Effective Substance Abuse Treatment: Inpatient Bridges to Outpatient Care

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CASE REPORT

HM, 46 YO F
PMH:

- Asthma, COPD
- Hep C
- IVDU
- Depression
- Urinary incontinence

Allergies: NKA
Medication: suboxone 8mg-2mg sublingual BID
Tobacco: 32 pack years of cigarettes, quit 06/2020
Illicit drugs: IV heroin and crack cocaine (13 year history),
currently 3 years sober
Hospital history:

- 10/2017: seen in ED for septic emboli and pneumonia, reported daily IV heroin and crack cocaine use (both used morning of ED admission)
- Met with addiction medicine doctor during hospitalization regarding substance abuse
- Was discharged on suboxone (1 week prescription) with follow up in addiction clinic
- Follows up in outpatient clinic weekly → biweekly → monthly → now every 3 months for suboxone refills
- Monthly therapy for relapse prevention and depression
- Monthly UDS at clinic

DIAGNOSIS

1. Opioid taken in larger amounts or over a longer period than intended
2. Persistent desire or unsuccessful efforts to cut down or control opioid use
3. A lot of time spent obtaining, using, or recovering from the effects of the opioid
4. Craving or a strong desire to use opioids
5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home
6. Continued use despite persistent or recurring social or interpersonal problems caused or exacerbated by opioid use
7. Stopping or reducing important social, occupational, or recreational activities due to opioid use
8. Recurrent use of opioids in physically hazardous situations
9. Continued use despite knowledge of having persistent or recurrent physical or psychological problems cause or worsened by opioid use
10. Tolerance as defined by either a need for markedly increased amounts to achieve intoxication or desired effect or by markedly diminished effect with continued use of the same amount (does not apply when used appropriately under medical supervision)
11. Withdrawal manifesting as either characteristic syndrome or the substance is used to avoid withdrawal (Does not apply when used appropriately under medical supervision)

Data were derived from Saunders.[10]
*A minimum of 2-3 criteria is required for a mild substance-use disorder diagnosis, while 4-5 is moderate, and 6-7 is severe. Opioid-use disorder is specified instead of substance-use disorder, if opioids are the drug of abuse.

Figure 1. Opioid disorder diagnostic criteria from the Diagnostic and Statistical Manual, 5th edition.[1]

BACKGROUND

- Women have been affected disproportionately by the opioid epidemic. From 1999 to 2017, overdose deaths in men increased by 225%, while those in women have increased by 270%.2 Research shows that women are more likely to be prescribed opioids, be diagnosed with chronic pain disorders, and experience negative outcomes associated with opioids.3. Opioid use disorder (OUD) is frequently treated with a combination of medication and counseling, and it has been estimated that the risk of death in OUD patients receiving long-term medication-assisted treatment (MAT) is 50% lower than those who are not.4
- Despite the demonstrated efficacy in MAT, medications such as methadone and buprenorphine are not used to their full potential. Some OUD patients are treated with solely psychological counseling, but these individuals have higher rates of relapse than those who receive MAT in addition to counseling.4 However, access to MAT is limited in many settings due to a variety of barriers to care, such as the need for frequent healthcare appointments and difficulties in initiating treatment.
- Many primary care physicians are not able to prescribe MAT due to needing additional training and due to limits placed on the number of patients they can treat at a time with buprenorphine.5 Methadone and buprenorphine, as the two most commonly prescribed MATs in the US, are prescribed in different ways, with methadone doses needing to be doled out daily, while buprenorphine prescriptions can be given out up to a month at a time.6 Making buprenorphine more accessible to OUD patients through increased inpatient prescribing is one proposed avenue to increasing MAT.

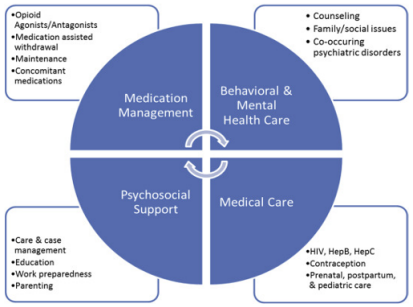

Figure 2. A plan for the treatment of OUDs.[6]

DISCUSSION

- Current strategies to address opioid addiction, such as social work consultation and referral to outpatient addiction management without inpatient treatment, have consistently been proven to be suboptimal;[7] if the patient in this case study had not been offered the necessary inpatient medical treatment that she received, research suggests that she would likely be at risk of high rates of reinfection and readmission.[7] Furthermore, the high rates of morbidity and mortality associated with drug-use associated infective endocarditis made effective treatment of this patient's SUD a medical necessity.[8]
- The successful initial management and continued treatment of the individual in this case study emphasize the efficacy of the inpatient bridging model to address substance use disorder. This model consists of initial pharmacological therapy (i.e., Buprenorphine) with a referral to outpatient addiction management. The bridging model's success in this case study is further supported by research that demonstrates its ability to increase rates of post-discharge abstinence and to decrease rates of readmission related to opioid use disorder.[9,10] Furthermore, with about a quarter of hospitalized patients having SUD, it is a necessity and priority to build a concise plan on starting inpatient treatment.[11]
- Although research shows that many patients with SUD have an interest in reduction or cessation of substance us[12], patients admitted for substance use-related complications are often discharged without a discussing addiction or treatment options with their physician; even fewer are discharged with a concrete plan for use reduction or cessation.[7] This points to a significant opportunity for the expansion of substance use recovery management.
- Despite the significant need for such a service, significant barriers to this bridging model exist. Medications for SUD are frequently under prescribed and most hospitals lack inpatient addiction medicine services.[12] There are regulatory barriers that can limit the access of these services. Physician knowledge of treatment options and comfort managing a treatment plan may further limit this model's use[13]. Patients may face individual barriers that impact their ability to access treatment, as well.[14]
- Nevertheless, if these services are available to patients while admitted, it increases the chances that the patients are started on SUD treatment and can transition to an outpatient program.[12] For these reasons, it is a necessity and a priority to build a more concise plan on starting SUD treatment in an inpatient setting.

CONCLUSIONS

- Opioid use disorder is a public health crisis with significant unmet treatment needs.
- This is a treatment option that has been shown to work. This patient is an example
- This patient was started on suboxone upon discharge. This intervention point is a missed opportunity for many patients that has been shown to significantly impact their likelihood of accessing treatment for SUD after discharge.
- Despite the demonstrated effectiveness of MAT, there are significant barriers to implementation of programs, as well as patient access.
- An expansion of information and training in managing SUD treatment is necessary for physicians to better patients.

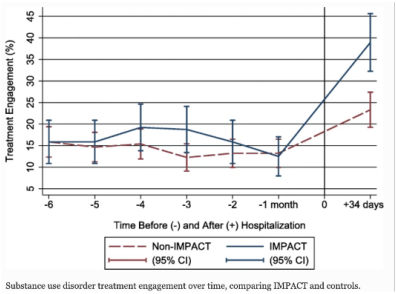

Figure 3. Patients enrolled in MAT program show higher rates of treatment engagement, compared to patients not enrolled in program[12]. Graph source: Englander et al.

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