

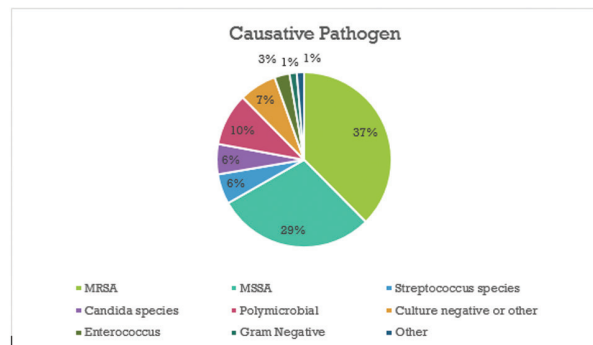
outcomes (death, cost) using parametric and nonparametric tests when appropriate. A *P*-value < 0.05 was considered significant.

**Results.** A total of 69 persons met criteria (Table 1). The average length of stay was 30.8 days. Thirty-four (52%) had documentation of antibiotic completion (in or outpatient). Seventeen received surgery: 16 with valve replacement and one device removal. Overall, 14 (20%) died over the study period. There was no significant association between antibiotic completion or 9-item risk and death. When stratified into low risk (<4 items) vs. high risk (≥5), there was no difference in overall direct costs, LOS, or whether patients received surgery.

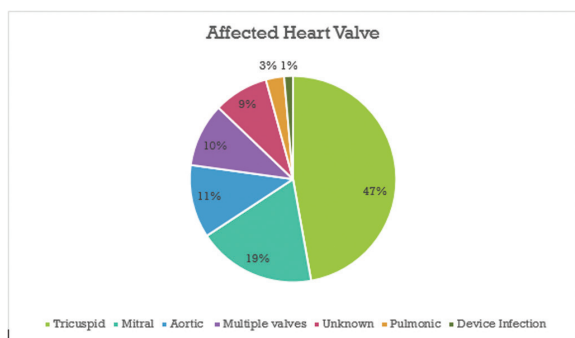
**Conclusion.** PWID with IE at a hospital serving a rural, Southern population have a greater length of stay, discharges against advice, surgical interventions, and costs than other regions, relative to existing literature. The lack of association between 9-item risk and outcomes suggests that death and high costs are attributable to factors beyond substance use. Costs of providing care for this population are exorbitant and likely devastating for rural county hospitals within the context of the current public health and payment framework, including Medicaid non-expansion.

**Table 1. Demographics and Hospital Outcomes for PWID with IE (n=69) receiving care at the University of Alabama at Birmingham (UAB)**

Age	
• Mean (SD)	• 35.9 (9.2)
• Median (IQR)	• 35 (11)
Male, N (%)	31 (45)
Race	N (%)
• White	• 64 (93)
• Black	• 3 (6)
• Asian	• 1 (1)
Insurance	N (%)
• Public	• 21 (30.4)
• Private	• 9 (13.0)
• Uninsured	• 39 (56.5)
Surgery	17 (24.6%)
Left AMA	12 (17.6%)
LOS	
• Mean (SD)	• 30.88 days (21.1)
• Median (IQR)	• 29 (33) range: 4-103
Readmission	13 (18.8%)
Death	14 (20.3%)
Treatment completed	34 (52%)
IVAT score	
• Mean (SD)	• 4.97 (1.70)
• Median (IQR)	• 5 (2)
Initial hospitalization cost data	
Total charges	
• Mean (SD)	• \$235,614.70 (238,113.66)
• Median (IQR)	• \$142,489.53 (232,295)
Direct Costs	
• Mean (SD)	• \$45,280.18 (76,621.44)
• Median (IQR)	• \$22,421 (40,819.82)



**Figure 1. Frequency of infection by causal pathogen, as defined by growth on blood or heart valve culture**



**Figure 2. Comparison of infected valve, in PWID with IE at UAB**

**Table 2. Intravenous Antibiotics and Addiction Team (IVAT) 9-Point Risk Assessment (Eaton et al. *Clinical Infectious Diseases*, 2018)**

Risk Factor	Score (0-1)
1. Cravings	
2. Unstable home environment	
3. Dual Psychiatric diagnosis	
4. History of drug overdose	
5. History of multiple relapses	
6. Polysubstance abuse	
7. Family history of addiction	
8. History of Trauma	
9. Limited willingness to change	
<b>Total Score =</b>	

One point is given for each of the above risk factors

Low risk is defined as a total score of 4 or less

High risk is defined as score of 5 or greater

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

#### 140. Trends of Infective Endocarditis at a Northern New England Academic Medical Center, From 2011 to 2017: A Case for Improved Methods to Reliably Identify Associated Substance Use

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**Session:** 37. Bacteremia, CLABSI, and Endovascular Infections

*Thursday, October 3, 2019: 12:15 PM*

**Background.** Infective endocarditis (IE) is a morbid and often lethal complication of injection drug use. There is an urgent need for accurate surveillance for IE related to substance use (SU) to support control strategies.

**Methods.** We conducted a retrospective comparative analysis of 3 datasets evaluating patients aged ≥16 years admitted to an academic medical center in New England with an ICD-9/10 discharge diagnosis of IE from April 2011 to December 2017. The 3 datasets included the hospital's electronic medical record (EMR); the hospital's Outpatient Parenteral Antibiotic Therapy (OPAT) program dataset; and the New Hampshire Uniform Hospital Discharge Data Set (UHDDS). We analyzed the number of admissions for IE per year, stratified by SU. We developed a SU composite measure by incorporating multiple sources of data from the EMR, and then verified accuracy of both the SU and IE diagnoses through manual chart review.

**Results.** The EMR documented 472 hospital admissions for IE, representing 385 unique patients. The median age was 56 years and 59% were men. Admissions increased 67%, from 56 in 2012 to 84 in 2017. SU was coded as a discharge diagnosis in 27% of these admissions; however, based on our composite measure of SU, 45% IE admissions were possibly associated with SU. The proportion of IE patients who had evidence of SU increased from 20% in 2011 to 49% in 2017 (*P* = 0.002). Patients with SU compared with those without were younger (40.5 vs. 65.2 years, *P* < 0.001) and more likely to be on Medicaid (59% vs. 8%, *P* < 0.001). They had higher average charges (\$146,633 vs. \$107,223, *P* = 0.002) and lengths of stay (19.1 vs. 13.4 days, *P* < 0.001). The UHDDS and EMR datasets identified a similar numbers of patients with a diagnosis of IE; however, manual chart review revealed that IE was over-coded in ~one-fifth of admissions.

**Conclusion.** The rate of IE in our hospital increased dramatically between 2011 and 2017, with a rising proportion associated with SU. Despite these trends, we found that discharge diagnosis coding alone substantially underestimated associated SU and overestimated IE disease burden. Our findings suggest public health administrative datasets, such as the UHDDS, can contribute to surveillance of IE disease burden with consideration of these important limitations, especially for assessing disease trends.

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

#### 141. Use of Rapid Diagnostic Testing in Gram-negative Bloodstream Infections with and without Antimicrobial Stewardship

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**Background.** Verigene Blood Culture Gram-Negative (VBC-GN) is a rapid diagnostic test (RDT) that can detect key GNs and resistance within hours from