

Leveraging the Electronic Health Record (EHR) to Achieve Tobacco Systems Change

Case Study: Alaska Native Tribal Health Consortium (ANTHC) & Alaska Native Medical Center (ANMC)

- Tobacco Free Campus Policy + Enforcement
- Ask, Advise, Refer
- Documentation + Electronic Health Records (EHR)
- Billing + Reimbursement Strategies
- Use of Alaska's Tobacco Quit Line
- Quit Medication

Introduction

Alaska Native Medical Center (ANMC) provides comprehensive inpatient and outpatient medical care to Alaska Native and American Indian people. The Alaska Native Tribal Health Consortium (ANTHC) and Southcentral Foundation (SCF) jointly own and manage ANMC under the terms of Public Law 105-83. These parent organizations have established a Joint Operating Board to ensure unified operation of health services provided by ANMC. The mission of ANMC is *working together with the Native Community to achieve wellness by providing the highest quality health services for all Alaska Natives.*

In 2006, ANMC became the second health care center in Alaska to pass a comprehensive tobacco-free campus policy and institute Centers for Disease Control and Prevention (CDC) best practices for treating tobacco use and dependence into clinical protocols. ANTHC funding was set aside to create a tobacco prevention and control program to provide cessation services for patients, employees and visitors to the ANMC campus and educate ANMC clinical staff about the cessation protocols and the referral process for patients to receive tobacco cessation services.

In 2011, the Joint Commission¹ introduced a new set of optional performance measures to address tobacco cessation for all hospitalized patients. ANTHC and ANMC leadership seized upon this challenging new opportunity and decided to adhere to these optional performance measures, as part of a quality improvement initiative, to strengthen the provision of tobacco treatment at ANMC and reduce the high prevalence of tobacco use among Alaska Native People. To rise to this challenge, ANTHC strengthened the clinical workflow processes at ANMC for treating tobacco use and dependence by leveraging the Electronic Health Record (EHR) system to improve and increase tobacco screening and the use of tobacco brief intervention –Ask, Advise, Refer (AAR). ANTHC and ANMC sought to strengthen, in particular, the second and third steps of the tobacco brief intervention and improve the likelihood that patients would not only be *asked* if they use tobacco but also be *advised* about the benefits of quitting and *referred* to treatment, provided in-house by tobacco treatment specialists working within ANTHC’s Tobacco Prevention and Control Program.

Optional Joint Commission Tobacco Metrics

TOB-1: Tobacco Use Screening

Hospitalized patients who are screened during the hospital stay for tobacco use (cigarettes, smokeless tobacco, pipe and cigars) within the past 30 days.

TOB-2: Tobacco Use Treatment Provided or Offered

Patients identified as tobacco product users within the past 30 days who receive or refuse practical counseling to quit AND receive or refuse FDA-approved cessation medications during the hospital stay.

TOB-3: Tobacco Use Treatment Provided or Offered at Discharge

Patients identified as tobacco product users within the past 30 days who were referred to or refused evidence-based outpatient counseling AND received or refused a prescription for FDA-approved cessation medication upon discharge.

TOB-4: Assessing Status after Discharge

Discharged patients who are identified through the screening process as having used tobacco products within the past 30 days who are contacted within 30 days after hospital discharge and follow-up information regarding tobacco use

¹ The Joint Commission is an independent, not-for-profit organization, that accredits and certifies more than 20,000 health care organizations and programs in the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization’s commitment to meeting certain performance standards. <http://www.jointcommission.org/>

A Strategic Initiative Commences

The ANTHC Board of Directors invites staff to submit proposals for strategic initiative funding. With a limited amount of money, these initiatives reflect organizational priorities to improve the health of Alaska Native People. In 2012, the Board of Directors selected an ambitious strategic initiative proposed by the ANTHC Tobacco Prevention and Control Program to increase tobacco cessation referral rates and provide treatment to 100% of patients referred to the tobacco program. The initiative began in October 2012 and was funded for two years.

Advocates on Staff

ANTHC has long studied the impact of tobacco use on the Alaska Native and American Indian population. This knowledge paved the way to making the reduction of patient tobacco use a major organizational priority. The ANTHC Division of Community Health Services is home to many notable tobacco prevention champions in Alaska including the Director of the Division, Dr. Jay Butler; Director of Wellness and Prevention, Dr. Gary Ferguson; and Tobacco Prevention and Control Program Manager, Karen Doster. The team recognized the important role of the health care provider in advising a patient to quit and the significance an EHR can have on developing a strong system for referring individuals for tobacco cessation services. This team pitched the tobacco initiative idea successfully to the ANTHC Board of Directors and now drives the initiative's successful implementation. The ANTHC Board of Directors received more than fifty applications for strategic initiative funding. The tobacco prevention and control strategic initiative was one of only 10 prevention strategies selected to become an organization-wide priority.

Tobacco Prevention and Control Strategic Initiative

The strategic initiative seeks to institute tobacco-related systems change across ANMC. The initiative works to build an environment in which every health care provider asks every patient about tobacco use at every visit, all ANMC patients who use tobacco are advised to quit and offered a referral to the tobacco cessation program. All patients referred to the tobacco cessation program are given the opportunity to receive tobacco cessation services or may decline cessation help. The foundation of this process is the EHR that prompts providers through these steps and "orders" the referral to the tobacco cessation team.

