Table 3: Odds Ratios for Discharge with OPAT Among Patients Stably Housed and Retained in Care

	Removing Undomiciled Patients		Removing AMA/eloped patients		Removing Undomiciled Patients and AMA/Eloped	
	Adjusted Odds Ratio, 95% CI	p-value	Adjusted Odds Ratio, 95% CI	p-value	Adjusted Odds Ratio, 95% CI	p-value
DUA-IE	0.17 (0.09, 0.38)	<0.001	0.23 (0.11, 0.47)	<0.001	0.23 (0.11, 0.49)	<0.001
Age, years	0.97 (0.95, 0.99)	0.003	0.96 (0.94, 0.98)	<0.001	0.96 (0.94, 0.98)	<0.001
Sex – Male	0.99 (0.60, 1.62)	0.99	1.00 (0.60, 1.66)	0.99	1.00 (0.60, 1.67)	1.00
Race						
White, non-Hispanic	Reference		Reference		Reference	
Black, non-Hispanic	1.31 (0.66, 2.60)	0.43	1.28 (0.64, 2.57)	0.49	1.27 (0.63, 2.55)	0.51
Hispanic	2.94 (1.51, 5.70)	0.001	3.24 (1.64, 6.40)	0.001	3.21 (1.62, 6.35)	0.001
Other	0.83 (0.24, 2.90)	0.78	0.78 (0.21, 2.92)	0.72	0.78 (0.21, 2.89)	0.71
Patient declined/unavailable	0.88 (0.24, 3.22)	0.86	1.07 (0.29, 3.98)	0.92	1.06 (0.29, 3.92)	0.93
Insurance						
Private	Reference		Reference		Reference	
Medicare	0.64 (0.32, 1.27)	0.20	0.70 (0.34, 1.42)	0.32	0.69 (0.34, 1.41)	0.31
Medicaid	0.68 (0.32, 1.47)	0.33	0.70 (0.32, 1.56)	0.39	0.69 (0.31, 1.53)	0.36
Year of admission						
2015	Reference		Reference		Reference	
2016	0.57 (0.26, 1.26)	0.17	0.53 (0.23, 1.21)	0.13	0.55 (0.24, 1.24)	0.15
2017	1.33 (0.66, 2.68)	0.43	1.28 (0.63, 2.63)	0.50	1.28 (0.63, 2.63)	0.49
2018	0.72 (0.35, 1.48)	0.38	0.73 (0.35, 1.52)	0.40	0.74 (0.36, 1.54)	0.42
2019	1.22 (0.50, 2.98)	0.66	1.42 (0.55, 3.64)	0.47	1.43 (0.56, 3.66)	0.46
Length of Stay, days	0.94 (0.92, 0.97)	<0.001	0.93 (0.90, 0.95)	<0.001	0.93 (0.90, 0.96)	<0.001
SES	1.05 (0.96, 1.16)	0.29	1.05 (0.96, 1.12)	0.29	1.05 (0.96, 1.16)	0.30
Charlson Comorbidity Index	1.03 (0.96, 1.10)	0.45	1.04 (0.97, 1.12)	0.31	1.04 (0.96, 1.11)	0.34
MICU admission	0.22 (0.09, 0.59)	0.002	0.18 (0.07, 0.48)	0.001	0.18 (0.07, 0.47)	<0.001
ID Consult	2.80 (0.93, 8.44)	0.07	2.36 (0.78, 7.13)	0.13	2.33 (0.77, 7.04)	0.13

Table 3: Odds Ratios for Discharge with OPAT Among Stably Housed and Patients Retained in Care
*Adjusted for covariates listed in tables 2 & 3

Conclusion: Patients with DUA-IE were discharged with OPAT significantly less than those with non-DUA-IE, and patients having unstable housing or leaving AMA did not account for these differences. These data do not elucidate whether differential treatment was clinically appropriate, but other studies have demonstrated safety and effectiveness of OPAT in DUA-infections. Understanding whether addressable clinician-related factors, including their attitudes toward people who use drugs, contribute to differential treatment is an important next step in this research.
Disclosures: All Authors: No reported disclosures

