Table 1: Characteristics of the Study Population

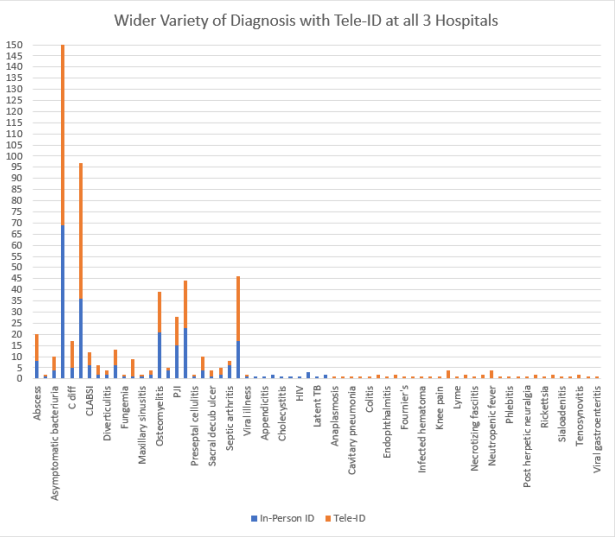
	Hospital #1		Hospital #2 and #3		
	In-person ID	Tele-ID	In-person ID	Tele-ID	Overall
Total Encounters	147	239	104	152	642
Caucasian (%)	126 (85.7)	205 (85.8)	97 (93.2)	145 (95.4)	573 (89.3)
Female (%)	74 (50.3)	141 (59.0)	54 (51.9)	79 (51.9)	348 (54.2)
Age (years)	67.4	66.7	66.5	67.3	67.0
BMI (average)	31.5	30.9	32.6	34.7	32.4
Comorbidity Score (average)*	5.4	5.8	6.4	7.0	6.2

* = Charlson Comorbidity Score

Table 2: Primary Outcomes of Consulted Patients

	Hospital #1		Hospital #2 and #3		
	In-person ID	Tele-ID	In-person ID	Tele-ID	Overall
Total Encounters	147	239	104	152	p=0.018
LOS after ID consult (Days)	5.3	4.6	3.6	3.6	p=0.468
ID Related Readmission at 30 days (%)	12 (8.2)	7 (2.9)	4 (3.8)	3 (2.0)	p=0.072
Transfer to tertiary center (%)	17 (11.6)	23 (9.6)	16 (15.4)	17 (11.2)	p=0.301
Discharge to Home (%)	63 (42.9)	121 (50.6)	64 (61.5)	95 (62.5)	p=0.333

Figure 1: Wider variety of ID diagnosis by Tele-ID service



Conclusion: This comparative study shows that patient outcomes are similar between in-person and Tele-ID, despite higher volume and complexity encountered by Tele-ID. The greater number of consults and broader range of diagnosis made by Tele-ID suggests greater productivity, possibly related to travel time elimination. Tele-ID appears to be a good alternative solution for rural locations that lack in-person access to ID care.

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613. Lessons learned from a Rhode Island academic out-patient Lyme and tick-borne disease clinic

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Session: P-23. Clinical Practice Issues

Background: Although the prevalence of tick-borne diseases (TBD) continues to increase, there remains significant confusion regarding treatment for Lyme and other TBDs. We conducted a chart review of all new patients that came to an academic center for Lyme and TBDs. We then initiated a quality improvement project for feedback from a small subset of patients with Post-treatment Lyme disease syndrome (PTLDS).

Methods: Charts of patients visiting the clinic between March and November 2018 were reviewed. Data abstracted from the electronic health record included demographics, laboratory and clinical data. A small subset of patients who reported a history of Lyme and at least 6 months of symptoms after antibiotic treatment were enrolled in a phone survey to evaluate their experience with treatment for PTLDS.

Results: Symptoms most commonly seen in 218 new patients included fatigue (66.5%), joint pain (58.2%), cognitive difficulty (32.1%), headache (27.9%) and sleep disturbance (27.5%). 87% had already received tick-borne disease directed antibiotic treatment. Over half (60.5%) of patients report having symptoms for more than 6 months. More than half of patients (54.8%) who had more than 6 months of Lyme-related symptoms had positive serological testing. Common themes identified in the 16 phone surveys of patients with PTLDS conducted so far included significant frustration related to the dismissive attitudes from medical professionals (n=9/16), and many sought alternative or complementary therapies (n=11/16). Six patients reported receiving very long-term antibiotic regimens from other Lyme specialists. Many patients expressed satisfaction with the visit and medical advice even in the absence of curative therapy (n=9/16), although a significant number continued to seek care elsewhere (n=6/16).

