Project Demonstration & Documentation

Project Documentation - step By step Project Development Procedure

Team Id	NM2023TMID04415
Project Name	Block chain Technology For Electronic Health Records

Abstract:

Background:

While the majority of smokers visit a primary care physician each year, only a small proportion of them receive evidence-based tobacco dependence treatment. The electronic health record (EHR) provides an opportunity to prompt clinicians to deliver tobacco dependence treatment in primary care.

Methods:

Over 1 year, Dean Health Systems worked with the University of Wisconsin School of Medicine and Public Health to modify the existing Dean EHR system (Epic Systems Corp, Verona, Wisconsin) to improve identification and treatment of adult smokers visiting primary care clinics. Modifications included evidence-based prompts that helped guide medical assistants to identify smokers and clinicians to deliver a brief tobacco cessation intervention (medication and Wisconsin Tobacco Quit Line referral). Eighteen primary care clinics provided data 1 year before and 1 year after implementing the EHR modifications.

Results:

A higher percentage of adult patients had their tobacco use status identified after EHR modification compared to pre-implementation (71.6% versus 78.4%, P < .001). During the post-implementation year, 6.3% of adult smokers were prescribed tobacco cessation medication, 2.5% of adult smokers had documentation of counseling, and 1.5% of adult smokers had counseling billed (pre-implementation data not available).

Conclusions:

This demonstration project showed that a large health care system can increase the delivery of tobacco dependence treatment interventions (increased identification of smokers and relatively high rates of delivering specific tobacco dependence clinical interventions) building on an existing EHR platform. The project demonstrated that brief, evidence-based tobacco dependence interventions can be incorporated into primary care, especially when the EHR is used to improve clinic workflow.

Figures:

Figure 1: EMR Screenshot of vitals section...

Figure 2: EMR Screenshot prompted clinical intervention...
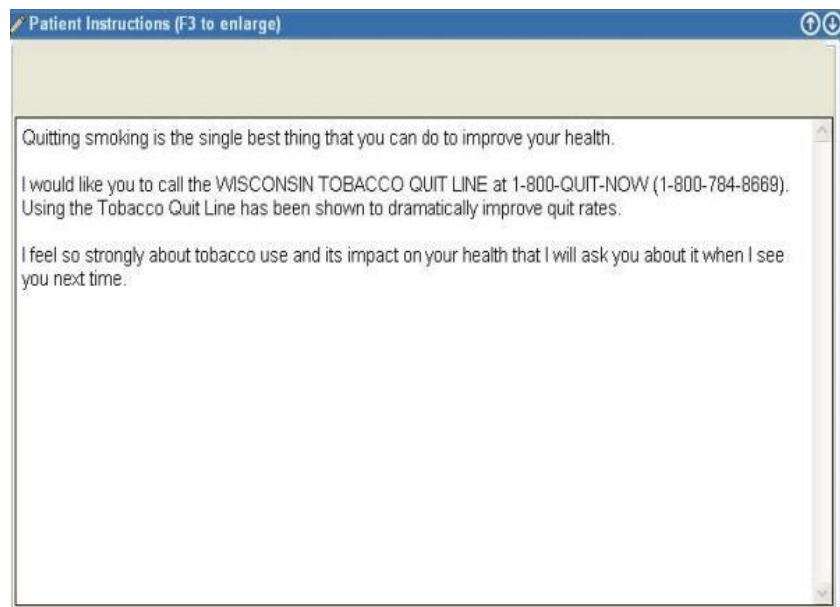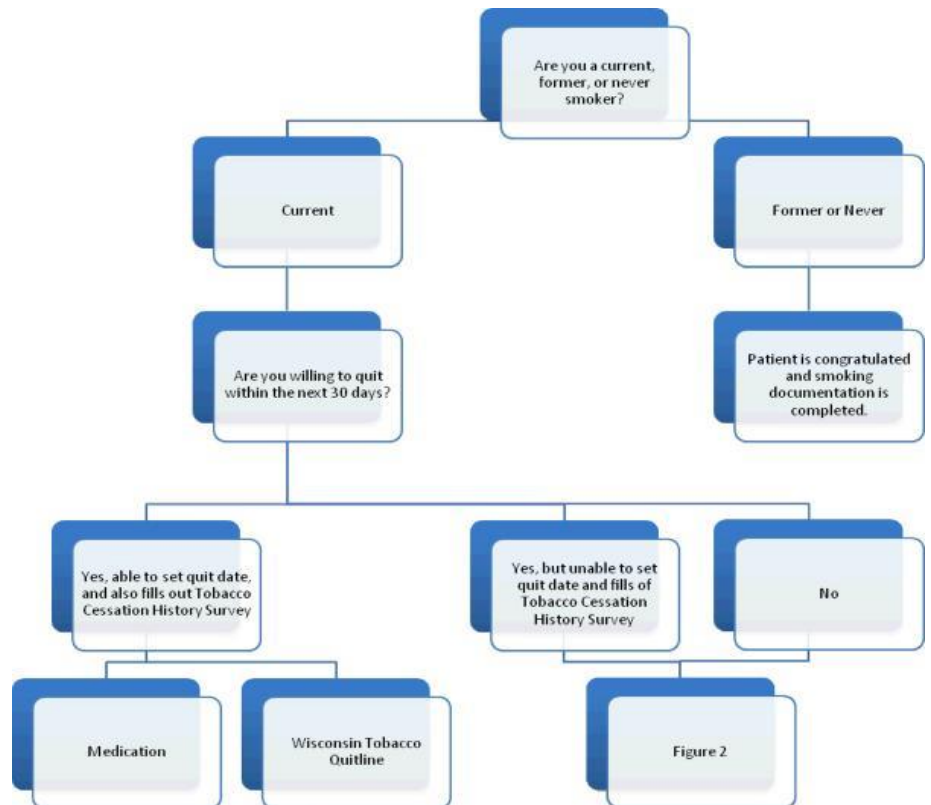
Figure 3:EMR Screenshot demonstrating printable instructions...

Figure 4: Clinic workflow diagram for adult…

References:

1.Tomar SL, Husten CG, Manley MW. Do dentists and physicians advise tobacco users to quit? J Am D Assoc. 1996;127:259–265. - **PubMed**

2.Fang CY, Ma GX, Miller SM, et al. A brief smoking cessation intervention for Chinese and Korean American smokers. Prev Med. 2006;43:321–324. - **PubMed**

3.Ferreira-Borges C. Effectiveness of a brief counseling and behavioral intervention for smoking cessation in pregnant women. Prev Med. 2005;41:295–302. - **PubMed**

4.Fiore MC, Jorenby DE, Schensky AE, et al. Smoking status as the new vital sign: effect on assessment and intervention in patients who smoke. Mayo Clin Proc. 1995;70:209–213. - **PubMed**

5.Glasgow RE, Whitlock EP, Eakin EG, et al. A brief smoking cessation intervention for women in low-income planned parenthood clinics. Am J Public Health. 2000;90:786–789. - **PMC** - **PubMed**