The OPAT service did not show a statistically significant reduction in 30-day readmission rate during the first 6 months of the program. However, this may have been due to insufficient power to detect the true difference between treatment arms. Additionally, use of the program was associated with improved antimicrobial stewardship through reduced use of antipseudomonal coverage and ceftriaxone.

Figure 1: Demographics

	OPAT Consult (N=95)	No OPAT Consult (N=22)
Median Age (IQR)	61(21)	64(26.3)
Median Index Length of Stay (IQR)	6(5)	7(8.3)
Indication for Therapy		
Empyema	7	2
Osteomyelitis	11	2
Bacteremia	36	13
Intra-Abdominal	10	3
Skin and Soft Tissue	26	0
Other	5	2

Figure 2: Results

	OPAT Consult (N=95)	No OPAT Consult (N=22)
Readmissions within 30 Days	14 (14.74%)	7 (31.82%)
Disposition Change	38 (40%)	12 (54.50%)
Disposition at Discharge		
Home	55 (57.89%)	10 (45.45%)
ECF or Acute Rehab	38 (40.00%)	11 (50.00%)
Hospice	2 (2.11%)	1 (4.55%)
Median Total Days of Therapy (IQR)	24 (19)	28 (24)

Disclosures. All authors: No reported disclosures.

1942. Expansion of Outpatient Parenteral Therapy Program with Addition of Advanced Practice Providers Can Lead to Reduced Readmission Rates

Joshua Wingfield, DNP¹; Maighdlin Anderson, DNP¹ and Kathleen Sheridan, DO²; ¹Department of Medicine, Division of Infectious Disease, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, ²University of Pittsburgh, School of Medicine, Pittsburgh, Pennsylvania

Session: 226. Clinical Practice Issues: OPAT
Saturday, October 6, 2018: 12:30 PM

Background. The addition of Advanced Practice Providers (APPs) such as Nurse Practitioners or Physician Assistants as hospital-based service providers has been shown to increase efficiency of care, provide for better continuity of care across the inpatient and outpatient settings, and facilitate interdisciplinary collaboration. As healthcare systems attempt to not only increase access to care but also improve quality, the addition of APPs is becoming an option to meet division-specific goals. To decrease readmissions and increase access to care for patients discharged on intravenous (IV) antibiotics and in the Outpatient Parenteral Antibiotic Therapy (OPAT) Program, the Division of Infectious Diseases at UPMC Presbyterian hired two APPs in early 2017. Our aim was to compare readmission and follow-up rates from the time before expansion of the program with APPs to after expansion.

Methods. We completed a retrospective study of all OPAT patients seen by any Infectious Diseases (ID) provider (MD or APP) in the period from January to May 2017 (prior to APP outpatient clinics with OPAT patients) and in the period from January to February 2018. The total number of patients seen by an ID provider and the 30-day readmission rates were collected and evaluated. A comparison of proportions was done with a two-tailed z-test for the percentage of readmissions prior to program expansion compared with the percentage of readmissions after program expansion.

Results. Following the expansion of the OPAT program with the addition of two APPs in 2017, there was a decrease, from 14.7% to 9.6%, in 30-day readmissions for all patients who were seen for follow-up ($P = 0.0461$, 95% CI 0.0672–9.3164). The percentage of patients who were seen for follow-up increased after expansion of the program from 29.5% to 39.3% ($P = 0.0051$, 95% CI 2.8714–16.9153).

Conclusion. Expansion of the OPAT program within the Division of Infectious Diseases at UPMC with the addition of two APPs has significantly increased access to care and significantly decreased 30-day readmissions when the patient was seen for follow-up by an ID provider (MD or APP).

Disclosures. All authors: No reported disclosures.

1943. Collateral Benefits of Diabetes Management Associated With Self-administered Outpatient Parenteral Antimicrobial Therapy

Kavita Bhavan, MD¹; Anisha Ganguly, BS, BA² and Deepak Agrawal, MD²; ¹Infectious Disease, UT Southwestern Medical Center, Dallas, Texas, ²UT Southwestern Medical Center, Dallas, Texas

Session: 226. Clinical Practice Issues: OPAT
Saturday, October 6, 2018: 12:30 PM

Background. Self-administered outpatient parenteral antimicrobial therapy (S-OPAT) is a self-care treatment modality in which patients requiring extended courses of intravenous antibiotics are trained to safely self-administer treatment via indwelling catheter in their own homes.^{1,2} A large proportion of S-OPAT patients are baseline diabetics who present with osteomyelitis and soft-tissue infections associated with poor glycemic control.³ Given the degree of patient activation demanded by the S-OPAT program, we hypothesized that S-OPAT may benefit patients in other self-care modalities, including diabetes self-management.

Methods. We conducted a before-after retrospective analysis of diabetic patients receiving S-OPAT. Outcomes were compared between the 6-month period prior to and the 6-month period following initiation of S-OPAT. Outcomes of diabetes self-management included HgbA1c, diabetes medication adherence (as measured by proportion of days covered, or PDC), and use of any diabetes medication. A subgroup HgbA1c analysis was conducted among insulin users. Difference in outcome was tested for significance using paired *t*-tests.

Results. A total number of 348 diabetic S-OPAT patients were identified. The mean HgbA1c decreased by 1.82 from the 6 months prior to the 6 months after initiation of S-OPAT ($P < 0.001$). Subgroup analysis showed an additional significant reduction in HgbA1c among insulin users ($P = 0.002$). There were no differences in adherence rates to diabetes medications or initiation of medications pre and post-initiation of S-OPAT ($P > 0.05$).

Conclusion. Initiation of S-OPAT was associated with a significant reduction in HgbA1c among diabetic patients. A similar reduction was noted among insulin users, a group requiring a higher level of self-care. Reduction in HgbA1c was not attributable to changes in medication regimens or adherence. Resolution of infection alone is not sufficient to explain the marked reduction in HgbA1c demonstrated pre- and post-initiation of S-OPAT. We hypothesize that the degree of patient engagement obtained through the S-OPAT model yields collateral benefits in other aspects of self-care, including glycemic control.

Disclosures. All authors: No reported disclosures.

1944. Patients With Prosthetic Joint Infections Receiving Outpatient Parenteral Antimicrobial Therapy: Characteristics and Readmission Rates

Sara Gore, MD¹; Fizza Gillani, PhD²; Erika M D'Agata, MD, MPH³; Jennifer Adelson-Mitty, MD, MPH⁴ and Curt Beckwith, MD⁵; ¹Alpert Medical School of Brown University/Rhode Island Hospital, Providence, Rhode Island, ²The Warren Alpert