Conclusion: More than half of new patients reported symptoms lasting more than 6 months after targeted antibiotic therapy. Further research is needed to develop interventions for the common symptoms of fatigue, joint pain, cognitive difficulty and sleep disturbance. Treatments to improve sleep, diet, and physical activity and decrease inflammation among patients who suffer from PTLDS are needed.

Disclosures: **All Authors**: No reported disclosures

614. Long-Acting Lipoglycopeptides for the Treatment of Bone and Joint Infections and Bacteremia in Infectious Disease Outpatient Infusion Clinics

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Background: Long-acting lipoglycopeptides (LGPs) are approved for the treatment of acute bacterial skin and skin-structure infections. Broad Gram-positive coverage and weekly dosing regimens are useful for other diagnoses, but real-world data supporting such use are sparse. We review our experience of dalbavancin and oritavancin for the treatment of bone and joint infection (BJI) and bacteremia (BAC) in outpatient infusion clinics (OICs).

Methods: We conducted a multicenter, retrospective, observational cohort study of patients (pts) receiving long-acting LGPs in OICs over 2 yrs from 2018-2019 for BJI and BAC. Data collected included demographics, diagnosis, dosing regimen, microbiology, clinical outcomes, and adverse events (AEs). Clinical success, defined as resolution of infection with continued oral antibiotics allowed, was assessed at the next follow-up visit. Worsening infection, the need for additional intravenous therapy, and discontinuations during therapy were deemed non-successful.

Results: We identified 70 pts (mean age: 64±16 years, 53% male) from 25 OICs, who received dalbavancin (n=50), oritavancin (n=19) and both (n=1). BJI accounted for 55 (79%) with 31 osteomyelitis, 9 bursitis, 7 prosthetic joint, 7 septic arthritis and 1 tenosynovitis. BAC was the primary diagnosis in 15 (21%) and sources were 6 device, 2 lower respiratory tract, 2 urinary tract and 5 unknown. 46% of pts were treated in the OIC without prior hospitalization. 72 Gram-positive isolates were obtained from 67 pts, with *Staphylococcus aureus* predominant (42/72, 58%), including methicillin-resistant (26/72, 36%) and methicillin-susceptible isolates (16/72, 22%). Median number of doses administered were 2 [IQR 1-2] in BJI and 1 in BAC [IQR 1-2]. Overall clinical success was 86% (57/66), with 4 non-evaluable. BJI had 85% success (44/52), with 90% in osteomyelitis (28/31), 50% in prosthetic joint (3/6) and 87% (13/15) in the others. Clinical success was 93% (13/14) in BAC. Three pts (4%) on dalbavancin experienced mild AEs, none resulting in discontinuation of therapy.

Conclusion: This multicenter real-world study of long-acting LGPs demonstrates safety and high clinical success rates in BJI and BAC. Our experience suggests a role for use of these agents in treatment of BJI and BAC in the outpatient setting.

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615. Overlooking those at Intermediate Risk? ASCVD Prevention Measures among People Living with HIV at an Urban Academic Medical Center

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Background: The American College of Cardiology (ACC) recognizes HIV as a risk factor for atherosclerotic cardiovascular disease (ASCVD). However, 2019 guidelines do not address people living with HIV (PLWH), aside from stating that their Risk Estimator Plus tool, which is used to calculate a 10-year risk for ASCVD and advise management, likely underestimates CVD risk in PLWH. This quality assessment project examines rates of ACC guideline adherence for ASCVD prevention for PLWH who have calculated risk scores in the low (< 7.5%), intermediate (> 7.5% & < 20%), and high-risk (> 20%) ranges. Patients analyzed are from an HIV registry of University Hospital Infectious Disease Outpatient clinic in Newark, NJ. The clinic's 2451 total patients are 40% female, 63% non-Hispanic black, 23% Hispanic, and 64% > 45 years old.

Methods: This project was approved by the Rutgers IRB. Patients (40-79 years) with a clinic visit from 2/1/2019 to 1/31/2020 were reviewed. ASCVD risk scores were calculated using the Risk Estimator Plus for all patients when data was available. Guideline adherence rate was defined as following 2019 ACC guidelines for appropriate statin therapy, while considering medication interactions.

