

## Introduction and Objectives

- With the rise of the opioid epidemic, Temple University Hospital (TUH) experiences a high volume of admissions due to IVDU-related infective endocarditis, and research is needed to better assess and improve patient care
- Objective:** This study aims to characterize the patient demographic, clinical characteristics, trends and outcomes for IVDU-related infective endocarditis at TUH over the past 4 years

## Methods

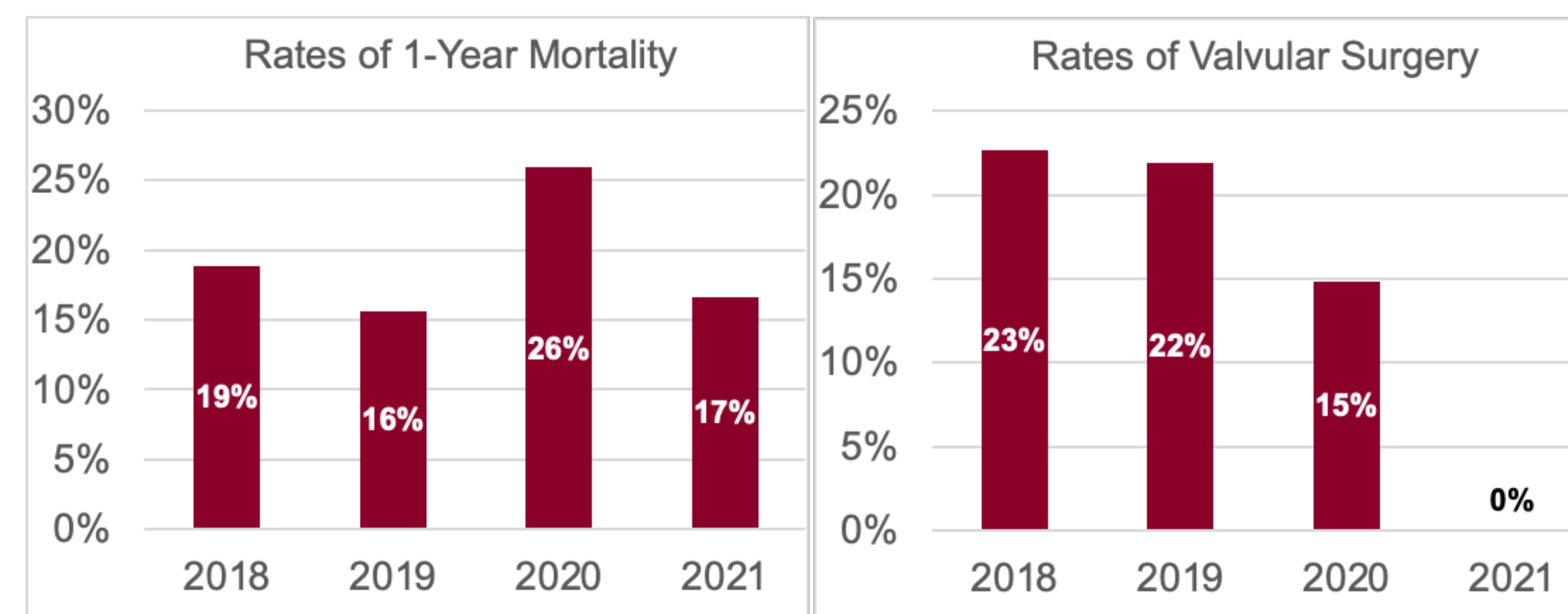
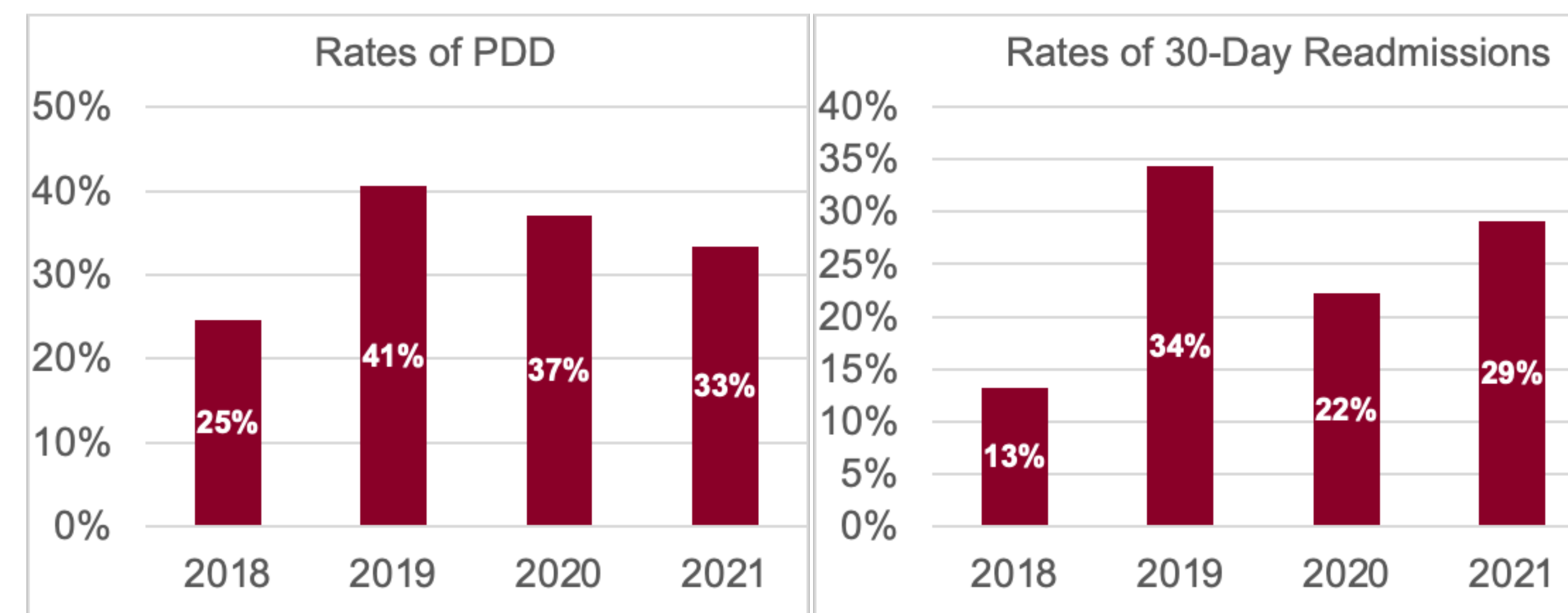
- An IRB-approved, single institution, retrospective chart review of PWID admitted to TUH with a diagnosis of infective endocarditis from 2018-2021
- Inclusion criteria:** 18+ years old, history of IVDU, "definite" score according to Duke criteria for infective endocarditis
- Exclusion criteria:** any score less than "definite" according to Duke criteria
- Primary outcomes:** rates of patient-directed discharge (PDD), 1-year mortality, 30-day readmission
- Secondary outcomes:** rates of homelessness, medical comorbidities, medical complications, and valvular surgery; length of stay; blood culture microorganisms