“The work of our research department inspired and helped lead the board to select this strategic initiative.”

– Dr. Gary Ferguson

Strategic Initiative Goals

1. Provide AAR training to the clinics and wards within ANMC (Year 1)
2. Refer all patients identified as a tobacco user to the tobacco treatment program (Year 1-2)
3. Track how many patients are referred to the program and how many accept or refuse services (Year 1-2)

The strategic initiative addresses utilization of the ANTHC tobacco cessation program to ensure that ANMC meets the measures set forth by Joint Commission. At the inception of the project in October 2012, the baseline for provider referrals to the tobacco treatment program (the proportion of patients identified as tobacco users who were referred to the cessation program) was 8.4%. As of November 2013, the rate of patient referrals to the tobacco treatment program was 21.4%. Since the strategic initiative's third month, all patients referred to the tobacco program's cessation services have been offered tobacco treatment. Of those who enroll in the program and set a quit date, nearly 35% are still intending to quit at six months.

Ask, Advise, Refer (AAR) + Electronic Health Record (EHR)

At the outset of the strategic initiative, the team faced three implementation challenges: helping providers feel comfortable advising patients to quit, making the referral step as easy as possible for providers, and creating a streamlined referral process within the EHR system. Since the inception of the project, the team has embraced all three of these challenges.

In the first year, training was a primary focus of the team's efforts and served as feedback mechanism as the team designed a clinical workflow process and EHR system that works for providers and their teams. The trainings educated providers about the goals of the strategic initiative, familiarized providers with tobacco brief interventions, and focused on how to best use the electronic health record to initiate and track the referral of a patient to tobacco cessation. As of October 2013, 100% of clinics have participated in the trainings and providers and staff now know how to ask a patient about all forms of tobacco use and how to document correctly patient tobacco use in the EHR system. The strategic initiative aligned well with the medical center's system wide EHR implementation. EHR had been in place for one year and providers were becoming more accustomed to using the electronic system. They benefited greatly from the strategic initiative's focus on educating providers on how to use the EHR to move through the tobacco screening process.

The trainings also helped illuminate challenges with the EHR and ways to make improvements to the system. For instance, tobacco control best practices recommend that tobacco screening be included with collection of a patient's vitals (blood pressure, etc.) on the basic intake form; however, at ANMC tobacco information is collected within the social history category under substance abuse. Because of the trainings supported by the strategic initiative, it is now becoming very normal for providers to go into the social history tab in the EHR system, but it remains a process of continuous education and focus. In the future, documentation of tobacco use will be a part of the EHR training received by every new employee at ANMC.

Year one of the initiative also served to identify the need for an improvement to ANMC's EHR tobacco data collection. It was identified that the EHR was collecting whether or not a referral to the tobacco program was being "ordered" on behalf of a patient, but the record had nowhere to document if a patient had declined referral. Going forward the EHR will include a third option for the "refer to tobacco cessation" field – yes, no, *and decline*. This will allow for a more accurate referral rate to be tracked and a better means to analyze why patients are or are not coming to the tobacco cessation program.

“We recognized the powerful role that providers can have in the “advise” step and wanted to help providers feel comfortable taking on that role.”

– Karen Doster

Looking Ahead

ANMC heads into year two of their strategic initiative in a strong position. All of their clinics have been trained in how to track tobacco screening with EHR and how to refer patients to in-house tobacco treatment. Small tweaks to the EHR will allow for better data capture and analysis, and a focus on follow-up with patients after hospital discharge will help position ANMC and ANTHC to have better success with patients quitting tobacco. EHR is just one piece of tobacco prevention and control system change within clinical settings and clearly a very important one. Effective design of EHR that easily walks providers through asking, advising, and referring patients to tobacco cessation services coupled with training clinicians in proper use of and documentation in EHR helps healthcare providers help their patients quit tobacco.

With improved use of EHR and improvements to EHR data collection system, long-term sustainability remains an important facet of the strategic initiative. Several efforts remain on the horizon for the ANTHC Tobacco Prevention and Control Program. Pertaining to EHR, the tobacco program would like to link the tobacco treatment-tracking database to the hospital's EHR. Currently, electronic health records only capture the front-end documentation of a patient tobacco use status. After the initial intake assessment at the hospital there is no more information going into the electronic health record. The patient's status may change after the patient is referred to and receives cessation services from the tobacco treatment program. Tobacco cessation counselors track information about patients receiving cessation services in a database that is not linked to the EHR, so therefore any change in tobacco use status of the patient is only captured if they are readmitted to the hospital or they come back into the hospital to get their change in tobacco use status updated.

The capacity of the tobacco treatment and cessation staff to serve all the probable referrals they may receive through the improved referral system remains a focus. Each week, anywhere from 200 - 400 patients are identified as tobacco users at ANMC. To meet the project goal – referring 100% tobacco users to tobacco cessation treatment services – demand for services could exceed the current capacity of the ANTHC tobacco prevention and control program. The team continues to weigh options for ensuring all patients who use tobacco have the opportunity to seek tobacco cessation services beyond the end of the strategic initiative period. One promising practice would be to integrate tobacco cessation services into existing clinical teams so that a referral to a separate program is not required.

