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#### Reducing Substance Use by an Emergency Department Intervention

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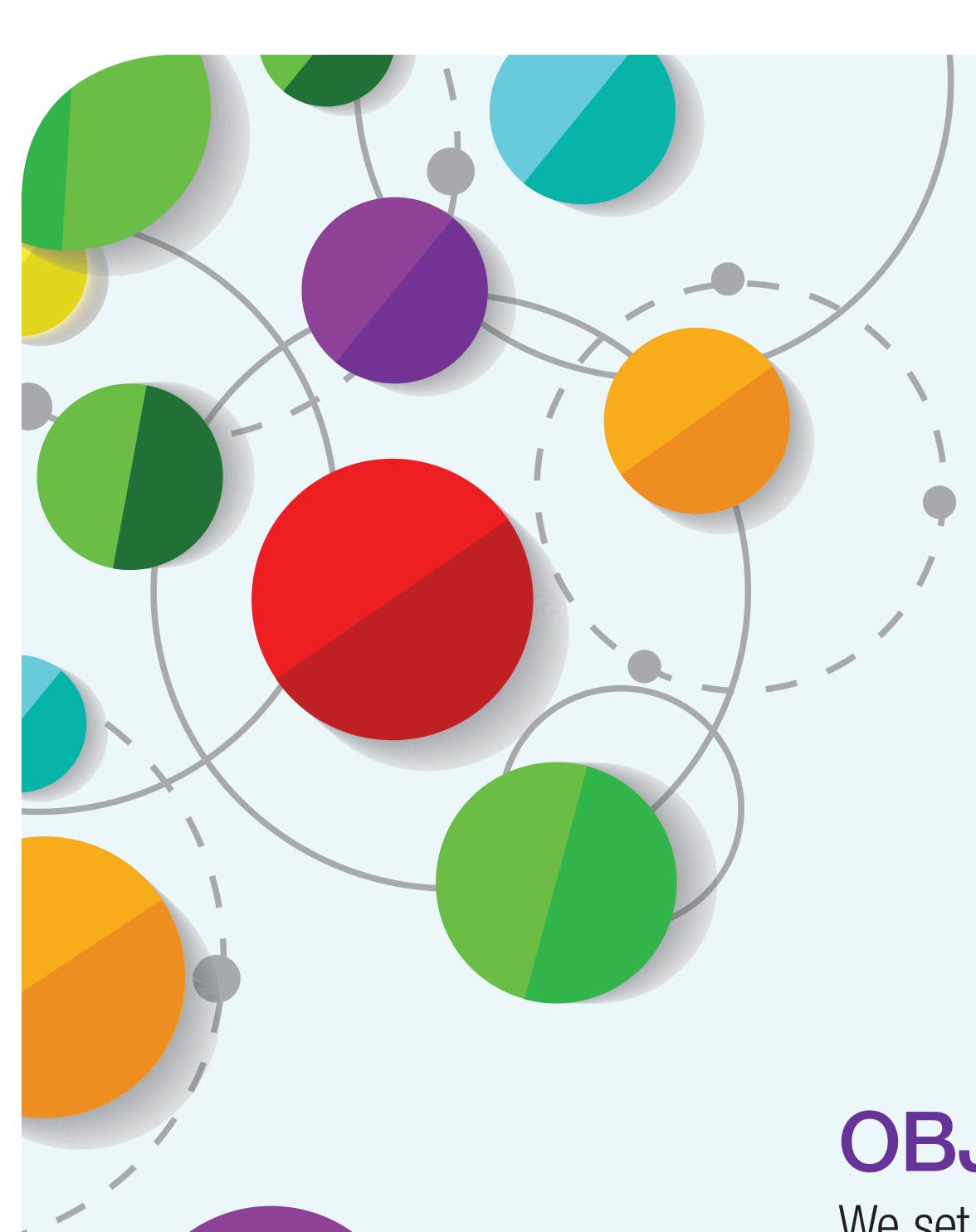
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# Reducing Substance Use by an Emergency Department Intervention

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## OBJECTIVE

We set out to determine substance use reduction rates after a brief emergency department (ED) intervention for patients with tobacco, alcohol, street drug, and/or misuse of potentially addictive prescription medication use.

# METHODS

In this pilot study, we approached a convenience sample of subjects in two emergency departments in Northeastern Pennsylvania during scheduled provider times. One site was a large tertiary care level one trauma center, while the other a smaller community hospital. To be eligible to participate, subjects had to be 18 years or older, have capacity to answer survey questions and participate in the program interventions, not be critically ill, and be willing to participate in the intervention program. In addition, participating subjects must have been willing to admit to unhealthy use of one or more of the following: tobacco products, alcohol, street drugs, or addictive prescription drugs. If all inclusion criteria were met, subjects received a structured survey and intervention tool that was previously validated, a brief intervention based on motivational interviewing, and referral to treatment. The intervention was carried out by either a medical student, Emergency Medicine (EM) Resident, or an Addiction Recovery Specialist (a licensed social worker, and certified recovery specialist with lived substance use disorder experience). Phone follow-up between approximately six weeks and six months was used to determine current substance utilization by the patient.

### RESULTS

A total number of 105 patients received an intervention regarding tobacco usage, 54 people received an intervention regarding alcohol usage, and 32 received an intervention for drugs. At follow-up, of the 105 patients in the tobacco category, 16 (15%) had stopped smoking, 51 (48.6%) patients reported a decrease in the amount of tobacco they used (decrease in the absolute amount of cigarettes used per day) and 32 (30.5%) had attempted to quit. Of the 54 patients in the alcohol category, 40 (74.1%) patients reported either a decrease in the number of days per week of drinking, or a decrease in the number of drinks had per day. Of the 32 patients in the drug use category, 25 (78.1%) patients reported a decrease in usage since the intervention.

# CONCLUSIONS

In this pilot study involving medical students, EM residents and multiple ED's, we found that a brief intervention targeted at patients with unhealthy tobacco, alcohol and drug use resulted in overall decreased substance use. A more robust study, with a larger patient sample size, and longer term outcomes is indicated.

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