

# Creating Systemic Changes to Support Tobacco Treatment



Hennepin County  
**Medical Center**



# Background

## What is Health Systems Change?

Health systems change is a sustainable, integrated solution implemented at the organizational level that supports clinicians and health care systems to address tobacco use consistently and effectively. Systems change leads to improvements in the way that health care systems operate and in patient care.<sup>1,2</sup> However, data from Minnesota illustrate that there is still substantial room for improvement in integrating comprehensive tobacco dependence treatment into routine care. Although almost all smokers report being asked by their health care provider if they smoke and 78.9 percent report being advised to quit, only 52.6 percent of current smokers report receiving a referral for quitting assistance.<sup>3</sup>

## Why is Health Systems Change Important?

The Institute for Healthcare Improvement describes the need to optimize health system performance in order to meet the “Triple Aim” – improving the patient experience of care (including quality and satisfaction), improving the health of populations and reducing the per capita cost of health care.<sup>4</sup> Addressing tobacco use with patients aligns with the Triple Aim: it increases patient satisfaction with their health care<sup>5</sup>; helps patients quit, thereby improving their health<sup>6</sup>; and has a positive return on investment.<sup>7</sup>

## Health Systems Change Project

Hennepin County Medical Center (HCMC) received a two-year grant award from ClearWay Minnesota<sup>SM</sup> to implement health systems changes that would improve HCMC’s ability to address tobacco use among their patients. The project period was from May 1, 2014, to April 30, 2016. ClearWay Minnesota is an independent nonprofit organization working to improve the health of all Minnesotans by reducing the harm caused by tobacco.<sup>8</sup> Professional Data Analysts, Inc. (PDA), was hired by ClearWay Minnesota to conduct a process evaluation of its health systems change grants. This case study summarizes key activities implemented by HCMC and lessons learned through their systems change work.

- 1 Curry SJ, Keller PA, Orleans CT, Fiore MC. The role of health care systems in increased tobacco cessation. *Annu Rev Public Health*. 2008;29:411-428.
- 2 Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. May 2008.
- 3 Tobacco Use in Minnesota: 2014 Update. Minneapolis, MN: ClearWay Minnesota<sup>SM</sup> and Minnesota Department of Health; January 2015.

- 4 [www.ihl.org/offering/Initiatives/TripleAim/Pages/default.aspx](http://www.ihl.org/offering/Initiatives/TripleAim/Pages/default.aspx)
- 5 Quinn VP, et al. Tobacco-cessation services and patient satisfaction in nine non-profit HMOs. *Am J Prev Med*. 2005;29:77-84.
- 6 The Health Consequences of Smoking: A Report of the Surgeon General. May 27, 2004.
- 7 Richard P., West K., Ku L. The return on investment of a Medicaid tobacco cessation program in Massachusetts. *PLoS One*. 2012;7:e29665.
- 8 [www.clearwaymn.org](http://www.clearwaymn.org)

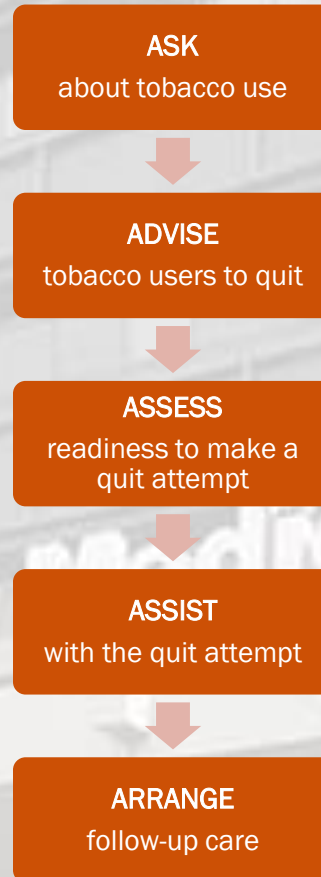


## Hennepin County Medical Center (HCMC)

is a Level 1 Adult and Pediatric Trauma Center, with many nationally recognized programs and specialties. The main hospital campus is located in downtown Minneapolis, and in 2015, HCMC had over 40 ambulatory care clinics throughout Hennepin County. HCMC is a safety net hospital providing care for low-income, uninsured and vulnerable populations.<sup>9</sup>

In 2013, 23 percent of HCMC patient encounters had a tobacco use status of “unknown,” indicating inconsistent screening for tobacco and/or improper documentation in the electronic health record (EHR). Of the unique patient encounters at that time, 29 percent of patients reported using tobacco; this was higher than the statewide tobacco use rate of 21 percent in 2010.<sup>10</sup> Together, these factors indicated the need for a systematic approach to address tobacco use. HCMC selected the 5A's<sup>11</sup> best practice model (Figure 1) to use as a guide for tobacco intervention.