To support potential integration of tobacco cessation services into each clinic ANTHC seeks to increase the number of ANMC staff trained as Tobacco Treatment Specialists. ANTHC hosts a Tobacco Treatment Specialist (TTS) training each fall. In 2012, the training experienced its highest attendance ever; however, the vast majority of participants come from organizations outside of ANMC and ANTHC. The tobacco strategic initiative team is considering the feasibility of offering an online TTS training with the goal of having more individuals who provide medical services at ANMC attend; and therefore, increase the capacity of tobacco cessation provision within each department at ANMC.

With a streamlined EHR process that effectively builds in the referral process, a focus on long-term sustainability, and continued support from joint leadership; ANMC and ANTHC will continue to be leaders in tobacco systems change.

“ [The EHR] is a work in process, it's not just a success story, it's a challenge. ”

– Dr. Jay Butler

Key Dates in ANMC & ANTHC Tobacco Systems Change Effort

2006

- ANMC became the second Tobacco Free Campus in the state of Alaska
- ANTHC Tobacco Prevention and Control Program created

2011

- The Joint Commission releases new optional tobacco performance metrics
- ANTHC makes the decision to adhere to and track these performance measures

October 2011

- ANMC launches Electronic Health Record System (brand name: Cerner)
- The tobacco control program worked hard before launch to make certain tobacco screening questions were included in the package

October 2012

- ANTHC Tobacco Prevention and Control Program strategic initiative receives funding for two years - October 1, 2012 to September 30, 2014

Year One Performance Measures:

1. Every ANMC clinic will be trained in the tobacco brief intervention (or ask, advise, refer) and how to document AAR properly in the electronic health record.
2. ANMC patients identified as tobacco users will be offered a referral to tobacco cessation treatment.
3. All ANMC patients referred to tobacco cessation treatment will be offered treatment.

Note: The focus of year one was on clinic and provider education in order to increase referrals to the tobacco prevention and control program cessation services.

October 2013

- Year two of strategic initiative commences
- 100% of ANMC clinics have been trained in AAR and how to document AAR in EHR

Year Two Performance Measures:

1. ANMC patients identified as tobacco users will be offered a referral to tobacco cessation treatment.
2. All ANMC patients referred to tobacco cessation treatment will be offered treatment.
3. ANMC patients who use tobacco will be contacted within 30 days after hospital discharge and follow-up information regarding tobacco use status will be collected.

Note: In year two, ANMC's EHR will be improved to capture patients who decline referral to the tobacco control program's cessation services. The focus will also shift to tracking patient quit rate after hospital discharge.

Electronic Health Record and Tobacco Control Screening Tips

- Use the EHR system to your advantage – it can either help you move forward or set you back.
- Develop a good working relationship with EHR product representatives in order to customize the system to your clinic’s particular needs.
- Make sure your needed questions are included in the EHR before launch. It is much easier to change the EHR before launch than after a clinic is already using the system.
- Make your EHR collection forms as standardized as possible, standardization allows for data sorting and check boxes vs. free text saves time filling out the form with patient, eliminate or minimize free text as much as possible. Time is crucial if you’re referring a patient to tobacco cessation treatment – at ANMC we can do it with “three clicks.”
- Provide supplemental scripts or talking points to providers to help them effectively advise patients to quit.
- Allow information in the EHR to be collected by all level of medical professional and consider allowing even CMA level do the referral to tobacco treatment- and have the doctor “sign-off”. When doctors only have 15 minutes a referral to tobacco treatment can sometimes get overlooked.

A key part of this implementation strategy was to make the best use out of the EHR system.

Electronic health record-supported interventions, in particular, can lead to significant reductions in smoking prevalence. With EHR support, healthcare providers routinely reach very high levels of identification and intervention (>80%).

A recent study of over 4,000,000 electronic encounter records in a 17-clinic healthcare delivery system suggests that a system of EHR-supported interventions can lead to significant reductions in smoking prevalence, while also reducing the rate of office visits for smoking-related diseases.²

“Sustainability is a goal of the strategic initiative. It will be critical to identify third-party payers for cessation services provided. Additionally, the existing tobacco treatment program will shift its focus from individual counseling to long-term capacity building and training. A key component of realizing this vision is folding our cessation counseling workflow into our EHR system. If we can make EHR a tool that counselors and staff are both using, then we can transition away from needing the counselors as a separate function.”

– Dr. Jay Butler

² Land TG, Rigotti NA, Levy DE, Schilling T, Warner D, et al. (2012) The Effect of Systematic Clinical Interventions with Cigarette Smokers on Quit Status and the Rates of Smoking-Related Primary Care Office Visits. PLoS ONE 7(7):e41649.doi:10.1371/journal.pone.0041649 http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0041649?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+plosone%2FPLoSONE+%28PLoS+ONE+Alerts%3A+New+Articles%29