704. Evaluation of Risk Factors and Outcomes of Early Left Ventricular Assist Device Infections

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Session: P-28. Endocarditis

Background: Infection is a major complication of placement of left ventricular assist devices (LVADs) for patients with end stage heart failure. This study aimed to identify risk factors and evaluate outcomes of early LVAD specific and related infections in a community teaching hospital.
Methods: This was a single-center, retrospective cohort study that included adult patients with placement of LVAD from October 2012 – December 2019. LVAD specific infection was defined as a pump, cannula, pocket, or percutaneous driveline infection and LVAD related infection was defined as infective endocarditis, mediastinitis, or bloodstream infection. The primary outcome was early LVAD specific or related infection within 90 days of implantation. Secondary outcomes included time to infection, risk factors of and time to recurrent infection, and time to death. Multivariate logistic regression was used to ascertain risk factors for early infection. Cox regression was used to ascertain association with time to outcome variables.
Results: Of 160 patients who had LVADs placed during the study period, 26 experienced early LVAD infection. The majority of infections were caused by *Staphylococcus spp.* (32.1%). Risk factors for early infection are summarized in Table 1. Risk factors identified included placement of HeartMate III device when compared to HeartMate II and BMI > 40kg/m^{2}. Increased hazard rate of infection was demonstrated for patients with HeartWare and HeartMate III devices compared to HeartMate II (HR 2.344; 95% CI 1.22,4.496; p-value 0.01; and HR 2.858; 95% CI 1.231, 6.635; p-value 0.015, respectively), those with BMI >40 (HR 2.437; 95% CI 1.131, 5.252; p-value 0.023), and those with history of diabetes (HR 1.736; 95% CI 1.012, 2.987; p-value 0.045). No risk factors were identified in the multivariate regression model for recurrent infection. Time to death was increased among patients with A1C > 6.4 at baseline (HR 1.028; 95% CI 1.002, 1.054; p-value: 0.032) and among patients who experienced early LVAD infection (HR 3.824; 95% CI 1.928, 7.584; p-value < 0.001).
Conclusion: HeartMate III device and BMI > 40kg/m^{2} were identified as risk factors for early LVAD infection. Time to mortality was decreased among patients that experienced an early LVAD infection.
Disclosures: Julie Ann Justo, PharmD, MS, BCPS-AQ ID, bioMerieux (Speaker's Bureau)TRC Healthcare (Speaker's Bureau)

705. Factors Associated with Local Invasion in Infective Endocarditis: a Nested Case-control Study

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Session: P-28. Endocarditis

Background: A substantial proportion of infective endocarditis (IE) cases are complicated by local invasion. The purpose of this study was to identify patient and disease characteristics that increase the odds of local invasion in surgically treated IE patients.
Methods: This was a nested case-control study. All episodes of IE for patients admitted to Cleveland Clinic from January 1st, 2013 – June 30th, 2016 were identified from the Cleveland Clinic IE Registry. Patients >18 years of age who underwent surgery for IE were included. Data was compiled by manual review of the Electronic Medical Record. Local invasion, defined as peri-annular extension, peri-valvular abscess, intra-cardiac fistula or pseudoaneurysm, was ascertained from the surgical operative note. Associations of selected factors with local invasion were examined in a multivariable logistic regression model.
Results: Among 510 patients who met inclusion criteria, 206 had local invasion. Mean age was 56 years and 369 (72 %) were male. Overall 344 (67 %) had aortic valve, 228 (45%) mitral valve, and 66 (13%) tricuspid or pulmonic valve involvement. Aortic valve involvement (OR 5.76, 95% CI 3.44 – 9.98), mechanical valve (OR 7.63, 95% CI 3.63 – 17.07), bioprosthetic valve (OR 3.20, 95% CI 1.99 – 5.19), significant paravalvular leak (OR 2.27, 95% CI 1.09 – 4.97), new atrioventricular nodal block (OR 3.05, 95% CI 1.57 – 6.09), *Staphylococcus aureus* infection (OR 2.11, 95% CI 1.20 – 3.76), coagulase negative staphylococcal infection (OR 2.38, 95% CI1.27 – 4.54), and non- viridans group streptococcal infection (OR 4.21, 95% CI 1.81 – 10.06) were significantly associated with local invasion.
Conclusion: Intra-cardiac and microorganism factors, but not comorbid conditions, are associated with local invasion in IE.
Disclosures: All Authors: No reported disclosures

706. Impact of Infectious Disease Consultation on Management and Clinical Outcomes of Infective Endocarditis: Results of an interrupted time series analysis

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Session: P-28. Endocarditis

Background: Infective endocarditis (IE) is associated with significant morbidity and mortality, and successful management requires expertise in both cardiac surgery and infectious disease (ID). However, the impact of ID consultation on clinical outcomes of IE is not clear.
Methods: The present study was a quasi-experimental, interrupted time series analysis of the clinical outcomes of patients with IE before (April 1998– April 2008) and after (May 2008–March 2019) the establishment of an ID department at a tertiary care hospital in Japan. The primary outcome was clinical failure within 90 days, defined as a composite of all-cause mortality, unplanned cardiac surgery, new-onset embolic events, and relapse of bacteremia caused by the original pathogen.
Results: Of 238 IE patients, 59 patients (25%) were treated in the pre-intervention period, and 179 patients (75%) were treated in the post-intervention period. Establishment of an ID department was associated with a 54% reduction in clinical failure (relative risk [RR], 0.46; 95% confidence interval [CI], 0.21–1.02; P=0.054) and a 79% reduction in new-onset embolic events (RR, 0.21; 95% CI, 0.07–0.71; P=0.01). In addition, the rate of inappropriate IE management significantly decreased (RR, 0.06; 95% CI, 0.02–0.22; P< 0.01).
Segmented regression analysis for monthly rates of clinical failure.