University of Washington Inpatient Tobacco Cessation Program Grant ID 044590: Final Progress Report

Name and contact information of Primary Investigator/Project Director:

Abigail Halperin MD, MPH, Department of Family Medicine, UW School of Medicine 4311 11th Ave NE, Suite 210, Seattle, WA 98105. Phone 206.616.4482, abigail@uw.edu

SUMMARY OF PROGRAM COMPONENTS PROGRESS AND MEASURES

TTM-1: Screen all in-patients for tobacco use.

- a) Incorporated Meaningful Use smoking questions into electronic medical records (ORCA and EPIC systems) at University of Washington Medical Center (UWMC) and Harborview (HMC) hospitals in April of 2013. This has increased the prioritization of tobacco use screening, with compliance increasing from an average of 90% of patients screened before the project (2011) to 98% afterwards (2013) at UWMC, and from an average of 69% to 85% at HMC during the same time periods (Tables 1 and 2).
- b) Smoking rates among admitted patients screened at the two hospitals reveals a great disparity between the two populations; patients at HMC smoke at three times the rate of patients at UWMC. 11% of UWMC patients reporting current smoking, compared with 33% of HMC patients (Figures 1 and 2).

TTM-2: Offer treatment (medication and counseling).

- a) Medication: Implemented computerized physician order entry (CPOE) for nicotine replacement therapy (NRT) at UWMC and HMC. This modestly increased the number of patients who were offered, accepted and received NRT during their hospital stay from baseline. Unfortunately, due to a change in the EMR intake form in November, we saw declines in NRT orders at UWMC, although not at HMC. We are currently investigating the origin of and potential remedy for this decline in NRT use at UWMC (Figures 3 and 4).
- b) Counseling: Identified and addressed an issue related to faulty skip logic in admission intake form whereby patients who declined offer of NRT were not being offered counseling. After the form was revised, counseling offer and uptake increased, including cases whereby patients who declined offer of NRT but accepted counseling received NRT after counseling by pharmacist. We saw this as a promising development for increasing provision of evidence-based treatment, as counseling and medication together are more effective than either one alone. However, with the EMR changes that took place in November (described above) we saw declines in provision of counseling at the bedside. We are currently investigating how to address this problem as well (Figures 5 and 6).

TTM-3: Provide discharge instructions, medications and follow up resources at discharge.

- a) Pharmacists at UWMC provided NRT and counseling at the bedside as well as discharge instructions. Pharmacy student interns were also trained to provide tobacco cessation counseling at the bedside and at time of discharge for increased continuity.
- b) Of the 42% of current smokers who received NRT in the hospital, nearly half (49%) received NRT on discharge from HMC; at UWMC, of the 38% who received NRT in the hospital, over half (58%) received NRT on discharge.
- c) All patients discharged from the hospital receive written advice on the discharge summary to quit tobacco if they are smokers or use other tobacco products, along with referral information for follow up with the WA State Quitline or the patient's primary care provider.

Compliance rate for tobacco use screening at UWMC and HMC after project implementation

Table 1. UWMC (n=14,281)

Month	Inpatients
	screened (%)
April 2013	97
May 2013	98
June 2013	99
July 2013	97
August 2013	98
September 2013	98
October 2013	98
November 2013	99
December 2013	98
January 2014	97
February 2014	97

Table 2: HMC (n=11,813)

Month	Inpatients screened (%)
April 2013	84
· ·	<u> </u>
May 2013	83
June 2013	86
July 2013	88
August 2013	86
September 2013	87
October 2013	85
November 2013	85
December 2013	84
January 2014	85
February 2014	85

Smoking status of admitted patients using Meaningful Use screening questions

Figure 1

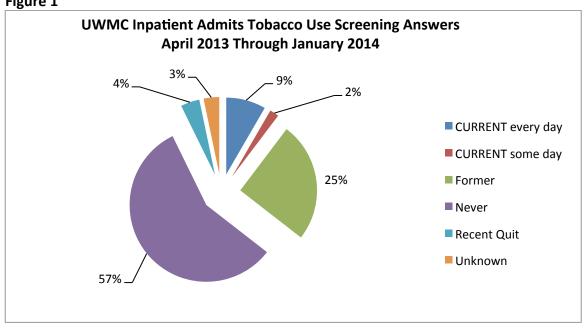


Figure 2