Results: Of the 1127 patients who met criteria, 744 ASCVD risk scores were calculated. Lipid values outside the calculator range (229) or no documented lipids (154) resulted in non-calculatable scores. Guideline adherence rate for the intermediate-risk group was significantly less than the high-risk and low-risk groups (P< 0.05): low-risk 92.8% (95% CI 90.0-95.1, n=346), intermediate-risk 35.2% (95% CI 29.7-41.1, n=270), and high-risk 52.3% (95% CI 43.8-60.8, n=128). Adherence rates within the intermediate-risk group for patients with hypertension (HTN) and smokers were significantly less than those with CVD (P< 0.05).

Table 1: Patients with Calculated ASCVD Risk Score > 20 for PLWH from 2/1/2019 – 1/31/2020

Table 1: Patients with Calculated ASCVD Risk Score > 20 for PLWH from 2/1/2019 – 1/31/2020

ASCVD > 20	On Statin n (%)	Appropriate Clinical Guideline Therapy for Patients with HIV n (%)	Adherence Rate % (95% CI)
Overall, n=128	80 (62.5)	67 (52.3)	52.3 (43.8 – 60.8)
Male, n=88	47 (53.4)	43 (48.9)	48.9 (38.7 – 59.1)
Female, n=40	33 (82.5)	30 (75.0)	75.0 (59.8 – 85.8)
Secondary Prevention*, n=36	32 (88.9)	30 (83.3)	83.3 (68.1 – 92.1)
DM, n=70	56 (80.0)	47 (67.1)	67.1 (55.5 – 77.0)
HTN, n=108	72 (66.7)	63 (58.3)	58.3 (48.9 – 67.2)
Smoking, n=63	32 (50.8)	31 (49.2)	49.2 (37.3 – 61.2)

*Secondary Prevention defined as a history of stroke, myocardial infarction, coronary artery disease, or peripheral arterial disease
Abbreviations: ASCVD = atherosclerotic cardiovascular disease; DM = diabetes mellitus; HTN = hypertension

Table 2: Patients with Calculated ASCVD Risk Score > 7.5 & < 20 for PLWH from 2/1/2019 – 1/31/2020

Table 2: Patients with Calculated ASCVD Risk Score ≥ 7.5 & < 20 for PLWH from 2/1/2019 – 1/31/2020

ASCVD ≥ 7.5 & <20	On Statin n (%)	Appropriate Clinical Guideline Therapy for HIV Patients n (%)	Adherence Rate % (95% CI)
Overall, n=270	98 (36.3)	95 (35.2)	35.2 (29.7 – 41.1)
Male, n=180	55 (30.6)	56 (31.1)	31.1 (24.8 – 38.2)
Female, n=91	43 (47.3)	39 (42.9)	42.9 (33.2 – 53.1)
Secondary Prevention*, n=37	28 (75.7)	24 (64.9)	64.9 (48.8 – 78.2)
DM, n=52	32 (61.5)	29 (55.8)	55.8 (42.3 – 68.4)
HTN, n=190	80 (42.1)	76 (40.0)	40.0 (33.3 – 47.1)
Smoking, n=105	32 (30.5)	29 (27.6)	27.6 (20.0 – 36.9)

*Secondary Prevention defined as a history of stroke, myocardial infarction, coronary artery disease, or peripheral arterial disease
Abbreviations: ASCVD = atherosclerotic cardiovascular disease; DM = diabetes mellitus; HTN = hypertension

Table 3: Patients with Calculated ASCVD Risk Score < 7.5 for PLWH from 2/1/2019 – 1/31/2020

Table 3: Patients with Calculated ASCVD Risk Score < 7.5 for PLWH from 2/1/2019 – 1/31/2020

ASCVD < 7.5	On Statin n (%)	Appropriate Clinical Guideline Therapy for HIV Patients n (%)	Adherence Rate % (95% CI)
Overall, n=346	54 (15.6)	321 (92.8)	92.8 (90.0 – 95.1)
Male, n=153	22 (14.4)	145 (94.8)	94.8 (90.0 – 97.3)
Female, n=193	32 (16.6)	176 (91.2)	91.2 (86.4 – 94.4)
Secondary Prevention, n=31	14 (45.2)	13 (41.9)	41.9 (26.4 – 59.2)
DM, n=17	11 (64.7)	10 (58.8)	58.8 (36.0 – 78.4)
HTN, n=121	33 (27.3)	109 (90.1)	90.1 (83.5 – 94.2)
Smoking, n=70	6 (8.57)	65 (92.9)	92.9 (84.4 – 96.9)

*Secondary Prevention defined as a history of stroke, myocardial infarction, coronary artery disease, or peripheral arterial disease
Abbreviations: ASCVD = atherosclerotic cardiovascular disease; DM = diabetes mellitus; HTN = hypertension

Conclusion: Lower overall guideline adherence rates within the intermediate risk group, and particularly among those with a history of HTN and smoking, highlights the need for targeted care. Provider education on the calculation and application of ASCVD risk scores, as well as increased awareness of the risk-enhancing nature of HIV infection in coexistence with the traditional risk factors of CVD history, diabetes, HTN, and smoking are important steps to increase adherence rates.