Figure 1. 5A's Model



## Systems Change Goal

HCMC's goal for this grant was to implement changes across the health system to streamline tobacco user identification and treatment for tobacco dependence. This included finalizing and implementing a tobacco cessation workflow and creating a process for better identifying and referring patients.

## Key Strategies

- Integrate tobacco use questions into the ambulatory care rooming workflow
- Modify and implement a tobacco SmartSet in the electronic health record (EHR)
- Implement electronic referrals to tobacco treatment resources (e.g. telephone quitline)

## Key Project Team Members

- Tobacco Cessation Project Manager (funded by the grant) – managed and conducted daily work of the project
- Clinic Practice Manager (formerly Diabetes Program Manager) – project oversight, connections to key committees and personnel
- EHR Analyst – EHR support and modifications
- Healthcare Quality Specialist – ongoing monitoring of workflow adherence

<sup>9</sup> [www.hcmc.org](http://www.hcmc.org)

<sup>10</sup> Tobacco Use in Minnesota: 2010 Update. Minneapolis, MN: ClearWay Minnesota<sup>SM</sup> and Minnesota Department of Health; February 2011.

<sup>11</sup> [www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/5steps.html](http://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/5steps.html)



# Strategy 1: Integrate Tobacco Use Questions into the Rooming Workflow

HCMC discovered a lack of standardization across the health system in how patient tobacco use was addressed. They identified the ambulatory clinic rooming process as a key time to ask patients about tobacco use.

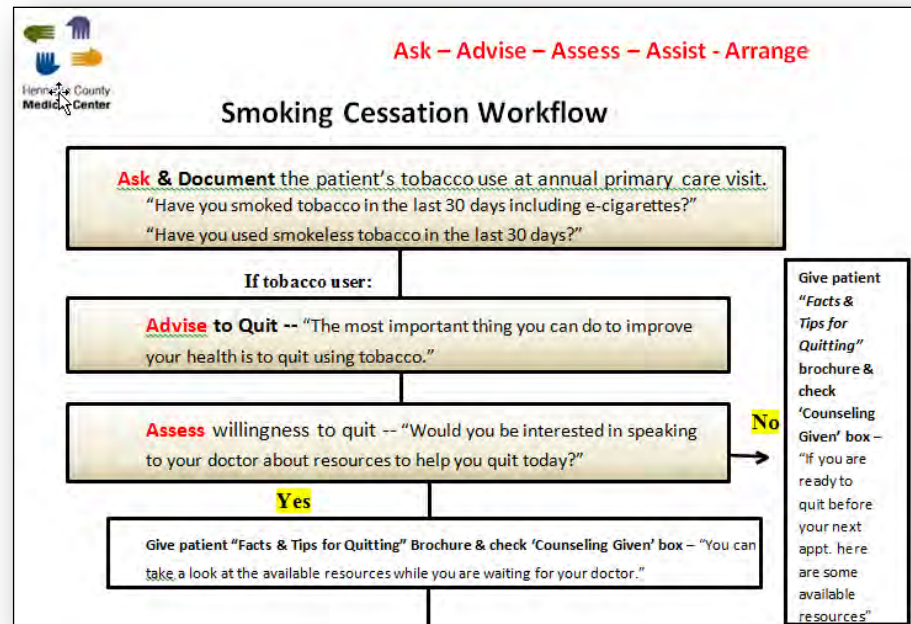
Using their connections to the Ambulatory Care Quality Committee (ACQC)<sup>12</sup>, the project team was able to attend ACQC meetings and successfully make the case for a standard operating procedure (SOP) that addresses tobacco use. Soon thereafter, the ACQC approved a new SOP which defined a minimum standard of asking every patient about their tobacco use at least annually, across all ambulatory care clinics.

