

Referral of Patients with High Opioid Dependence to Level 4 Drug Rehab Program: One-year Single Institutional Experience

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Background

- The opioid epidemic has only worsened with the introduction of synthetic opioids.
- Concomitant medical and substance use-related needs are a barrier to post-hospitalization care, as many traditional nursing facilities struggle to manage both kinds of demands.
- One novel resource available to the Philadelphia community is the Level 4 (L4) Rehabilitation Center. These treatment centers are housed in general hospitals or psychiatric hospitals that are staffed by an interdisciplinary team that provides concurrent intensive substance use and medical treatment.
- We sought to describe patient characteristics that may lead to successful referral during its first year of inauguration.

Methods

- We used a retrospective electronic medical record review of patients admitted to a large urban hospital who were then referred to L4 upon discharge between March 2023 and December 2023
- The primary outcome will be successful referral to L4 and the secondary outcome will be 60-day readmission rate
- We hypothesize that most patients will be accepted to L4 irrespective of amount of substance use and number of morphine milligram equivalents (MMEs) used during admission
- We also hypothesize that patients with acceptance to L4 will have a lower 60-day readmission rate compared to those that were not accepted.

Figures

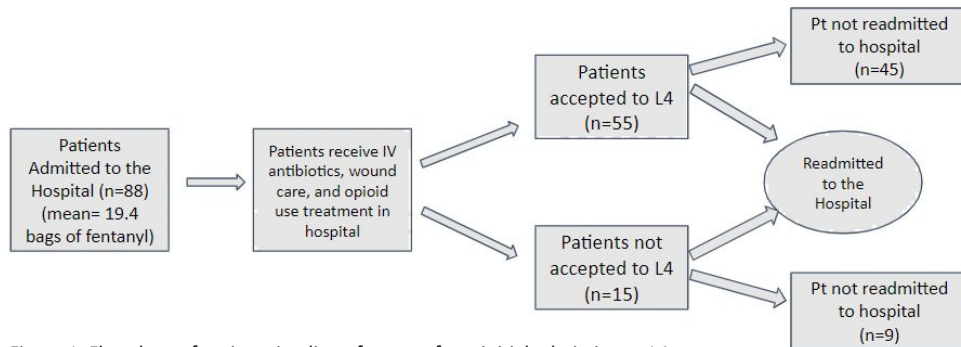


Figure 1. Flowchart of patient timeline of events, from initial admission to L4 disposition to potential readmittance

Table 1: Characteristics of Patients		
Characteristic	Patients (n=88)	%
Sex		
Male	57	64.8
Female	31	35.2
Race		
White	54	61.4
Hispanic	15	17
Black	15	17
Unhoused	63	71.6
Medical Comorbidity	80	90.9
Ambulatory dysfunction	45	51.1

Results

- Preliminary data included 88 patients
- Patient's median age was 40 years, 57 (64.8%) of participants were male, 54 (61.4%) of participants were white, 15 (17%) were Hispanic, and 15 (17%) were black.
- 72 (81.8%) patients were referred to L4 and of those patients, 55 (78.6%) were accepted. Ten patients left prematurely prior to acceptance.
- On average, patients were prescribed 1002.67 MMEs per day while inpatient, and used a mean of 19.4 bags of fentanyl.
- 80 (90.9%) patients had at least one other medical comorbidity, 63 (71.6%) were without housing, and 45 (51.1%) had unspecified ambulatory dysfunction.
- Of those that were not accepted (n=15), 40% were found to be readmitted within 60 days, while of those accepted (n=55) only 17.5% of patients were readmitted in the same timeframe.

Conclusion

- Our preliminary data show that most patients get accepted to L4 despite deep dependence and high opioid dosages in the community.
- Moreover, many patients have other comorbidities including housing insecurity and ambulatory dysfunction.
- Acceptance to L4 had lower 60-day readmission rates, showing some efficacy to L4 referral.
- More data are necessary to investigate if other factors may play a role in L4 referral/acceptance.
- The preliminary data are encouraging that L4 is suitable for bridging care gaps in this vulnerable patient population.

References

1. LEVEL 4 MEDICALLY MANAGED INTENSIVE INPATIENT SERVICES BY SERVICE CHARACTERISTICS. ddap.pa.gov. Published August 19, 2020.
 2. Calcaterra, S.L., Saunders, S., Grimm, E. et al. In-Hospital Methadone Enrollment: A Novel Program to Facilitate Linkage from the Hospital to the Opioid Treatment Program for Vulnerable Patients with Opioid Use Disorder. J GEN INTERN MED 2023.