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616. Patients Experiencing Homelessness and Opioid Use Disorder with Infectious Complications Treated with OPAT at Medical Respite: Evaluation of Retention in Care at 30 days and Role of Addictions Consultation

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Background: Patients experiencing homelessness and opioid use disorder (OUD) admitted for severe infections often require prolonged hospital stays. These patients, typically evaluated by Infectious Disease (ID) providers, are often excluded from Outpatient Parenteral Antimicrobial Therapy (OPAT) due to social risk factors. Medical respite, near Harborview Medical Center (HMC), offers a supportive environment for patients to receive OPAT with daily nurse administered antibiotics. For further support, our institution created a dedicated Addiction medicine consult service March 1, 2019 to assist with initiation of medications for opioid use disorder (MOUD) and linkage to outpatient care for interested patients.

Methods: We performed retrospective review of all patients > 18 years with OUD admitted for procedure/inpatient stay from 1/31/2018 – 1/31/2020 who discharged to medical respite for OPAT. The minimum follow up period was 90 days. We recorded demographics, OUD history, diagnosis, discharges against medical advice (AMA), and total readmissions. We evaluated outcomes of 4 care interventions (ID consult, Addiction consult, linkage to case management and/or mental health, linkage to MOUD) in relation to successful OPAT completion, clinical cure, and retention in MOUD at 30 days.

Results: Fifty-three patients had 63 OPAT episodes of care (Table 1). Median length of stay (LOS) was 19 days inpatient, and 33 days at medical respite. Common diagnosis included, osteomyelitis 46 (73%), bacteremia 27 (43%), septic joint 17 (27%), epidural abscess 10 (16%), and endocarditis 10 (16%). There were 24 OPAT episodes which received all 4 interventions (Table 2). Episodes during which 4 interventions occurred were more likely to result in clinical cure (p = 0.03) and retention in MOUD treatment at 30 days (p = 0.003) compared to episodes where 3 or fewer interventions occurred (Table 3).

Table 1. Demographics

	n = 53 (%)
Currently Homeless	53 (100%)
Male	37 (70%)
Age (average years)	38
White	42 (79%)
African American	7 (13%)
Alaska Native	3 (6%)
Asian	1 (2%)
Hepatitis C	37 (70%)
Diabetes	3 (6%)
HIV	1 (2%)
OUD during OPAT Episode of care	**n = 63 (%)**
Current PWID (used last 0-3 months)	45 (71%)
Recent PWID (used last 4-12 months)	9 (14%)
Remote PWID (used last > 13 months)	1 (2%)
No PWID (inhaled/smoked/other)	8 (13%)
Current non- injection drug use	12 (19%)
Recent non-injection drug use	5 (8%)
Remote non-injection drug use	2 (3%)
Drugs Used	
Heroin	57 (90%)
Heroin/Opioids + Methamphetamine	41 (65%)
Other opioids	6 (10%)
OPAT Episodes of Care	**n = 63 (%)**
Median LOS inpatient (days)	19
Median LOS medical respite (days)	33
Left medical respite AMA	27 (43%)
Left inpatient AMA	2 (3%)
Line Tampering	6 (10%)
Secondary bacteremia	3 (5%)
Readmissions (any)	32 (51%)
Patients with > 1 readmission	4 (6%)

Abbreviations: Human Immunodeficiency Virus (HIV), Opioid Use Disorder (OUD), Outpatient Parenteral Antimicrobial Therapy (OPAT), People Who Inject Drugs (PWID), Length of Stay (LOS), Against Medical Advice (AMA)

Table 2. OPAT Care Interventions, n =63

Interventions:		
	Yes	No
ID consult	58 (92%)	5 (8%)
Addiction consult	43 (68%)	20 (32%)
MOUD	54 (86%)	9 (14%)
Case management/Mental health	37 (59%)	26 (41%)
Distribution of Interventions:		
0 interventions	1 (1.6%)	
1 intervention	5 (7.9%)	
2 interventions	8 (12.7%)	
3 interventions	25 (39.7%)	
4 interventions	24 (38.1%)	