Furthermore, through the tobacco project team's continued involvement with the ACQC, committee members approved the integration of the tobacco workflow into a new rooming workflow being piloted and implemented in primary care clinics as part of a system-wide LEAN<sup>13</sup> initiative. The Tobacco Cessation Project Manager worked closely with the ACQC to ensure the tobacco use questions were added to the rooming workflow.

## Rooming Process Flow

The rooming portion of the tobacco process flow is shown below in Figure 2 (see Appendix for full workflow). When a patient is placed in an exam room, the Medical Assistant (MA) follows the Ask-Advise-Assess steps of the 5A's model with help from embedded questions and prompts in the EHR. If the patient identifies as a tobacco user, the MA provides the patient with a brochure and several handouts on quitting tobacco (see Appendix). If the patient is ready to quit, a best practice alert is triggered in the EHR which the provider sees upon opening the record during the patient visit.

Figure 2. Smoking Cessation Workflow Excerpt (MA Steps)



<sup>12</sup> The ACQC provides expertise and leadership to direct and oversee clinical quality performance improvement initiatives for the Ambulatory Care division of HCMC. The ACQC ensures alignment with organizational clinical quality activities while focusing on the needs of the ambulatory population.

<sup>13</sup> <http://www.lean.org/>



## Pilot, Implementation, and Training

In June 2015, the new rooming workflow, including tobacco use questions, was piloted at one primary care clinic for four weeks. During the pilot, time studies were conducted to measure how long it took the MAs to complete each section of the workflow in order to quantify the benefits of making the process standard. Using the time study data, the ACQC was able to demonstrate to HCMC leadership and decision-makers that the new rooming workflow, overall, resulted in a more efficient rooming process.

From September to December 2015, all ambulatory MAs were trained on the new rooming workflow process. In January 2016, the workflow was fully implemented throughout all primary care clinics.

## Quality Improvement and Monitoring

As part of the LEAN initiative, the clinic managers monitor the MAs through regular, in-person process observations. They use an observation checklist to record whether the MA accurately covered each section in the workflow, and then provide feedback based on that observation to the clinic staff at the next day's team huddle. Additionally, operations staff audit the clinics by observing the MAs every other week.

This process reinforces to the MAs the importance of following the new rooming workflow at every visit. HCMC plans to implement a similar workflow, inclusive of the tobacco use questions, in the rest of their ambulatory care clinics and inpatient units in the future.

**“As we’ve been doing these [process] observations, when I go to [team] huddles...I haven’t seen anyone miss the tobacco steps.” - Clinic Practice Manager**

## Successes

The new rooming workflow was fully implemented across all primary care clinics. All primary care patients are to be asked about tobacco use at every visit. Gaining access to an important decision-making body (ACQC) and coordinating with an existing system-wide initiative (LEAN) allowed the project team to standardize how tobacco use is addressed across primary care. It also permitted them to roll out the tobacco use questions much faster than if they had pursued these efforts independently. Moreover, coordination with the larger initiative enabled access to additional resources to support comprehensive training and ongoing monitoring of staff.

## Challenges

Because the new rooming workflow covers so many health areas, not just tobacco, the MAs do not always complete each section. Although they are asking patients about tobacco use at every primary care visit, many MAs are skipping the next steps of asking about quitting and referring patients to treatment. To address this issue, the pilot clinic manager provided additional training to her MAs on how to ask patients about quitting. The project team plans to follow up with each of the other primary care clinics to reinforce the tobacco workflow with the MAs and provide additional training if necessary.

## Smoking Facts & Tips For Quitting



Hennepin County  
Medical Center

# Strategy 2: Modify and Implement a Tobacco SmartSet

In addition to standardizing how they assess and document tobacco use, HCMC identified the need for a standard EHR process and decision support tool (called a SmartSet) for providers to assist patients in quitting tobacco. The project team learned that such a tool already existed and was being used by HCMC's Tobacco Dependence Clinic.

The project team, which included an EHR analyst, partnered with the director of the Tobacco Dependence Clinic to modify the tobacco SmartSet. This involved updating the referral options and adding a nicotine replacement therapy (NRT) order form. The team consulted with several providers on the design of the SmartSet. The ACQC decided when the best practice alert would be triggered within the tobacco workflow.

