Poster # 616

UW Medicine HARBORVIEW MEDICAL CENTER

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

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Background

Patients experiencing opioid use disorder (OUD) and homelessness admitted for severe infections often require prolonged hospital stays. These patients typically evaluated by Infectious Disease (ID) providers, are commonly excluded from Outpatient Parenteral Antimicrobial Therapy (OPAT) due to social risk factors. Medical respite, adjacent to Harborview Medical Center (HMC), offers a supportive environment for patients to receive OPAT with daily nurse administered antibiotics. For further support, our institution developed 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.[1,2]

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).

References

1) Marks L, Munigala S, Warren D, Liang S, Schwarz, E, Durkin M. *Addictions Medicine Consultations Reduce Readmission Rates for Patients with Serious Infections From Opioid Use Disorder*. Clin Infect Dis. 2019; 68: 1935-1937.
2) Seval N, Eaton E, Springer S. *Beyond Antibiotics: A Practical Guide for the Infectious Disease Physician to Treat Opioid Use Disorder in the Setting of Associated Infectious Diseases.* Open Forum Infect Dis. 2019; 7: ofz539.
3) Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. *Research electronic data capture (REDCap) – a metadata-driven methodology and workflow process for providing translational research informatics support.* J Biomed Inform. 2009; 42:377-81.

Methods

We performed retrospective chart review of all HMC patients > 18 years experiencing homelessness with OUD admitted for procedure/inpatient stay from 1/31/2018 – 1/31/2020 who discharged to medical respite for OPAT. Data extracted manually from electronic health record (EHR), was collected in REDCap data collection tool.[3] 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 four care interventions (ID consult, Addiction consult, linkage to Mental Health (MH) and/or Case Management (CM), and linkage to MOUD), in relation to successful OPAT completion, clinical cure, and retention in MOUD at 30 days. OPAT completion was defined as completing the intended antibiotic course and clinical cure was defined as no evidence of antibiotic failure at 90 days, as documented in the EHR. Chi-squared test was used for analysis.

DEFINITIONS OF CARE INTERVENTIONS

ID Consult – inpatient evaluation by an ID trained provider

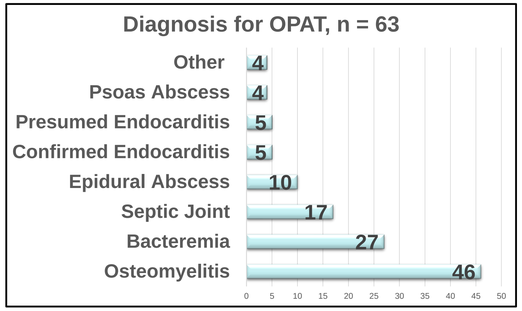
Addictions Consult – inpatient evaluation by an Addictions trained provider

MH/CM – linkage to services after discharge through HMC, medical respite, MOUD facility, primary care provider, or other community services, with documented retention in care by EHR

MOUD – patient discharged with Buprenorphine or Methadone and linkage to continue MOUD services, with documented retention in care by EHR

Results, n = 53 patients with 63 episodes of care

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%)



Substance use characteristics, by episodes 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%)
Substances Used	
Heroin	57 (90%)
Heroin/Opioids + Methamphetamine	41 (65%)
Other opioids	6 (10%)
Hospital utilization, by 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%)
Unsafe Line Use	6 (10%)
Secondary bacteremia	3 (5%)
Any readmission	32 (51%)
> 1 readmission	4 (6%)

Care 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%)	

		All 4 interventions	< 4 interventions	p-value
Clinical cure	Yes	14 (54%)	12 (46%)	P=0.03
	No	10 (27%)	27 (73%)	
OPAT Completion	Yes	15 (48%)	16 (52%)	P=0.098
	No	9 (28%)	23 (72%)	
Retention in MOUD treatment at 30 days	Yes	19 (54%)	16 (46%)	P=0.003
	No	5 (18%)	23 (82%)	

Conclusions

- Patients with OUD and homelessness can receive OPAT at medical respite, but high re-admission rates suggest the need for support and close follow up.
- Patients who received all 4 interventions (ID consult, Addiction consult, Case management and/or Mental health, and MOUD), had higher rates of clinical cure.
- Patient-centered comprehensive care plans, including ongoing support and access to MOUD should be a priority to ensure successful treatment of infections.