



A MILLION HEARTS® ACTION GUIDE

Tobacco Cessation CHANGE PACKAGE



The Tobacco Cessation Change Package was created by the Centers for Disease Control and Prevention (CDC) with the purpose of helping healthcare professionals in outpatient, inpatient, and behavioral health settings, as well as public health professionals who partner with these groups, to implement systems and strategies that improve care for patients who use tobacco.

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Graphic Design and Editorial Assistance

Graphic and HTML design support was provided by Shelby Barnes, MPH, CHES^{*}; Booker Daniels, MPH^{*}; Susan Davis (Northrop Grumman Corporation)^{*}; and Jessica Spraggins, MPH^{*}.

Website Hosting Assistance

Website hosting support of tools and resources was provided by the National Association of Chronic Disease Directors.

We would like to extend special thanks to the following organizations for their willingness to share tools and resources to improve smoking cessation, as further denoted within the Tobacco Cessation Change Package:

- American Academy of Family Physicians (AAFP)
- American College of Cardiology (ACC)
- American Lung Association
- Arizona Smokers' Helpline (ASHLine)
- California Quits
- California Smokers' Helpline
- Cayuga Medical Center
- Center of Excellence for Health Systems Improvement for a Tobacco-Free New York
- Essentia Health
- Group Health Cooperative of South Central Wisconsin
- HealthyHearts NYC
- Heart Health Now!
- Hospitals Helping Patients Quit
- Institute for Clinical Systems Improvement (ICSI)
- Institute for Healthcare Improvement (IHI)
- Kansas Health Foundation
- Legacy (now Truth Initiative[®])
- MultiCare Health System
- National Alliance on Mental Illness Kansas (NAMI KS)
- National Behavioral Health Network for Tobacco & Cancer Control
- For More Information

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National Cancer Institute (NCI)

- National Quality Forum (NQF)
- Navy and Marine Corps Public Health Center
- New York City Department of Health and Mental Hygiene (NYC DOHMH)
- New York City Health + Hospitals (NYC Health + Hospitals)
- New York State Department of Health
- New York State Smokers' Quitline
- North American Quitline Consortium (NAQC)
- Northern Lakes Community Mental Health
- Oklahoma Health Care Authority
- Oklahoma State Department of Health, Center for Chronic Disease Prevention and Health Promotion
- Oklahoma Tobacco Settlement Trust (OK TSET)
- Oregon Health Authority
- Partnership for Prevention
- Plymouth Family Physicians
- Substance Abuse and Mental Health Services Administration (SAMHSA)
- Telligen
- University of California Quits (UC Quits)

- University of California, San Francisco Schools of Pharmacy and Medicine (UCSF Schools of Pharmacy & Medicine)
- University of California, San Francisco, Smoking Cessation Leadership Center (UCSF SCLC)
- University of Colorado, Anschutz Medical Campus (CU Anschutz Medical Campus)
- University of Maryland School of Medicine (UM Medicine)
- University of Wisconsin Health (UW Health)
- University of Wisconsin Madison, School of Medicine and Public Health (UW-Madison SMPH)
- University of Wisconsin Center for Tobacco Research and Intervention (UW-CTRI)
- US Department of Veterans Affairs (VA)
- Wisconsin Hospital Association
- Wisconsin Nicotine Treatment Integration Project (WiNTiP)

Suggested Citation

Centers for Disease Control and Prevention. *Tobacco Cessation Change Package*. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2019.

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Tobacco Cessation Change Package — Quick Reference

Focus Areas



Change Concepts and Change Ideas

Key Foundations

Approaches and tools to assess the current status of tobacco dependence treatment in your practice or system and to make tobacco dependence treatment a priority.

Make Tobacco Cessation a Practice and System Priority

Identify one or two key champions and assemble a multidisciplinary team

As a multidisciplinary group, conduct an assessment of your clinic/system and develop an action plan to address the current gaps

Adopt or update a unit, practice, or system-wide policy to reflect prioritization of tobacco treatment

Create a Supportive Environment for Cessation

Implement and strengthen hospital or clinic-wide tobacco-free or smoke-free campus policies

Leverage mass-reach media campaigns to encourage and normalize quitting (e.g., with media in waiting rooms, throughout clinic or hospital system)

Support employees and their family members in quitting smoking by providing health benefits for tobacco cessation

Equipping Care Teams

Approaches and tools to prepare and motivate healthcare staff to consistently address tobacco use.

Equip All Staff to Engage in Tobacco Cessation Efforts

Adopt a clinician/staff training policy to train and retrain staff

Conduct onboarding and annual trainings on tobacco policies, systems, and procedures

Optimize billing practices by leveraging existing codes to capture all billable services

Provide Clinician and System-Level Feedback on Progress and Impact

Set and communicate specific, measureable performance and quality goals

Make tobacco cessation a quality improvement measure at the clinician or system level

Track clinician, clinic, hospital, and system performance to provide feedback to clinicians and decision-makers

Screening

Approaches and tools that promote consistent universal screening for tobacco use (i.e., **asking** about tobacco use) as a prerequisite for intervening with patients or clients who use tobacco.

Make Tobacco Use a Vital Sign: Screen Every Patient for Tobacco Use at Every Visit

Adopt a tobacco use screening protocol

Establish a workflow and determine roles for tobacco use screening and documentation

Embed a tobacco use status prompt in the EHR or other patient record-keeping system

Embed decision support scripts for screening into the EHR or other patient record-keeping system

Treatment

Approaches and tools to help ensure that patients or clients who use tobacco are consistently **advised** to quit, **assessed** for willingness to make a quit attempt, and offered **assistance** in quitting tobacco use.