## Results

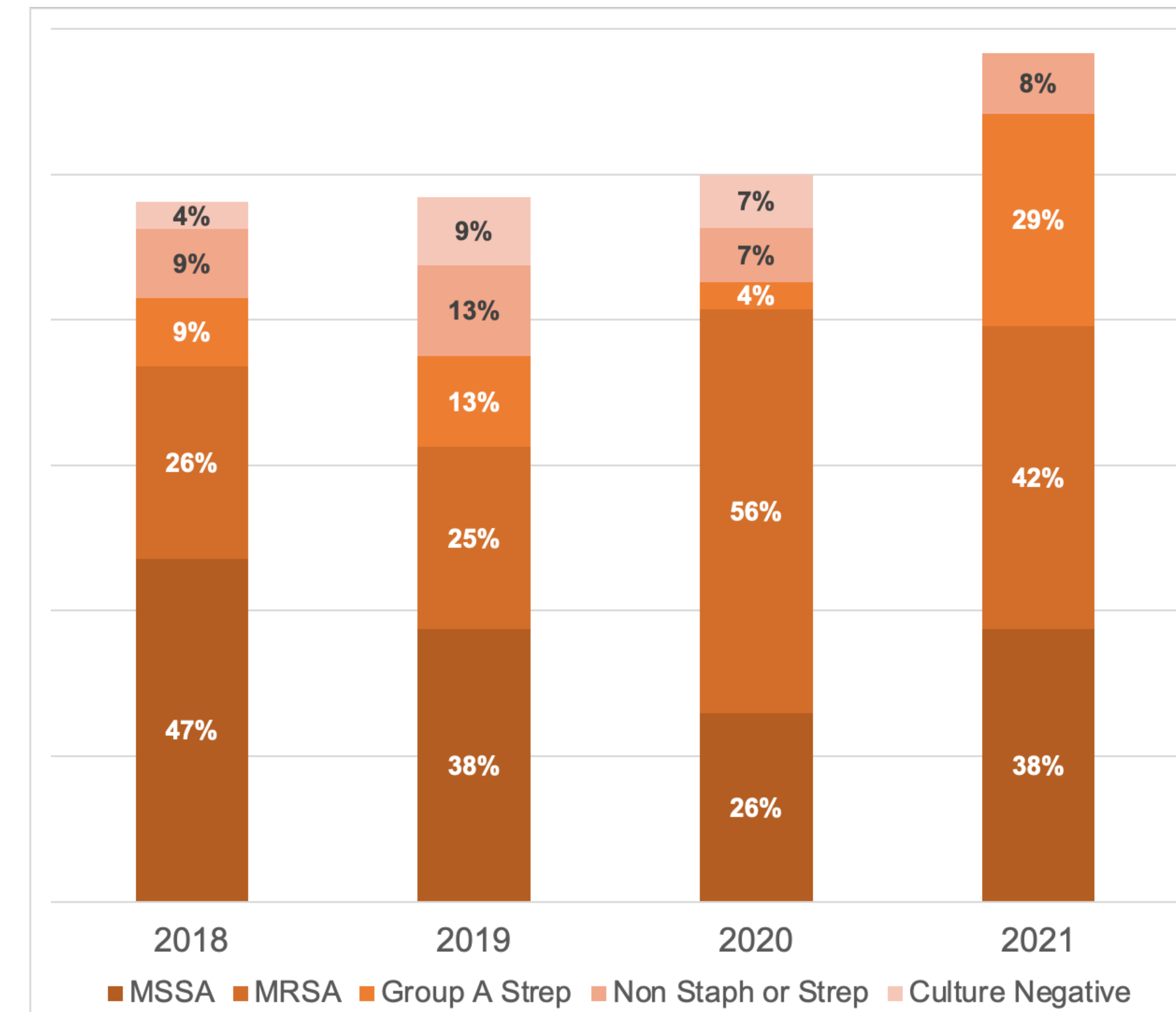
Demographics			Comorbidities		
Total Encounters	136		<b>Condition</b>	<b>Count</b>	<b>Percent</b>
Total Patients	103		HCV	123	90%
Average Age	37		Septic Emboli	117	86%
<b>Race</b>	<b>Count</b>	<b>Percent</b>	Homelessness	94	69%
Caucasian/White	96	71%	Osteomyelitis	42	31%
African American/Black	18	13%	Septic Arthritis	23	17%
Hispanic/Other	15	11%	Acute Renal Failure on Dialysis	15	11%
Hispanic/Black	2	1%	HIV	12	9%
Other Race	2	1%	CHF	11	8%
Unknown	3	2%	CKD	11	8%
Other/Unknown	5	4%	Diabetes	5	4%
<b>Sex</b>	<b>Count</b>	<b>Percent</b>			
Male	82	60%			
Female	54	40%			

Yearly Analysis				
	2018	2019	2020	2021
Total Encounters	53	32	27	24
Median LOS	14.0	12.5	7.0	13.0
Encounters with PDD	25%	41%	37%	33%
Encounters with Readmits within 30 Days	13%	34%	22%	29%
Encounters with 1-Year Mortality	19%	16%	26%	17%
Encounters Receiving Valvular Surgery	23%	22%	15%	0%
Encounters with Hx of Homelessness	66%	78%	56%	79%

### Yearly Trends in Key Outcome Variables



### Yearly Trends in Blood Culture Microorganisms



## Conclusion

- From 2018-2021, TUH experienced high rates of PDD (32%), 30-day readmissions (23%), and 1-year overall mortality (19%)
- Rates of *streptococcus pyogenes* are going up while rates of valvular surgery are going down; annual trends in rates of PDD, 30-day readmissions, and overall 1-year mortality require more scrutiny
- Next Steps:** A finalized analysis including all data points from 2018-2022 utilizing more sophisticated statistical analysis