

Process Improvement for Implementation of a Validated Substance Use Screening Tool for all Patients in a General Medicine Inpatient Unit

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Background

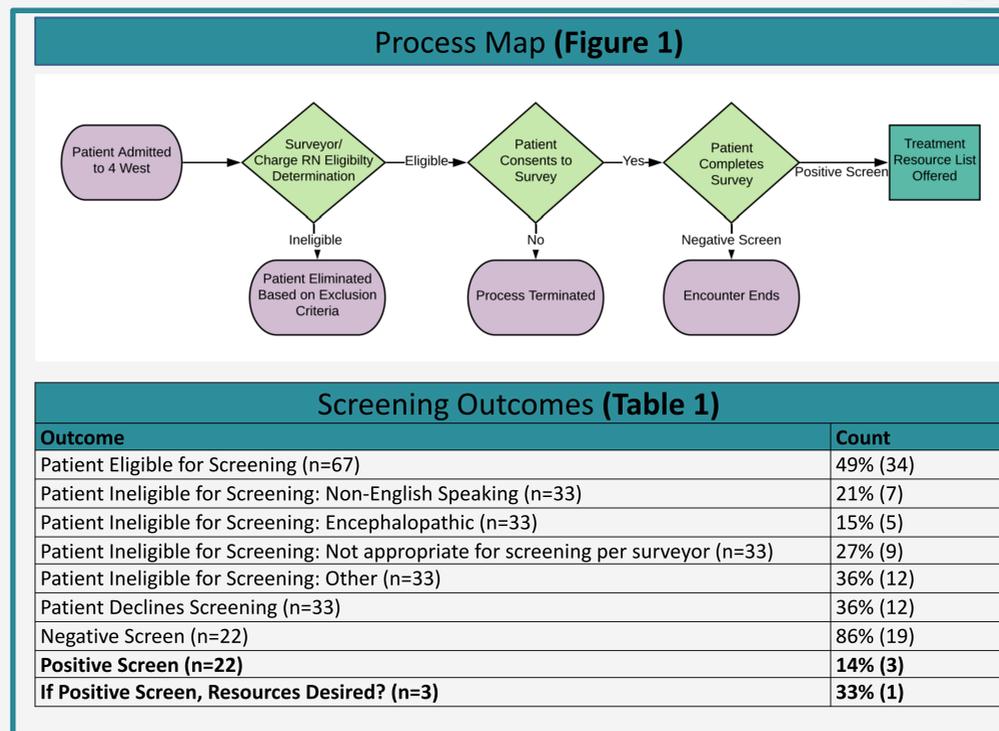
In 2017, an estimated 21 million US adults, equivalent to 1 in 13 people, had a substance use disorder.¹ In 2015, New Mexico had the 8th highest overdose death rate in the nation with the highest number of overall deaths occurring in Bernalillo County.² Screening at the time of presentation to the hospital can provide an important opportunity to offer resources and direct care appropriately. At the time of this study, University of New Mexico Hospital did not have a tool to identify patients with substance use disorders (SUD) as part of intake protocols. Similar studies conducted previously found that factors important to successful implementation include: comprehensive education and training, intra and inter-organization communication and collaboration, host site and practitioner support, and champions to lead and direct management of the program.^{3,4}

Project Description

A nursing survey to assess buy-in and potential barriers to successful SUD implementation was completed to inform how a screening protocol could be most effectively incorporated into workflow. Subsequently, a patient SUD screening pilot was launched on 4 West, the largest UNMH inpatient adult medical-surgical unit, over a 14-day period in 2019. The Drug Abuse Screening Tool 10 question or DAST-10 (Table 2), an evidence-based, sensitive, and specific tool for identification of substance use, was selected for implementation.⁵ All patients admitted to the unit over the course of the pilot were screened for eligibility. The screening was then administered to those eligible and willing (Figure 1).

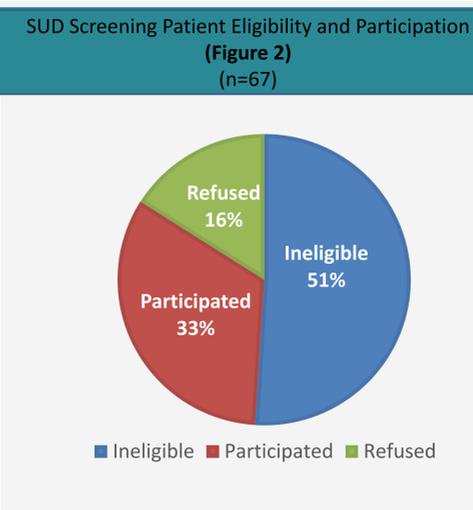
Exclusion criteria included non-English speaking, encephalopathic or if otherwise deemed inappropriate for screening by the surveyor (e.g. clinically inappropriate).

Patients with a positive screen were assessed for interest in treatment and offered a compilation of local resources for support.



DAST-10 Screening Questionnaire (Table 2)

These questions refer to the past 12 months	No	Yes
1. Have you used drugs other than those required for medical reasons?	0	1
2. Do you abuse more than one drug at a time?	0	1
3. Are you always able to stop using drugs when you want to? (If never use drugs, answer "Yes")	1	0
4. Have you had "blackouts" or "flashbacks" as a result of drug use?	0	1
5. Do you ever feel bad or guilty about your drug use? If never use drugs, choose "No"	0	1
6. Does your spouse (or parents) ever complain about your involvement with drugs?	0	1
7. Have you neglected your family because of your use of drugs?	0	1
8. Have you engaged in illegal activities in order to obtain drugs?	0	1
9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	0	1
10. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.?)	0	1



References

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Results

Surveyed nurses (n=19) indicated strong buy-in for SUD screening with 94% of those surveyed indicating that they agreed or strongly agreed that SUD screening was important. Barriers to implementation identified included: patient fear admitting drug use for legal/ social reasons, time required to complete screening and fitting it into workflow, and acuity of illness or cognitive barriers that would preclude screening.

A total of 67 patients admitted to the unit were reviewed. Of the 67 patients, 33 patients (49.2%) were eligible for screening (Figure 2). Primary reasons for ineligibility included: inappropriate for screening based on surveyor judgment (27.3%), non-English speaking (21.2%), and patient was encephalopathic (15.2%). In total, 22 patients agreed to participate in the survey and 11 patients declined. Of the 22 participants, 3 (13.6%) screened positive on the DAST-10. Of those who screened positive for substance use, one patient was interested in receiving resources (Table 2).

Conclusion

In this proof-of-concept pilot, performance of the DAST-10 survey led to the identification of 14% of hospitalized patients on 4 West with a SUD. Beyond the ability of the screen to identify a number of patients with SUD, performance of the survey was able to be tied to treatment linkage.

Key identified barriers to implementation included staff time to complete screening, patient willingness/comfort to answer screening questions, and a significant number of patients who were not able to answer screening questions due to language barriers or acute illness and encephalopathy.

Future directions for this project include creating an EMR based version of the screen included in the admission workflow for all inpatient units and the ED, a Spanish Language version, an automatic referral to a future substance use consult service for all positive screens as well as reminders to complete the screen prior to discharge.