Establish a Tobacco Treatment Protocol

Implement a treatment intervention

Establish a workflow to determine roles for delivering the treatment intervention

Enhance Clinical Decision Support

Embed treatment intervention prompts into the EHR or other patient record-keeping system

Embed decision support scripts for each intervention step into the EHR or other patient record-keeping system

Implement standard order sets for counseling and medication

Adopt tools to guide medication selection

Implement Standardized Approaches to Support Cessation Efforts

Deliver standard patient education regarding cessation medication

Adopt a clinical decision support tool for helping patients plan their quit attempt

Referral and Follow-Up

Approaches and tools for **arranging** follow-up for patients or clients who use tobacco and for providing referral to internal or external resources that can serve as an adjunct to treatment provided by the clinician.

Establish Protocols to Identify and Connect Patients to Referral Resources

Implement a protocol or workflow to ensure clinician follow-up with patients

Identify and partner with referral services that can serve as an adjunct to care

Set up direct referrals to internal and external resources by creating standard referral orders

Establish two-way communication with referral services to get information on whether referrals were accepted by the patient

Employ Population Management Strategies to Better Identify and Reach Patients Who Use Tobacco

Use tobacco registries or other methods to track patients who use tobacco

Conduct proactive follow-up with patients who use tobacco

The Importance of Treating Tobacco Use and Dependence

Tobacco use is the leading preventable cause of disease and death in the United States and is a significant driver of healthcare costs.¹⁻³ More than 16 million people in the U.S. live with at least one serious disease caused by smoking.¹ Additionally, approximately 480,000 deaths and more than \$300 billion in healthcare and lost productivity costs are attributable to smoking every year.^{1,3} Future smoking-related illnesses, deaths, and costs can be prevented by helping individuals who use tobacco to quit. Tobacco dependence is a chronic, relapsing condition that often requires repeated intervention and long-term support.4 Evidence-based treatments, including counseling and FDAapproved medications, are available⁴⁻⁸ but are underutilized.9-14

E-cigarettes

E-cigarettes have potential to benefit nonpregnant adults who smoke if used as a complete substitute for smoked tobacco products, such as cigarettes. However, these products are still fairly new, and evidence on their long-term health effects, as well as their potential effectiveness as a cessation aid, is still developing.²⁶ E-cigarettes are not currently approved by the FDA as a smoking cessation aid, and many adult e-cigarette users continue to also smoke cigarettes (known as dual use). Additionally, there is little current evidence about how to help people guit e-cigarette use. For more information, visit **www.cdc.** gov/e-cigarettes.

Clinicians play a critical role in delivering cessation support; at least 70% of persons who smoke see a physician each year.⁴ Patients expect physicians to address tobacco use, and consistent interventions from clinicians improve patient outcomes.⁴ Even brief advice to guit from a clinician increases quit rates, and more intensive clinical interventions have progressively greater impact.⁴ In addition to the patient-level benefits, addressing tobacco use and dependence in health systems is cost-effective across a variety of settings,¹⁵⁻¹⁷ can help meet certain quality measures,¹⁸⁻²⁰ can reduce rehospitalization and readmission,²¹⁻²³ and can increase patient satisfaction with the care they receive.^{24,25} Integrating tobacco dependence treatment into routine clinical care policies, protocols, and systems can help clinicians deliver effective cessation interventions.

About the Tobacco Cessation Change Package

The Tobacco Cessation Change Package (TCCP) presents a list of process improvements that clinicians can implement as they seek to deliver optimal treatment to patients who use tobacco.[§] It was developed to give clinical teams a practical resource to increase the reach and effectiveness of tobacco cessation interventions and to incorporate these interventions into the clinical workflow.

The TCCP is intended to be used by healthcare professionals in outpatient, inpatient, and behavioral health settings. The TCCP is not a comprehensive clinical guide on treating

[§] The primary focus of the TCCP is cessation from combustible tobacco products, since the burden of death and disease from tobacco use in the U.S. is overwhelmingly caused by cigarettes and other combusted tobacco products.¹ However, some tools and resources in Tables 1–5 address non-combustible product use, and the Million Hearts[®] **Clinician Action Guide** contains some guidance on addressing the use of other tobacco products.

tobacco dependence; rather, it is designed to complement other Million Hearts® tools:

- Tobacco Cessation Intervention Protocol
- Clinician Action Guide on Identifying and Treating Patients Who Use Tobacco

Whereas the Protocol and Action Guide focus on the *content* of clinical interventions, the TCCP focuses on *how to implement* such interventions at a systems level.

The Evolving 5As

Additional models for treatment implementation have evolved since development of the 5As. Ask, Advise, Refer (AAR) and Ask, Advise, Connect (AAC) emphasize connection of patients to treatment extenders. Opt-out treatment models are also increasingly utilized; one example of an opt-out model is the American College of Cardiology's (ACC) **Pathway for Tobacco Cessation Treatment**.²⁷ The TCCP is composed of change concepts, change ideas, and tools and resources. **Change concepts** are general notions that are useful for developing more specific strategies for changing a process. **Change ideas** are actionable, specific ideas or strategies that can be rapidly tested on a small scale to determine whether they result in improvements in the local environment. Each change idea is linked to evidence- or practicebased **tools and resources** that can be adopted or adapted to implement each change idea.

The purpose of the TCCP is to help multidisciplinary healthcare teams put systems and strategies in place to more efficiently and effectively integrate treatment of tobacco use and dependence into routine clinical care. The TCCP is broken down into five main focus areas (Figure 1), which are mapped to the 5As tobacco intervention framework: Ask all patients about tobacco use at every visit/admission; Advise all patients who use tobacco to quit; Assess the patient's willingness to make a quit attempt; Assist the quit attempt with counseling and medication; and Arrange follow-up.⁴

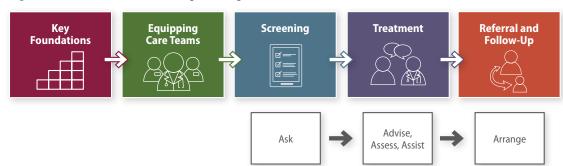


Figure 1. Tobacco Cessation Change Package Focus Areas

How to Use the Tobacco Cessation Change Package

The TCCP offers a menu of options that clinicians and practices can choose from based on their specific circumstances and needs. We do not recommend that any healthcare practice attempt to implement all the interventions described in the TCCP at once, nor is it likely that all of these interventions will be applicable to every clinical setting.

