Increasing the Treatment of Alcohol Dependence in the Inpatient Hospital Setting Through Implementation of a Discharge Planning Tool

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The Problem
Alcohol-related complications are among the top three reasons for 30 day readmission to San Francisco General Hospital (SFGH). As SFGH in 2010-11, 10% of medicine patients had a documented alcohol related illness, and 19% of them were readmitted within 30 days. Although there are national hospital-based improvement initiatives aimed at providing standardized, comprehensive, evidence-based care for the other top two reasons for readmission, heart failure and pneumonia, no such initiative exists around alcohol-related admissions.

No research has been done on a coordinated plan of care upon discharge for patients admitted with alcohol-related complications. This transition from inpatient to outpatient is a critical and frequently missed opportunity for patients to be screened for alcohol dependence, started on pharmacotherapy and linked to counseling. Naltrexone (an opioid antagonist) has been FDA approved for the treatment of alcohol dependence since 1994, and there has been considerable data to date to support its safety and efficacy. Despite this data, naltrexone has rarely been used, if at all, to treat patients with alcohol dependence at SFGH.

Project Goals
1. To assess the barriers in initiating treatment for alcohol dependence on the inpatient service
3. To design a discharge planning tool for residents to use to implement the alcohol dependence treatment bundle
4. To evaluate the early impact of the March 2012 implementation of this discharge protocol

Project Timeline
June 2011 Baseline chart review of patients discharged from the medicine service (Figure C)
Formulation of Alcohol Dependence Bundle and Discharge Planning Tool (Figure B)
March 2012 Post-Intervention chart review (Figure D)
June July Aug Sept Oct Nov Dec Jan Feb March April May
Key informant interviews with residents, pharmacists, social workers, and substance use counselors at the Treatment Access Program to assess barriers to treatment and referrals (Figure A)
Implementation of Discharge Planning Tool. Presentation at Joint Attending Rounds on March 2, 2012

Results / Progress to Date

Barriers to Initiating Pharmacologic Therapy or the Treatment of Alcohol Dependence
- Lack of knowledge about available options
- Concerns around efficacy
- Concerns about side effects
- Insurance coverage
- Limited time to discuss with patients
- Lack of primary care or follow up

Figure A: Barriers to Treatment

Pre-Intervention June 2011 Chart Review

Post-Intervention March 2012 Chart Review

The Quality Gap: Naltrexone has been shown to be the most effective medication to treat alcohol dependence. Although some patients are ineligible for naltrexone because of opioid use (~30%) or severe liver dysfunction (~10%), over 50% of patients are eligible for naltrexone, yet NONE of them were prescribed this medication in June 2011.

Process Measure: Through the use of a discharge planning tool, rates of prescription for naltrexone increased from 0% to 52%.

Outcome Measure: After implementation of a discharge planning tool that reinforced the alcohol dependence treatment bundle, 30 day readmission rates decreased from 27% to 13%.

Conclusion: With a discharge planning tool, residents are able to screen for alcohol dependence, assess naltrexone eligibility, prescribe medication and refer outpatient management during an inpatient hospitalization.

Next Steps
- Expand the discharge planning tool to services outside of medicine, including the cardiology service and faculty inpatient service
- Establish quality metrics for alcohol related admissions, similar to designated quality metrics for other top reasons for 30 day readmission to SFGH
- Collaborate with Bridge Clinic, SFGH's discharge clinic, to assist with alcohol dependence treatment follow up and medication refill
- Link this inpatient effort to the established ambulatory training initiatives to improve education around treatment of alcohol dependence on the outpatient side

Lessons Learned
- The Problem: Of all patients admitted to the medicine service at SFGH, 25% have alcohol related illnesses, and 19% of them are readmitted within 30 days.
- The Quality Gap: Naltrexone has been shown to be the most effective medication to treat alcohol dependence. Although some patients are ineligible for naltrexone because of opioid use (~30%) or severe liver dysfunction (~10%), over 50% of patients are eligible for naltrexone, yet NONE of them were prescribed this medication in June 2011.
- Process Measure: Through the use of a discharge planning tool, rates of prescription for naltrexone increased from 0% to 52%.
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- Conclusion: With a discharge planning tool, residents are able to screen for alcohol dependence, assess naltrexone eligibility, prescribe medication and refer outpatient management during an inpatient hospitalization.

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