## SmartSet and Treatment Process Flow

If a tobacco user expresses a readiness to quit during the rooming process, the MA indicates this in the EHR. This triggers a best practice alert which pops up when the provider opens the EHR during their visit with the patient. The alert instructs the provider to either open the SmartSet or document a reason for not opening the SmartSet in order to view the rest of the patient's record. Once in the SmartSet, the provider can submit an electronic referral (e-Referral) to a variety of treatment options, order cessation medications, and document a tobacco-related diagnosis for the patient.

### SmartSet Referral Options:

- ✓ Prescription quit medications
- ✓ Over-the-counter quit medications
- ✓ Quitline referral program
- ✓ HCMC's Tobacco Dependence Clinic
- ✓ HCMC's Behavioral Health / Psychology Department
- ✓ HCMC's Pharmacy Department







“We’re continuously improving [the SmartSet], and we will be when the funding is over, just because we have...this captive audience with the providers.”  
– Project Team Member

## Training

After the SmartSet was finalized, the project team notified staff of the changes via email, newsletter and HCMC intranet. In-person trainings were held at all of the primary care clinics in conjunction with monthly all-staff clinic meetings. During these trainings, the Tobacco Cessation Project Manager walked through the tobacco cessation workflow (see Appendix) with clinic staff. Moving forward, new providers will be trained on the tobacco cessation workflow and SmartSet during new employee orientation, and additional trainings will be offered as needed.

## Monitoring

One of the project team members is the practice manager at the clinic where the rooming workflow was piloted. This role gives her direct access to providers. Since implementation of the workflow, the practice manager has met with a number of providers to obtain feedback on the SmartSet. Examples of provider feedback include: requesting ongoing education about the SmartSet and suggesting changes to the timing of the best practice alert.

In addition, the Quality Assurance Department runs a report from the EHR system that shows the number of patients that requested information about quitting and the number of times a provider acted upon that request. This report helps the project team track providers’ utilization of the SmartSet over time. Using a combination of data review and meetings with providers, the project team plans to continue to monitor and update the SmartSet going forward to best meet provider and patient needs.



## Successes

The updated tobacco SmartSet was fully implemented across all ambulatory care clinics in August 2015. The project team was able to utilize an existing HCMC tobacco SmartSet that required only limited modification. The EHR system now alerts providers to address tobacco use with patients who are ready to quit and provides them with clear options for referring patients to treatment and prescribing cessation medications. Through the modified SmartSet, providers can refer patients to both internal and external tobacco cessation resources.



## Challenges

As a large health system with multiple priorities and different methods used to communicate and disseminate information to providers, it was challenging for the project team to communicate with providers about the modified SmartSet. To address this issue, they used multiple methods of in-person and electronic communication, such as one-on-one meetings and posting on the HCMC intranet, in addition to promoting through email and staff meetings. Initially, SmartSet utilization was lower than desired, so the project team held additional trainings for providers.

Moreover, due to the many needs of HCMC's patient population, providers are often hesitant to discuss tobacco use with patients. Some providers prefer to focus on health behaviors that are easier for the patient to change, so that the patient can see they are making progress. The project team aims to incentivize providers to address tobacco use by emphasizing the relationship between tobacco cessation and Minnesota's statewide vascular, diabetes and asthma quality measures.<sup>14</sup>

“...providers have so many things coming at them all the time. If [the SmartSet] doesn't pop up for another month, [they think] 'What is this again?'"

– Project Team Member

# Strategy 3: Implement Electronic Quitline Referrals

The Minnesota Department of Health runs a statewide tobacco quitline referral program, Call it Quits (CiQ), which “enables health care providers to use a single form and fax number to refer patients who use tobacco to quitline support” (Figure 3).<sup>15</sup> In 2013, all HCMC primary care clinics were registered with CiQ. However, due to staffing transitions, few clinic staff had been trained on how to use it, and many were unaware of its existence. Therefore, HCMC decided to use the grant to improve CiQ utilization across the health system.