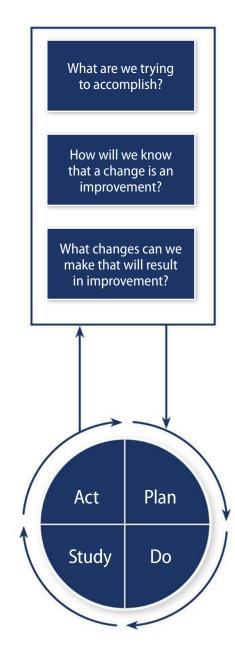
We recommend that you start by bringing together a multidisciplinary team of stakeholders (e.g., physicians, pharmacists, nurses, medical assistants, social workers, care managers, guality improvement coordinators, health informaticians, and administrators). The team can look at the elements in Figure 1 and conduct an assessment to determine the aspects of tobacco dependence treatment that are most in need of improvement in your health system. You may also benefit from talking directly with others who have undertaken similar efforts to learn from their experience. Once your team has identified and prioritized the needs, interventions can be selected from the TCCP to create a supportive treatment environment to address those needs.

Figure 2 depicts the Institute for Healthcare Improvement (IHI) Model for Improvement.²⁸ This model suggests posing three questions:

- 1. What are we trying to accomplish?
- 2. How will we know that a change is an improvement?
- 3. What changes can we make that will result in improvement?

The answers will point you to your quality improvement objectives and related metrics. You can then choose strategies from the TCCP that have been shown to result in improvement. Each strategy you choose should first be tested on a small scale (i.e., conduct a "small test of change") to assess feasibility and allow the team to evaluate and adjust before instituting the change on a broader, more permanent scale. This approach can be accomplished using **Plan-Do-Study-Act (or PDSA) cycles**.

Figure 2. Institute for Healthcare Improvement (IHI) Model for Improvement



Tables 1 through 5 contain a list of change concepts and change ideas that clinicians, practices, and systems can implement to enhance their delivery of tobacco cessation interventions. Each change idea is paired with practical tools and resources provided by experts in the field who have successfully used them. Each tool has a key to indicate its applicable settings (i.e., outpatient, inpatient, behavioral health, or multiple settings).

- Key Foundations (Table 1) includes approaches and tools to assess the current status of tobacco dependence treatment in your healthcare practice or system and to make it a priority. This is likely a good place to start quality improvement efforts related to tobacco cessation interventions.
- Equipping Care Teams (Table 2) includes approaches and tools to prepare and motivate healthcare staff to consistently address tobacco use.
- Screening (Table 3) includes approaches and tools that promote consistent universal screening for tobacco use (i.e., asking about tobacco use) as a prerequisite for intervening with patients or clients who use tobacco.
- **Treatment** (Table 4) includes approaches and tools to help ensure that patients or clients who use tobacco are consistently advised to quit, assessed for willingness to make a quit attempt, and offered assistance in quitting tobacco use.
- Referral and Follow-Up (Table 5) includes approaches and tools for arranging follow-up for patients or clients who use tobacco and for providing referral to internal or external resources that can serve as an adjunct to treatment provided by the clinician.

Additional resources can be found in the appendices:

- Appendix A provides resources for quality improvement.
- Appendix B contains resources for working with electronic health records.
- **Appendix C** highlights case studies in health systems change for tobacco cessation interventions.
- Appendix D provides resources for engaging in community-level tobacco prevention and control strategies.

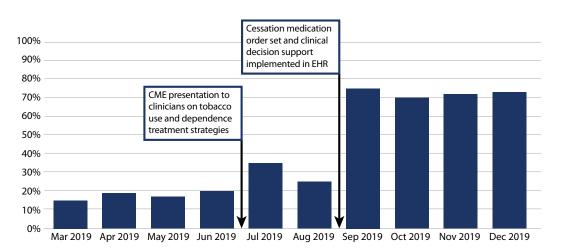
The tools in this TCCP have been successfully used in the field to systematize and improve the delivery of treatment for tobacco use and dependence. Some clinical details in certain tools may reflect models of treatment and management that differ from those in your practice. You may need to modify these tools to adapt them to your patient population and practice. In addition, because the science of treating tobacco use and dependence continues to evolve, some tools may become outdated over time. The TCCP will be periodically updated accordingly.

How to Measure Quality Improvement Efforts

Monitoring and measuring quality improvement efforts, including both outcomes and processes, is essential. Process measures, such as the proportion of patients who use tobacco and are offered treatment and follow-up, can provide early indications of whether interventions are being successfully carried out. Longer-term outcomes, such as reduced prevalence of tobacco use in the system's patient population, can also provide valuable feedback. You can begin by collecting baseline data on a process you are seeking to improve. Then test your change ideas on a small scale in order to identify potential barriers to implementation. This approach allows clinical staff to make needed refinements to address these barriers before implementing the change idea on a broader scale.

One very helpful tool for monitoring efforts is a run chart. A **run chart** is a graph that displays performance on a process or outcome over time. It can help show decision makers and other stakeholders why recommended changes are needed. You can then use the chart to document when specific changes were made in order to show how these changes impacted performance (Figure 3). See Appendix A for additional quality improvement tools and resources.

