A hospital-based approach to smoking cessation

Introduction & Background

Smoking is responsible for approximately 20% of all cause mortality in the US. It is a modifiable risk factor for coronary heart disease, stroke, COPD, and many types of cancer. In a 2015 census, 21.9% of Louisiana adults reported active tobacco use, and 39.8% million were spent on tobacco-related hospitalizations in the state. Patients with tobacco-related diseases often continue to smoke upon discharge and have multiple hospital readmissions. At University Medical Center New Orleans (UMCNO), physicians can refer patients to an outpatient smoking cessation clinic, however there is currently no uniform approach to inpatient tobacco cessation counseling. According to best practices, initiating smoking cessation counseling during admission and including patients in follow-up for up to 6 months post-discharge improves long-term outcomes.

Aim

- To reduce smoking rates among UMCNO admissions
- To begin smoking cessation interventions before patients are discharged from initial inpatient visit
- To reduce hospital readmissions for smoking-related diseases
- To create an inpatient tobacco cessation counseling protocol and increase referrals to UMCNO’s outpatient clinic
- To measure patient-reported smoking status and readmissions at 1, 6, and 12 months

Methods

1. Nurses document patients’ smoking status on intake exam
2. A report with smoking status of all patients is generated daily and sent to all respiratory therapists (RTs)
3. RTs counsel patients using a uniformed script, answer questions, offer NRT or other cessation medication
4. Physicians refer patients to outpatient clinic for follow up

Figure 1: Tobacco Cessation Workflow: Our intervention follows patients from intake through discharge and follow up

Intervention Date

Figure 2: Patient intervention rate. Our preliminary data show an average daily prevalence of 33% tobacco users in all patients admitted to UMCNO, which is significantly higher than the state and national averages of 21.9% and 15.1%, respectively. These data include patients admitted for observation and in behavioral health units, however they do not include patients in the ER. The grey bars and numbers represent the number of patients our respiratory therapist is able to counsel each day. Orange bars represent active tobacco users who our team was not able to visit, and blue bars represent non-smokers.

Figure 3: Patient intervention by type. Of the patients the our team was able to counsel (grey bars, numbers in figure 2), the vast majority were interested in some form of medical intervention. 69% of patients received a Nicotine patch, 1% requested gum, and 7% received another medication. 3% of patients were registered for a statewide Smoking Cessation Trust (SCT). 20% of patients addressed declined intervention post-counseling. All interventions were documented in patient charts and physicians notified to continue cessation medication on discharge.

Conclusions

- Tobacco is the leading cause of preventable death in the US. Intervening during patients’ hospital stay improves smoking cessation rates and thus decreases hospital readmissions and mortality due to tobacco-related illnesses.
- UMCNO currently has a 33% smoking prevalence, higher than the national and state averages.
- Patients at UMCNO are amenable to smoking cessation options when presented with them.

References

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/

1 Centers for Disease Control and Prevention. State Tobacco Activities Tracking and Evaluation (STATE) System. Available at: https://www.cdc.gov/statesystem