## Development and Implementation

All 40+ ambulatory care clinics were either registered or re-registered with CiQ, and a champion was identified within each site to encourage referral via CiQ. Once the clinics were registered, the project team developed an electronic version of the CiQ referral form (e-Referral) and embedded it in the EHR system. When a provider selects CiQ as a referral option in the SmartSet, they are directed to a CiQ e-Referral form in the Communication Management section of the EHR. The e-Referral form auto-populates with patient, provider, and clinic information, and it is faxed directly from the EHR to CiQ with electronic signatures.

## Training

The CiQ e-Referral form was rolled out at the same time as the modified tobacco SmartSet. Providers in all nine primary care clinics were trained on use of the SmartSet. All ambulatory care clinic contacts received an email stating the purpose of and instructions for completing the CiQ e-Referral form.

## Monitoring

Through an online reporting system, HCMC can access monthly summary reports of their CiQ referrals. These reports are broken down by clinic and show the number of patients that were referred and the number that enrolled in a quitline. The project team uses these reports to monitor CiQ utilization and to follow up with clinics that are not actively making referrals.

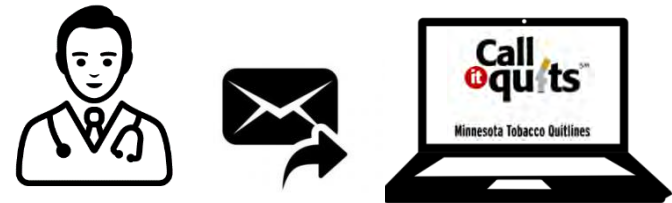
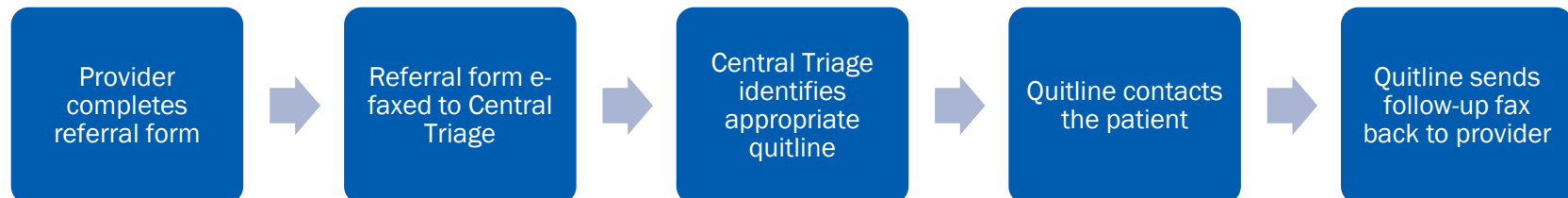


Figure 3. CiQ e-Referral Process<sup>15</sup>



<sup>15</sup> [www.health.state.mn.us/callitquits](http://www.health.state.mn.us/callitquits)



## Successes

As of August 2014, all HCMC ambulatory care clinics were registered with CiQ. Furthermore, the CiQ referral form is now electronic and integrated into the EHR system. Initially, the project team did not think that all fields in the form could be auto-populated from the EHR. However, by coordinating with their IT staff and the CiQ administrator, the team removed the need for manual data entry and improved the ease and efficiency of submitting a CiQ referral. Pre-populating forms and automating their transmission were key successes of this strategy.



## Challenges

HCMC is a very dynamic organization, and clinics are often opening, closing, and moving locations. Therefore, it was difficult for the project team to determine the number of ambulatory care clinics at a given time and to identify a CiQ champion at each site. In order to overcome this barrier, they connected with various staff across the organization to assemble a comprehensive list of clinics and key contacts.

Another challenge is ensuring that all providers receive CiQ training. On top of this, sending the e-Referral requires providers to access a section of the EHR that they rarely use, thus, highlighting the importance of provider training. Providers have reported that they often click out of the SmartSet and then cannot remember how to navigate back to send the e-Referral. The project team plans to connect with primary care staff to gather input and suggestions for developing a method to keep all clinics updated on the CiQ process.

# Lessons Learned



## Establish a strong project team

The project benefitted from having a dedicated Tobacco Cessation Project Manager who was solely focused on moving the grant strategies forward. The Project Manager was supported by a long-time staff member who was able to connect the Project Manager with key personnel and decision-making bodies. An EHR Analyst was also brought on to the team. Since most of the system changes were technical, it was essential to involve EHR staff early on. To support and monitor project sustainability, the project team also brought on a Healthcare Quality Specialist who focused on primary care clinic quality measures related to tobacco (e.g. diabetes and asthma). The Specialist supported ongoing EHR monitoring of the tobacco SmartSet and workflow.