Figure 3. Example of a Run Chart



Percent of Eligible Patients Counseled on Cessation Medication, Clinic A, March–December 2019



Change Concepts, Change Ideas, and Tools and Resources

Table 1. Key Foundations						
Change Concept	Change Idea	Tools and Resources	Settings			
		Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment (p. 155)	0	Δ		
		ICSI — Tobacco Health Systems Change Starter Toolkit for Clinics (pp. 5–6)	\bigcirc	\triangle		
	Identify one or two key champions and assemble a	UW Health, UW-Madison SMPH, and UW-CTRI — Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (pp. 12–13)	0			
	multidisciplinary team	UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (p. 9)		\land		
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (p. 19)		\triangle		
		SAMHSA — Implementing Tobacco Cessation Programs in Substance Use Disorder Treatment Settings: A Quick Guide for Program Directors and Clinicians (p. 8)				
Make Tobacco Cessation a Practice and System Priority	As a multidisciplinary group, conduct an assessment of your clinic/system and develop an action plan to address the current gaps (continued on next page)	Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment (pp. 154–160)	0			
		ICSI — Tobacco Health Systems Change Starter Toolkit for Clinics (pp. 5–6)	\bigcirc	Δ		
		AAFP — Treating Tobacco Dependence Practice Manual: A Systems-Change Approach (pp. 4–6, 19)	\bigcirc	\triangle		
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (p. 9 , Appendix 1)	ightarrow			
		OK Health Care Authority and OK State Department of Health, Center for Chronic Disease Prevention and Health Promotion				
		 Primary Care Practice Facilitation Curriculum, Module 12 – An Introduction to Assessing Practices: Issues to Consider 	0			
		TSET Clinical Practice Self-Evaluation Summary				



Table 1. Key Foundations (continued)							
Change Concept	Change Idea	Tools and Resources		Settings			
	As a multidisciplinary group, conduct an assessment of your clinic/system and	CU Anschutz Medical Campus — Build a Clinic Learning Community: Summary Report and Playbook (pp. 65–84)					
Make Tobacco Cessation a Practice	develop an action plan to address the current gaps	KS Health Foundation and NAMI KS — Implementation Self-Assessment: Kansas Tobacco Guideline for Behavioral Health Care					
and System Priority	Adopt or update a unit, practice, or system- wide policy to reflect prioritization of tobacco treatment	UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (Appendix N)					
	Implement and strengthen hospital or clinic-wide tobacco- or smoke-free campus policies	CU Anschutz Medical Campus — DIMENSIONS: Tobacco-Free Policy Toolkit	\bigcirc				
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (pp. 2–12 , 30–31, Appendix C, Appendix D, Appendix M)	\bigcirc	Δ			
		National Behavioral Health Network for Tobacco & Cancer Control — How to Implement a Tobacco- Free Policy Infographic	\bigcirc	Δ			
Create a Supportive Environment for Cessation		WiNTiP — Recommendations and Guidelines for Policies & Procedures in Tobacco-Free Facilities & Services in Wisconsin's Substance Use & Mental Health Treatment Programs	0				
Cessation		SAMHSA — Implementing Tobacco Cessation Programs in Substance Use Disorder Treatment Settings: A Quick Guide for Program Directors and Clinicians (pp. 7–8)					
		Northern Lakes Community Mental Health — Tobacco-Free Initiative Information Kit					
		National Behavioral Health Network for Tobacco & Cancer Control — Implementing Tobacco- Free Policies in Community Behavioral Health Organizations Webinar					





Table 1. Key Foundations (continued)							
Change Concept	Change Idea	Tools and Resources		Settings			
	Leverage mass-reach media campaigns	CDC — Tips From Former Smokers® — Campaign Resources	igodot				
	to encourage and normalize quitting (e.g., with media in waiting rooms, throughout clinic or hospital system)	NYC DOHMH — Tobacco Quit Kit Posters • English • Spanish	ightarrow	Δ			
Create a Supportive Environment for		NY State Department of Health — Cessation Outreach Posters	\bigcirc	Δ			
Cessation	Support employees and their family members in quitting smoking by providing health benefits for tobacco cessation	UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (pp. 4–5)	0				







Table 2. Equipping Care Teams								
Change Concept	Change Idea	Tools and Resources	Settings					
	Adopt a clinician/staff training policy to train and retrain staff	No tools in the TCCP at this time						
		UCSF Schools of Pharmacy & Medicine — Rx for Change: Tobacco Treatment Training Program for Health Professionals	\bigcirc					
		UW-CTRI — Videos for Health-care Providers	\bigcirc	\land				
	Conduct onboarding and annual trainings on tobacco policies, systems, and procedures	Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment: Training Toolkit						
		· General Health Settings	\bigcirc	\land				
Equip All Staff to		· Behavioral Health Settings						
Engage in Tobacco Cessation Efforts		Navy and Marine Corps Public Health Center — Strategies to Promote Tobacco Cessation: Stages of Change	\bigcirc	Δ				
		 UW Health, UW-Madison SMPH, and UW-CTRI Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (pp. 29–31) 	\bigcirc					
		· Quit Connect Health: Staff Training Slides						
		UC Quits Webinar Series Module 2: The 5 As of Tobacco Cessation Module 4: Medication for Smoking Cessation Webinar 	0					
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (Step 4 , pp. 10–11)						





	Table 2. E	quipping Care Teams (continued)			
Change Concept	Change Idea	Tools and Resources	:	5	
		American Lung Association — Billing Guide for Tobacco Screening and Cessation	\bigcirc		
		Million Hearts [®] — Protocol for Identifying and Treating Patients Who Use Tobacco (Appendix A)	\bigcirc		
Equip All Staff to Engage in Tobacco	Optimize billing practices by leveraging existing	AAFP — Treating Tobacco Dependence Practice Manual: A Systems-Change Approach (pp. 17–18)	\bigcirc		
Cessation Efforts	codes to capture all billable services	UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (pp. 26–28)			
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (pp. 9, 25–26)			
	Set and communicate specific, measureable performance and quality goals	Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment (pp. 161–163)	0	Δ	
		ICSI — Tobacco Health Systems Change Starter Toolkit for Clinics (pp. 15–19)	\bigcirc		
		NQF — Understanding Performance Measures: Anatomy and Types	\bigcirc		
Provide Clinician-		OK Health Care Authority and OK State Department of Health, Center for Chronic Disease Prevention and Health Promotion — Module 13: Measuring and Benchmarking Clinical Performance	\bigcirc		
and System-Level Feedback on Progress and Impact		UW-CTRI — Quality Improvement Programs Relevant to Tobacco Dependence Treatment	\bigcirc		
		American Lung Association — Quality Measures and Tobacco Cessation	\bigcirc		
	Make tobacco cessation a quality improvement measure at the clinician or system level	Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment (p. 164)	0		
	or system level	NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 7–9 , 119–121)	0		
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (pp. 5–7)			



