Patient-Directed Discharge and Addiction-Focused Care in Opioid Use Disorder–Associated Infective Endocarditis

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RESEARCH DAY

Study site: Hartford Hospital, 2023

BACKGROUND

Endocarditis in adults with opioid use disorder (OUD) requires coordinated infection and addiction care.[1] Patient-directed discharge (PDD) may interrupt planned treatment and is associated with readmission.[2]

OBJECTIVE

Examine PDD, documented addiction care, and 30- and 90-day outcomes in adults with OUD and clinician-documented endocarditis.

METHODS

Design: Retrospective, encounter-level cohort at Hartford Hospital in 2023.

Cohort: 56 identified encounters, including 50 live discharges. Median age 38 years, 50% male, median stay 8 days.

Complete bundle: Any inpatient methadone or buprenorphine dose, addiction consultation, and naloxone on the discharge medication list.

Analysis: All-cause readmission and death after discharge. Unadjusted ORs, 95% CIs, and 2-sided Fisher exact tests. Exploratory comparisons.

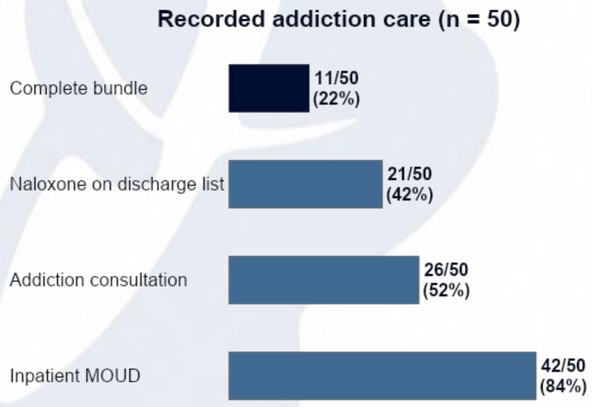


Figure 2. Care components among live discharges. MOUD = medications for opioid use disorder. Naloxone reflects discharge-list documentation.

RESULTS

30-day readmission: 57.9% vs 22.6%

Risk ratio 2.56 (95% CI 1.20–5.46)

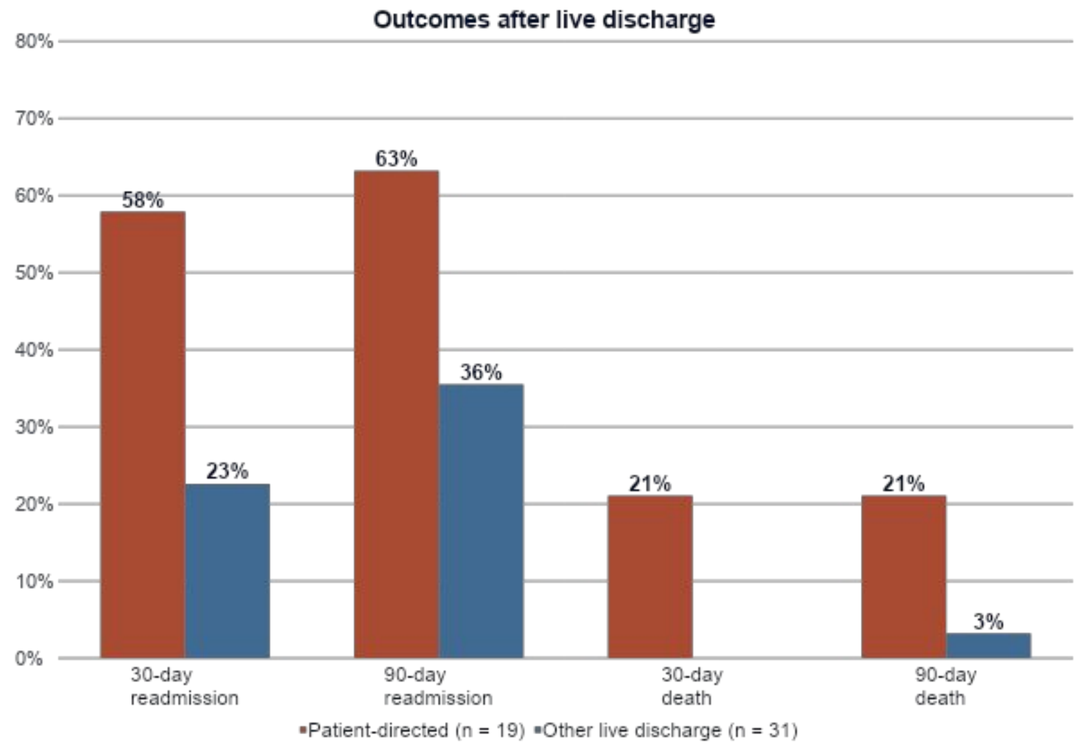


Figure 1. Documented post-discharge outcomes by discharge status. The 90-day mortality endpoint includes deaths within 30 days.

Outcome	Unadjusted OR (95% CI)	P value
30-day readmission	4.71 (1.36–16.29)	.016
90-day readmission	3.12 (0.95–10.22)	.081
30-day death	NE	.017
90-day death	8.00 (0.82–78.00)	.062

Comparisons include 50 live discharges. NE = not finitely estimable because of a zero cell. ORs are unadjusted.

All 4 documented 30-day deaths followed PDD.

COMPLETE CARE BUNDLE

11/50 live discharges (22%) met all 3 care-component criteria.

90-day outcome	Complete (n = 11)	Incomplete (n = 39)
Readmission	3/11 (27.3%)	20/39 (51.3%)
Death	2/11 (18.2%)	3/39 (7.7%)

Readmission OR 0.36 (95% CI 0.08–1.55), P = .189.
Mortality OR 2.67 (95% CI 0.39–18.42), P = .301.

These estimates did not establish a readmission or mortality benefit.

DISCUSSION

MOUD receipt was 100% (26/26) with consultation. Without consultation, 60% (18/30) received MOUD (P < .001).

Frequent medication receipt did not ensure completion of the documented care bundle. Treatment timing and continuity were unavailable.

CONCLUSIONS

PDD marked greater early post-discharge risk. Coordinated addiction care and discharge continuity warrant attention. Bundle effectiveness requires prospective evaluation.

LIMITATIONS

Small single-center cohort with unadjusted comparisons and sparse deaths. Endocarditis lacked formal adjudication. Unique-patient counts, outside events, and treatment continuity were not established. The reported 56 encounters and 6 in-hospital deaths await final case-list reconciliation.

References

1. Baddour LM, Weimer MB, Wurcel AG, et al. Management of Infective Endocarditis in People Who Inject Drugs: A Scientific Statement From the American Heart Association. Circulation. 2022;146:e187–e201. doi:10.1161/CIR.0000000000001090

2. Schranz AJ, Tak C, Wu LT, et al. The Impact of Discharge Against Medical Advice on Readmission After Opioid Use Disorder-Associated Infective Endocarditis: a National Cohort Study. J Gen Intern Med. 2023;38:1615–1622. doi:10.1007/s11606-022-07879-6

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