## Involve stakeholders to be impacted by the changes

From the start of the project, it was important to involve staff that would be impacted by the changes. For HCMC, this included providers and MAs. The project team solicited feedback from providers on the best practice alert, SmartSet, and CiQ e-Referrals. At the same time, MAs identified issues and suggested improvements to the rooming workflow.

## Leverage existing initiatives and tools

Through their connection to a key decision-making body (ACQC), the project team was able to successfully integrate their work into a larger, system-wide initiative. Additionally, by working with HCMC's tobacco cessation clinic, they were able to utilize and modify an existing EHR SmartSet, saving time and resources.

## Use multiple (repeated) methods of communication

Communicating with medical staff about EHR and workflow changes was a consistent challenge across the three strategies. Email is often not the best method for communicating with providers, so it is important to utilize other resources to inform them of changes (i.e. in-person meetings, posting on intranet). HCMC emphasizes the importance of sending out messages multiple times using a variety of methods to effectively reach providers.

## Change takes time and necessitates flexibility

In a large health system like HCMC, change takes time. Timelines frequently shift due to other projects and competing organizational priorities. Therefore, staff working on systems change projects must be flexible, understand how to collaborate across departments, and be willing to modify their work to fit the changing landscape.

## Acknowledgements

The authors would like to thank the following individuals for providing information for this study: Tammy Didion, Clinic Practice Manager; Trisha Vennink, former Tobacco Cessation Project Manager; Dr. Paul Pentel, HCMC Tobacco Dependence Clinic Director; Gao Vang, Healthcare Quality Specialist; and Linda O'Connor, EHR Ambulatory Analyst.





## **Appendix**

- 1. Smoking Cessation Workflow**
- 2. Tobacco Cessation Brochure**
- 3. Tobacco Cessation Handouts**

## Smoking Cessation Workflow

**Ask & Document** the patient's tobacco use at annual primary care visit.  
 "Have you smoked tobacco in the last 30 days including e-cigarettes?"  
 "Have you used smokeless tobacco in the last 30 days?"

**If tobacco user:**

**Advise to Quit** -- "The most important thing you can do to improve your health is to quit using tobacco."

**Assess** willingness to quit -- "Would you be interested in speaking to your doctor about resources to help you quit today?"

**No**

**Yes**

Give patient "Facts & Tips for Quitting" Brochure & check 'Counseling Given' box – "You can take a look at the available resources while you are waiting for your doctor."

Give patient "Facts & Tips for Quitting" brochure & check 'Counseling Given' box – "If you are ready to quit before your next appt. here are some available resources"

**Assist** in quit smoking attempt. PCP makes appropriate referrals.

Primary Care Counseling and Medication Management

Call it Quits Phone/Text Counseling

Behavioral Health / Psychology Consult

HCMC Smoking Cessation Clinic

Clinical PharmD Counseling and Medication Management

Prescribe medication and proceed with plan of

Provider completes *Call it Quits* Referral form in Communication Management  
 Fax referral to 1-800-483-3114

Order referral to Psychology (Downtown or neighborhood clinic)

Order referral to Smoking Cessation Clinic

Order referral to PharmD (Downtown or neighborhood clinic)

**Arrange** for follow-up

## Benefits of Quitting

Right Away

## When you quit smoking

- The air around you is no longer harmful to children and others

Within 24 hours

- Carbon monoxide (a poisonous gas) lowers to normal levels

Within days

- Smell and taste improves

Within months

- Circulation improves
- Wound healing is faster
- You will breathe easier
- Energy increases
- Risk of lung infection is lower