Table 2. Equipping Care Teams (continued)						
Change Concept	Change Idea	Tools and Resources	Settings			
Provide Clinician- and System-Level Feedback on Progress and Impact			Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment			
		· General Health Settings (pp. 165–166)	\bigcirc	\triangle		
	Track clinician, clinic, hospital, and system performance to provide feedback to clinicians and decision-makers	· Behavioral Health Settings (pp. 193–195)				
		Plymouth Family Physicians — Practice Performance Report (p. 29)	\bigcirc	\triangle		
		 OK Health Care Authority and OK State Department of Health, Center for Chronic Disease Prevention and Health Promotion Collecting Performance Data Using Chart Audits and Electronic Data Extraction Chart Audit Tool 	0			
		NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 142–145)	\bigcirc			
		AAFP — Treating Tobacco Dependence Practice Manual: A Systems-Change Approach (p. 16)	\bigcirc			





		Table 3. Screening			
Change Concept	Change Idea	Tools and Resources		Setting	5
		Million Hearts [®] — Protocol for Identifying and Treating Patients Who Use Tobacco	\bigcirc		
		NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (p. 84)	\bigcirc		
	Adopt a tobacco use screening protocol	UW Health, UW-Madison SMPH, and UW-CTRI — Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (p. 10)	\bigcirc		
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (pp. 8 , 13–14)			
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (pp. 6–7 , Appendix N)		Δ	
Make Tobacco Use a Vital Sign: Screen Every Patient for	Establish a workflow and determine roles for tobacco use screening and documentation	Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment (pp. 148–153)	\bigcirc		
Tobacco Use at Every Visit		ICSI — Tobacco Health Systems Change Starter Toolkit for Clinics (pp. 24–26)	\bigcirc		
		CU Anschutz Medical Campus — A Patient- Centered Tobacco Cessation Workflow for Healthcare Clinics (pp. 2–4)	\bigcirc		
		CA Quits — CA Quits Toolkit (pp. 7–8)	\bigcirc	\land	
	Embed a tobacco use status prompt in the	NYC Health & Hospitals — EHR Screenshots (Epic): Ambulatory Tobacco Screening and Treatment Workflow (pp. 1–5)	\bigcirc	Δ	
	EHR or other patient record-keeping system (continued on next page)	UW Health, UW-Madison SMPH, and UW-CTRI • Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (pp. 14–28)	0	Δ	
		 Quit Connect Health Overview and Staff Instructions (p. 11) 			





Table 3. Screening (continued)							
Change Concept	Change Idea	Tools and Resources	:	Settings			
		CDC — Louisiana State University Health System's Tobacco Control Initiative (pp. 4–5)	\bigcirc				
		Hospitals Helping Patients Quit and OK TSET — Hospitals Helping Patients Quit and Tobacco Treatment Best Practices Electronic Records Support (p. 3)	0				
		UW-CTRI — Using the Electronic Health Record (EHR) to Support the Delivery of Tobacco Dependence Treatment Services in Health Care Settings (p. 9)	\bigcirc				
	Embed a tobacco use status prompt in the	Cayuga Medical Center — Cayuga Center for Healthy Living Care Transitions Program Treatment Plan for Tobacco/Nicotine Replacement	\bigcirc				
	EHR or other patient record-keeping system	NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 81–83)	\bigcirc				
		AAFP — Integrating Tobacco Cessation into Electronic Health Records	\bigcirc				
Make Tobacco Use a Vital Sign: Screen Every Patient for		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (for obstetric care; Appendix 5A–C)	\bigcirc				
Tobacco Use at Every Visit		Legacy (now Truth Initiative [®]) and Partnership for Prevention — Help Your Patients Quit Tobacco Use: An Implementation Guide for Community Health Centers (p. 54)	\bigcirc				
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (p. 7)					
		NYC DOHMH — Help Your Patients Quit Smoking: A Coaching Guide	\bigcirc				
		CA Quits — CA Quits Toolkit (pp. 7–8)	\bigcirc				
	Embed decision support scripts for screening into the EHR or other	UW Health, UW-Madison SMPH, and UW-CTRI — Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (pp. 21–22)	0				
	patient record-keeping system	Heart Health Now! Advancing Heart Health in NC Primary Care — Module: Ready or Not: Addressing Tobacco Use (pp. 12–13)	\bigcirc				
		UW-CTRI — Using the Electronic Health Record (EHR) to Support the Delivery of Tobacco Dependence Treatment Services in Health Care Settings (pp. 16–17)	\bigcirc				





Table 4. Treatment						
Change Concept	Change Idea	Tools and Resources	Settings			
		 Million Hearts[®] Protocol for Identifying and Treating Patients Who Use Tobacco Identifying and Treating Patients Who Use Tobacco: Action Steps for Clinicians (pp. 3–5) 	0			
		ACC — 2018 ACC Expert Consensus Decision Pathway on Tobacco Cessation Treatment (Figure 1)	\bigcirc	Δ		
	Implement a treatment intervention	CU Anschutz Medical Campus — A Patient- Centered Tobacco Cessation Workflow for Healthcare Clinics (p. 6)	\bigcirc			
		NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (p. 84)	\bigcirc			
Establish a Tobacco Treatment Protocol		UW Health, UW-Madison SMPH, and UW-CTRI — Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (p. 10)	\bigcirc			
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (pp. 8 , 11–12 , 15–22)				
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (pp. 20–26 , Appendix N)				
		AAFP — Office Champions Tobacco Cessation Behavioral Health Facts				
		KS Health Foundation and NAMI KS – Kansas Tobacco Guideline for Behavioral Health Care: An Implementation Toolkit (pp. 28–34)				
		SAMHSA — Implementing Tobacco Cessation Programs in Substance Use Disorder Treatment Settings: A Quick Guide for Program Directors and Clinicians (pp. 5–9)				





