

Hospital discharge decision making for patients with substance use disorders and serious infections

What's the evidence?



A Harm Reduction Approach Can Improve Quality of Care

- Meet people where they are at: some patients may want their infection treated, **but may not want to stop using drugs.**

Inpatient options

Prolonged hospitalizations for 4-6 weeks are often recommended due to limitations, barriers, stigma, or other reasons.

Challenges: Isolation, retaining employment, financial stress, family responsibilities, stigma

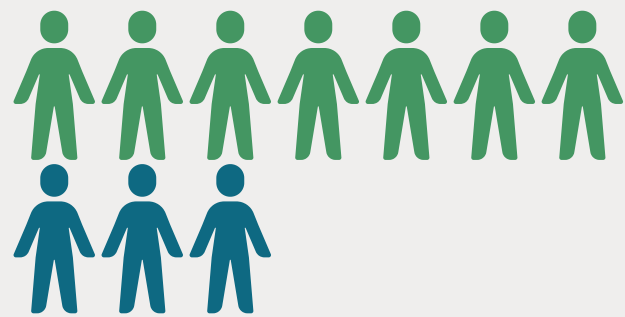
Rates of in-hospital drug use can be up to 40%

Less likely to complete prolonged course of antibiotics if no other options offered.



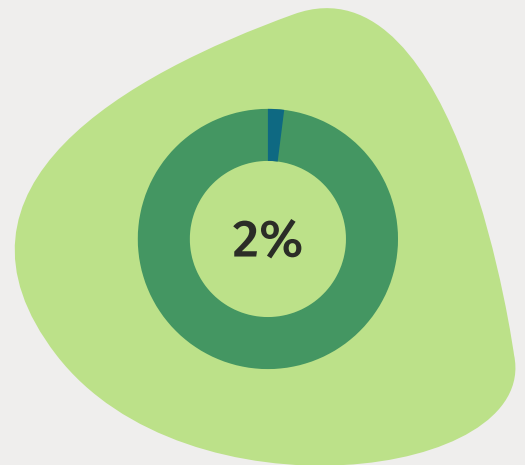
In a recent systematic review 72% to 100% of people successfully completed outpatient parental antimicrobial therapy (OPAT), which is similar to outcomes in patients without a history of injection drug use

Outpatient options

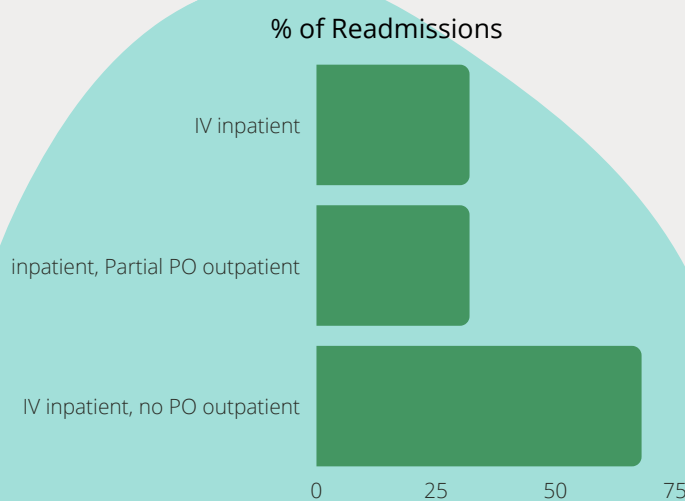


Misuse of PICC lines are uncommon

0-2% of cases in literature



Other options



Offer oral antibiotics

A single site study showed that giving SOME oral (PO) antibiotics is better than none at all if patients leave early

A 2021 systematic review of prospective, controlled trials showed that stepping down to PO antibiotics is effective in certain patients

Off label IV antibiotics

Long acting IV antibiotics are approved for skin & soft tissue infections. Off-label use for endocarditis and osteomyelitis has been described, though more studies are needed. A randomized trial of n=80 patients with osteomyelitis showed that 2 doses of a long acting IV antibiotic was effective. Here's what we know from one case series of n=32 people who use drugs with serious *Staphylococcus aureus* infections:

- 56% clinical response
- 31% lost to follow up
- Average cost/dose ~ \$4,000

References

- 1) Lennox et al IJDP 2021
- 2) McNeil R, Soc Sci Med 2014
- 3) Fanucchi et al J Subst Abuse Treat 2018
- 4) Suzuki et al OFID 2018
- 5) Fanucchi et al CID 2020
- 6) Marks LR et al CID 2019
- 7) Wald-Dickler et al Am J Med 2021
- 8) Rappo OFID 2018
- 9) Bryson-Cahn 2019

Antimicrobial Discharge Considerations

- **Patient goals and preferences**
 - *Understands risks/benefits of options (see conversation guide)*
- **Infection type**
 - *Antimicrobial treatment duration and options*
- **Antimicrobial administration and setting**
 - *Phone, insurance, transportation, environment*
- **Substance use history**
 - *Should not necessarily exclude someone from being discharged with PICC*
- **Discharge needs**
 - *Nursing or other services needed*
- **Access to outpatient care**
 - *(PCP, mental health, ID, substance use)*



Prior to discharge, discuss:

- ✓ **Overdose prevention**
 - *Prescribe naloxone*
- ✓ **Infection prevention**
 - *Safer use*
 - *Vaccinations*
 - *STD screening*
 - *Pre-exposure prophylaxis for HIV*
 - *TB screening*
 - *Referral for viral hepatitis care*

References

Sikka et al, BMJ 2021

Thakarar et al, PMJ 2016