Within 1 year

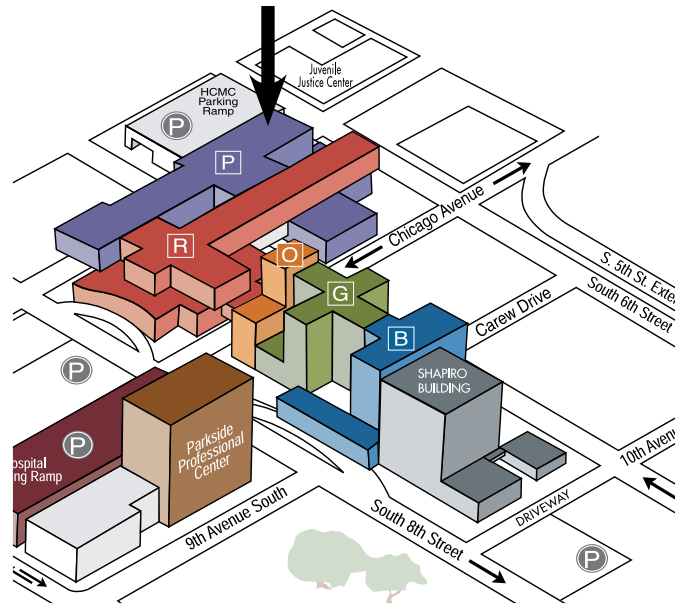
- Risk of heart attack or stroke is lower

Within 2 years

- Risk of heart attack is the same as a non-smoker

Within 5 years

- Risk of lung cancer is lower



## Tobacco Dependence Clinic

701 Park Avenue  
Purple Building, Level 7  
Minneapolis, MN 55415  
612-873-6963

### Parking at HCMC:

Discounted parking for patients, families and visitors is available in the HCMC Parking Ramp at 6th Street and Park Avenue and the "Hospital" Parking Ramp at 8th and Chicago Avenue. Request a parking validation ticket in your clinic or inpatient unit. Valet parking is also available Monday-Friday at the 7th Street entrances to the Purple and Blue Buildings.



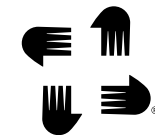
Hennepin County Medical Center provides services without regard to race, color, creed, religion, age, sex, disability, marital status, sexual orientation, gender identity, public assistance or national origin.

Donate. Hennepin Health Foundation | [www.hcmc.org/foundation](http://www.hcmc.org/foundation)

10/14 180-07361

## Quit Smoking

Tobacco  
Dependence  
Clinic



Hennepin County  
Medical Center

## Dangers of Smoking

Cigarette smoking causes:

- Heart attacks
- Stroke
- Emphysema
- Chronic bronchitis
- Cancers of the lung, mouth, throat, esophagus, kidneys, bladder, colon
- Osteoporosis (soft bones)
- Gingivitis (gum disease)
- Cataracts
- Low birth weight and increased infant deaths in babies born to pregnant women who smoke
- Worsening of asthma
- Wrinkled skin
- Erectile dysfunction
- Macular degeneration

## Clinical Staff

**Paul Pentel, MD**

Director, Division of  
Clinical Pharmacology

**Charles Reznikoff, MD**

Addiction Medicine

## How we can help you

At the HCMC Tobacco Dependence Clinic you will be seen and evaluated individually to develop a plan for quitting.

## Your quit plan will include

- Behavioral counseling for how to manage stress, weight control, being around other smokers and smoking triggers.
- Medications, including nicotine patch, gum, inhaler, lozenge and nasal spray, Zyban (bupropion) and Chantix (varenicline).
- Frequent follow-ups to help you adjust and make sure you remain a non-smoker.
- To schedule or cancel an appointment call 612-873-6963

## Scheduling Services

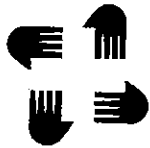
## What will it cost?

The cost of your clinic visit and medication is covered by most insurance plans. If you have insurance, we will send a claim directly to your insurance plan. If you don't have insurance coverage, we will work with you to find the best plan.

# EVERY cigarette YOU SMOKE takes 11 minutes off YOUR LIFE







Hennepin County  
Medical Center

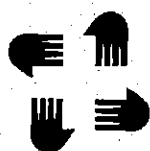
## Helping Someone Quit Smoking

When someone is trying to quit smoking, you can help. Your help is very important to a smoker who is quitting. Here is how you can help:

1. Make your home smoke free. Don't let anyone smoke in your home. Ask smokers to go outside.
2. If you smoke, respect the ex-smoker and never smoke around them. If you're inside, go outside. If you're already outside, go far enough away that so that your smoke can't be seen or smelled. Also keep your cigarettes, lighters, and ashtrays out of sight.
3. Offer suggestions for enjoyable activities to help the time pass, like going for a walk or out to a movie.
4. Be patient. Ex-smokers are craving nicotine and may be irritable, anxious, and angry at times.
5. Give encouragement and support. Don't preach or nag. A positive tone is much more effective.
6. Many smokers are not able to stop smoking on their first try. They may need to try several times. Be patient and encouraging.