Table 4. Treatment (continued)						
Change Concept	Change Idea	Tools and Resources	Settings			
		Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment		•		
		 General Health Settings (pp. 148–153) 	\bigcirc			
		Behavioral Health Settings (pp. 188–190)				
		UC Quits — UC Irvine Emergency Workflow	\bigcirc	\land		
Establish a Tobacco	Establish a workflow to determine roles	ICSI — Tobacco Health Systems Change Starter Toolkit for Clinics (pp. 23–26)	igodot			
Treatment Protocol	for delivering the treatment intervention	CU Anschutz Medical Campus — A Patient- Centered Tobacco Cessation Workflow for Healthcare Clinics (pp. 2–4)	igodot			
		UC Quits — UC Irvine Psychiatric Inpatient Workflow		Δ		
		UC Quits — UCSF Outpatient Workflow	\bigcirc			
		ACC — 2018 ACC Expert Consensus Decision Pathway on Tobacco Cessation Treatment (Figure 4)	ightarrow			
		UC Quits — Current UCSF Inpatient Workflow				
		NYC Health & Hospitals — EHR Screenshots (Epic): Ambulatory Tobacco Screening and Treatment Workflow (pp. 3–9)	0	Δ		
		Group Health Cooperative of South Central Wisconsin — EHR Screenshot (Epic) (pp. 1–3)	\bigcirc			
	Embed treatment intervention prompts	AAFP — Integrating Tobacco Cessation into Electronic Health Records	igodol			
Enhance Clinical Decision Support	into the EHR or other patient record- keeping system (<i>continued on</i> <i>next page</i>)	UW-CTRI — Using the Electronic Health Record (EHR) to Support the Delivery of Tobacco Dependence Treatment Services in Health Care Settings (pp. 10, 13)	\bigcirc			
		 UW Health, UW-Madison SMPH, and UW-CTRI Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (pp. 14–28) 	0			
		 Quit Connect Health Overview and Staff Instructions (pp. 11–12) 				



Table 4. Treatment (continued)						
Change Concept	Change Idea	Tools and Resources	:	5		
	Embed treatment intervention prompts into the EHR or other	NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 89–94)	\bigcirc			
	patient record- keeping system	UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (pp. 8, 21)				
		NYC DOHMH — Help Your Patients Quit Smoking: A Coaching Guide	\bigcirc			
		UW-CTRI – Motivational Interviewing Scripts	\bigcirc			
	Embed decision support scripts for each intervention step into the EHR or other patient record-keeping system	UW-CTRI — Using the Electronic Health Record (EHR) to Support the Delivery of Tobacco Dependence Treatment Services in Health Care Settings (pp. 16–17)	\bigcirc			
		ASHLine — Advising Tobacco Users to Quit (General; Behavioral Health)	\bigcirc			
Enhance Clinical		CA Quits — CA Quits Toolkit (p. 8)	\bigcirc	\land		
Decision Support		UW Health, UW-Madison SMPH, and UW-CTRI — Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (pp. 19 , 22 , 26)	\bigcirc			
		Heart Health Now! Advancing Heart Health in NC Primary Care — Module: Ready or Not: Addressing Tobacco Use (pp. 17–18, 22, 26)	\bigcirc			
	Implement standard order sets for	NYC Health & Hospitals — EHR Screenshots (Epic): Ambulatory Tobacco Screening and Treatment Workflow (pp. 7–8)	\bigcirc			
	counseling and medication	NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 89–94)	\bigcirc			
	(continued on next page)	UW-CTRI — Using the Electronic Health Record (EHR) to Support the Delivery of Tobacco Dependence Treatment Services in Health Care Settings (pp. 9–13)	\bigcirc			



Table 4. Treatment (continued)					
Change Concept	Change Idea	Tools and Resources	Settings		
Enhance Clinical Decision Support	Implement standard order sets for counseling and medication	Group Health Cooperative of South Central Wisconsin — EHR Screenshot (Epic) (p. 2)	\bigcirc		
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (p. 8 , Appendix J)			
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (Appendix 2B , Appendix 3)			
	Adopt tools to guide medication selection	Million Hearts [®] — Identifying and Treating Patients Who Use Tobacco: Action Steps for Clinicians (pp. 6–7)	\bigcirc		
		UW-CTRI — Tobacco Dependence Treatment Medications	\bigcirc	Δ	
		AAFP — Pharmacologic Product Guide: FDA- Approved Medications for Smoking Cessation	ightarrow	Δ	
		AAFP — Quit Smoking Guide	\bigcirc	\triangle	
Implement Standardized Approaches to Support Cessation Efforts	Deliver standard patient education regarding cessation medication	VA — Patient Guide: Tobacco Cessation Therapy • English • Spanish	ightarrow		
		NYC DOHMH and NY State Smokers' Quitline — NYC Quits Kit	\bigcirc		
		NYC DOHMH — Help Your Patients Quit Smoking: A Coaching Guide	\bigcirc		
		Cayuga Medical Center — Cayuga Center for Healthy Living Care Transitions Program Treatment Plan for Tobacco/Nicotine Replacement	ightarrow		
	Adopt a clinical decision support tool for helping patients plan their quit attempt	Center of Excellence for Health Systems Improvement for a Tobacco-Free NY — Supporting Evidence-Based Tobacco Dependence Screening & Treatment: Behavioral Health Settings Training Toolkit (pp. 142–143)	\bigcirc		
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (p. 8)	\bigcirc	Δ	
		Group Health Cooperative of South Central Wisconsin — EHR Screenshot (Epic) (p. 4)	\bigcirc		



Table 5. Referral and Follow-Up					
Change Concept	Change Idea	Tools and Resources	Settings		
Establish Protocols to Identify and Connect Patients to Referral Resources		Million Hearts [®] — Protocol for Identifying and Treating Patients Who Use Tobacco	0		
		ICSI — Tobacco Health Systems Change Starter Toolkit for Clinics (pp. 23–26)	\bigcirc	\land	
	Implement a protocol	MultiCare Health System — Tobacco Cessation Program (pp. 11–12)	\bigcirc		
	or workflow to ensure clinician follow-up with patients	NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (p. 84)	\bigcirc		
		AAFP — Treating Tobacco Dependence Practice Manual: A Systems-Change Approach (p. 12)	\bigcirc		
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (pp. 20–25, Appendix 8, Appendix 9)	\bigcirc	Δ	
		Quitlines • 1-800-QUIT-NOW • Find more information about Quitlines at CDC's Tips® website	0	Δ	
	Identify and partner with referral services that can serve as an adjunct to care	NCI · Smokefree.gov · Smokefree.gov/tools-tips/text-programs · Smokefree.gov/tools-tips/apps · Veterans.smokefree.gov/smokeless-tobacco	\bigcirc		
		AAFP — Treating Tobacco Dependence Practice Manual: A Systems-Change Approach (p. 11)	\bigcirc		





Table 5. Referral and Follow-Up (continued)					
Change Concept	Change Idea	Tools and Resources	Settings		
		MultiCare Health System — Tobacco Cessation Program (pp. 4 , 11–14)	0	\land	
		UM Medicine — Tobacco Cessation: EPIC E-Referrals to MD Quit Line (pp. 4–5)			
	Set up direct referrals to internal and external	NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 98–101)	igcolumna		
Establish Protocols to Identify and Connect Patients to Referral Resources		NYC Health & Hospitals — EHR Screenshot (Epic): Ambulatory Tobacco Screening and Treatment Workflow (p. 9)	0		
	resources by creating standard referral orders	 UW Health, UW-Madison SMPH, and UW- CTRI Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (pp. 10, 14–19) Quit Connect Health Overview and Staff Instructions (pp. 11–12) 	igodot		
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (Appendix 3, Appendix 6)			
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (Appendix 7)	0		
		NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (p. 99)	igcolumna	\triangle	
	Establish two-way communication with referral services to get information on whether referrals were accepted by the patient	Hospitals Helping Patients Quit and OK TSET — Hospitals Helping Patients Quit and Tobacco Treatment Best Practices Electronic Records Support (p. 6)	igodot		
		UW-CTRI — Screenshots depicting treatment services data from the tobacco quitline that populates the referred patient's EHR	ightarrow		
		UW Health, UW-Madison SMPH, and UW-CTRI — Quit Connect Health: A Specialty Staff Protocol to Improve Referrals to Tobacco Quit Lines (p. 27)	0		



Table 5. Referral and Follow-Up (continued)					
Change Concept	Change Idea	Tools and Resources	Settings		;
Employ Population Health Management Strategies	Use tobacco registries or other methods to track patients who use tobacco	UW-CTRI — Using the Electronic Health Record (EHR) to Support the Delivery of Tobacco Dependence Treatment Services in Health Care Settings (pp. 14–15)	0		
		NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 121, 142)	ightarrow		
		Legacy (now Truth Initiative [®]) and Partnership for Prevention — Help Your Patients Quit Tobacco Use: An Implementation Guide for Community Health Centers ("Experience from the Field," p. 27)	\bigcirc		
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (for obstetric care; Appendix 5A–B)	0		
		Legacy (now Truth Initiative [®]) and Partnership for Prevention — Help Your Patients Quit Tobacco Use: An Implementation Guide for Community Health Centers (p. 36)	0	Settings	
		NYC DOHMH and HealthyHearts NYC — ABCS Toolkit for the Practice Facilitator (pp. 84, 104)	\bigcirc		
	Conduct proactive follow-up with patients who use tobacco	Group Health Cooperative of South Central Wisconsin — EHR Screenshots (Epic): (pp. 3, 5)	\bigcirc		
		UW-CTRI — Treating Tobacco Use and Dependence in Hospitalized Patients: A Practical Guide (pp. 23–25)			
		UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (pp. 24–25 , Appendix O)			



Appendix A: Additional Resources for Quality Improvement

If you are new to continuous quality improvement (QI), there are many useful QI tools that can assist you in your efforts. For example, the Institute for Healthcare Improvement (IHI) provides a number of QI tools that support its Model for Improvement (Figure 2). Their

Quality Improvement Essentials Toolkit

is a good primer for those new to quality improvement. It includes the **Project Planning Form** to help teams think systematically about their improvement project, and the **PDSA Worksheet for Testing Change**, which walks the user through documenting a test of change. **Sustaining Improvement** provides guidance for maintaining high levels of performance over time by adding quality planning and quality control to improvement efforts. These resources may be helpful for planning, assigning responsibilities, carrying out small tests of change, and preserving improvements for clinical tobacco cessation interventions.

Another useful QI reference and toolkit is the "Guide to Improving Care Processes and Outcomes in Health Centers" available from the Health Resources and Services Administration (HRSA), which supports the U.S. healthcare safety net. This resource includes worksheets, such as the Clinical Decision Supportenabled Quality Improvement Worksheet, for analyzing current workflows and information flows and considering improvements for targets such as increasing tobacco cessation. The TCCP can help identify promising or evidence-based approaches to enhancing care processes to achieve this goal.

Finally, the Healthcare Information and Management Systems Society (HIMSS) publishes a guidebook series on improving care delivery and outcomes with clinical decision support (CDS).^{29,30} These guidebooks can help you apply the CDS Five Rights framework to ensure that all the right people (including patients) get the right information in the right formats via the right channels at the right times to optimize healthrelated decisions and actions. The guidebooks help healthcare practices and their partners set up programs that reliably deliver outcomeimproving CDS interventions. They also provide detailed guidance on how to successfully develop, launch, and monitor such interventions so that all stakeholders benefit.

Appendix B: Additional Resources for Electronic Health Records Changes

Leveraging electronic health record (EHR) technology is one key strategy to integrate treatment of tobacco use and dependence into routine clinical care. Several of the change ideas described above include modifying the EHR to facilitate integration of cessation interventions into the clinical workflow. The following resources provide specific guidance for leveraging EHRs to enhance provision of clinical cessation services.

Guides	
AAFP — Integrating Tobacco Cessation in	to Electronic Health Records
California Smokers' Helpline — e-Referral	
Hospitals Helping Patients Quit and OK TSET Treatment Best Practices Electronic Reco	— Hospitals Helping Patients Quit and Tobacco rds Support
North American Quitline Consortium — Gu	ide for Implementing eReferral Using Certified EHRs
UW Health, UW-Madison SMPH, and UW-CT Improve Referrals to Tobacco Quit Lines (pp	RI — Quit Connect Health: A Specialty Staff Protocol to • 14–28)
UW-CTRI — Using the Electronic Health R Dependence Treatment Services in Healt	ecord (EHR) to Support the Delivery of Tobacco h Care Settings
Screen Shots	
CA Quits — CA Quits Toolkit (p. 7)	
Group Health Cooperative of South Central Best Practice Advisory as Seen by Providers	Wisconsin — EHR Screenshots (Epic):
Smoking Cessation SmartSet as Seen by Pro	oviders
Tobacco Cessation Outreach Specialist (Care	e Manager) EHR Notes Documentation
Patient Instructions from Tobacco Cessation	Outreach Specialist (Care Manager) Example
Tobacco Cessation Outreach Specialists (Car	re Managers) Navigator
Legacy (now Truth Initiative®) and Partnersh An Implementation Guide for Community H	ip for Prevention — Help Your Patients Quit Tobacco Use: ealth Centers (p. 54)
MultiCare Health System — Tobacco Cessati	on Program (pp. 13–14)
NYC DOHMH and HealthyHearts NYC — ABC	CS Toolkit for the Practice Facilitator (pp. 81–83, 89–94)
NYC Health & Hospitals — EHR Screenshot Workflow (Epic):	s: Ambulatory Tobacco Screening and Treatment
Tobacco Screening	Best Practice Advisory
Ask About Tobacco Use	Assist With Quitting SmartSet Counseling
Advise to Quit	and Referrals
Assess Readiness to Quit	Assist With Quitting SmartSet Medication
Assist With Quitting	Tobacco Quitline eReferral Order
UCSF SCLC — Destination Tobacco Free: A P	ractical Tool for Hospitals and Health Systems (pp. 7–8)
UM Medicine — Tobacco Cessation: EPIC E-F	Referrals to MD Quit Line (pp. 3–7)
UW-CTRI — Screenshots depicting treatmost and the second sec	nent services data from the tobacco quitline that

Appendix C: Case Studies in Health Systems Change for Tobacco Cessation Interventions

The following case studies provide examples of health systems that have undertaken extensive systems change to improve treatment of tobacco use and dependence within their systems. For approaches and tools to replicate these successes, see Tables 1–5 in this change package.

Case Studies
CU Anschutz Medical Campus — Build a Clinic Learning Community: Summary Report and Playbook (p. 25)
CDC — Q&A with Harvard Vanguard Medical Associates and Atrius Health about Health Systems Change to Address Smoking
CDC — Louisiana State University Health System's Tobacco Control Initiative
Essentia Health — Incorporating Best Practice Tobacco Treatment into a Large Integrated Health System
Legacy (now Truth Initiative®) and Partnership for Prevention — Help Your Patients Quit Tobacco Use: An Implementation Guide for Community Health Centers
North Carolina (pp. 44–45)
Oregon (pp. 46–47)
Utah (pp. 48–49)
UCSF SCLC — Destination Tobacco Free: A Practical Tool for Hospitals and Health Systems (p. 21)

Appendix D: Resources for Community-Level Tobacco Prevention and Control Strategies

Although the TCCP focuses on clinical cessation interventions, healthcare systems can also support population-level strategies that decrease tobacco initiation and promote cessation. This may include activities such as community outreach, educational campaigns, and engagement in proven tobacco control policy efforts. Additionally, healthcare systems can partner with state and local public health entities to support community health improvement plans,³¹ or leverage their own community health needs assessment and implementation plans³² to engage in population-level strategies. Look at the following tools for ideas on how to engage in multi-sector approaches for tobacco prevention and control.

- CDC Best Practices for Comprehensive Tobacco Control Programs — 2014
- OR Health Authority Multi-Sector Approaches for Tobacco Prevention: Recommendations for Health Systems
- OR Health Authority Evidence-Based Strategies for Reducing Tobacco Use: A Guide for CCOs (p. 7)

Acronyms

AAFP	American Academy of Family Physicians
ACC	American College of Cardiology
ASHLine	Arizona Smokers' Helpline
CDC	Centers for Disease Control and Prevention
CDS	Clinical Decision Support
CU	University of Colorado
DOHMH	Department of Health and Mental Hygiene
EHR	Electronic Health Record
HIMSS	Healthcare Information and Management Systems Society
HRSA	Health Resources and Services Administration
ICSI	Institute for Clinical Systems Improvement
IHI	Institute for Healthcare Improvement
NAMI	National Alliance on Mental Illness
NAQC	North American Quitline Consortium
NCI	National Cancer Institute
NQF	National Quality Forum
PDSA	Plan-Do-Study-Act
QI	Quality Improvement
SAMHSA	Substance Abuse and Mental Health Services Administration
SCLC	Smoking Cessation Leadership Center
SMPH	School of Medicine and Public Health
TCCP	Tobacco Cessation Change Package
TSET	Tobacco Settlement Trust
UC	University of California
UCSF	University of California, San Francisco
UM Medicine	University of Maryland School of Medicine
UW	University of Wisconsin
UW-CTRI	University of Wisconsin Center for Tobacco Research and Intervention
VA	U.S. Department of Veterans Affairs
WiNTiP	Wisconsin Nicotine Treatment Integration Project

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Million Hearts[®] is a U.S. Department of Health and Human Services initiative that is co-led by the Centers for Disease Control and Prevention and the Centers for Medicare & Medicaid Services, with the goal of preventing one million heart attacks and strokes by 2022.