Your help is important and will make it easier to quit.

**Tobacco Dependence Clinic  
701 Park Avenue South  
Minneapolis, MN 55415  
612-347-2300**



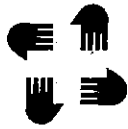
Hennepin County  
Medical Center

## Drinking and Smoking

**When someone quits smoking, half of all failures happen during or right after drinking alcohol**

- If alcohol is a problem for you, talk with your doctor about getting some help with your drinking.
- Even if alcohol is not a problem for you, it can make it more difficult to quit smoking
  - Don't drink any place where smoking is allowed, such as a party, club or even with friends if someone is smoking.
  - Be on your guard during or after drinking. Your will-power will be less and it will be harder to resist the urge to smoke.
  - The more you drink the harder it will be to remain a nonsmoker. If you drink, limit the amount.

**Tobacco Dependence Clinic  
701 Park Avenue South  
Minneapolis, MN 55415  
612-873-2300**



Hennepin County  
Medical Center

## **Walking for Exercise**

Walking at a comfortable pace is a great form of exercise that can help prevent or treat many common medical problems. Most people find walking to be fun and that it feels good if it is done regularly and sensibly.

### **Walking regularly reduces your risk of developing these medical problems:**

- Obesity
- Diabetes
- Heart disease (heart attack)
- Cancer of the intestines
- Osteoporosis (soft bones)

### **Walking can reduce the severity of these medical problems even if you already have them:**

- Depression
- Overweight or obesity
- Diabetes
- High blood pressure
- High cholesterol
- Osteoporosis
- Heart disease (heart attack, angina)
- Emphysema or chronic bronchitis
- Walking increases your chances of quitting smoking

### **Other benefits of walking:**

- Increased strength, energy and endurance
- Improved mood; reduces anxiety and tension; increases sense of well-being
- For the elderly, improved ability to remain active and self-sufficient
- Live longer

### **How long do I have to walk?**

20 minutes every day or 30 minutes 4 times per week will improve your health. This should be in addition to any walking you already do. You do not have to do your walking all at once. You can walk 10 minutes in the morning and 10 minutes in the afternoon.

**The New York Times** Reprints

This copy is for your personal, noncommercial use only. You can order presentation-ready copies for distribution to your colleagues, clients or customers here or use the "Reprints" tool that appears next to any article. Visit [www.nytimes.com/reprints](http://www.nytimes.com/reprints) for samples and additional information. Order a reprint of this article now.

**WATCH NOW**  
**THE FIRST**  
**12 MINUTES**

January 3, 2011

# The Claim: Taking a Walk Can Help Reduce Cravings

By ANAHAD O'CONNOR

## THE FACTS

Do your New Year's resolutions tend to fizzle like a glass of chilled Champagne?

If your goal is to break a bad habit or cut back on food and shed a few pounds, then a simple but overlooked trick could come in handy: go for a walk. As far as weight-loss strategies go, it is not the most glamorous, but studies have found that a brisk walk around the block can significantly dampen cravings, whether the urge for junk food or the desire to light up a cigarette.

In a 2008 study, researchers recruited a group of "regular chocolate eaters" — people who ate at least two chocolate bars a day — and had them abstain for three days. They then divided them into groups, put them to work on difficult cognitive tests to raise their stress levels, and tempted them with unwrapped chocolate bars.

The researchers found that if the subjects walked for 15 minutes on a treadmill at a pace that was brisk but not tiring, they were far less likely to suffer cravings, and even showed lower blood pressure when handling the chocolate bars.

In other studies, scientists looked at the effects of brief walks on cigarette cravings. One in 2005 found that smokers who were told to abstain for a day had rapid reductions in the urge to smoke when they took "self-paced, low-intensity" walks lasting about 15 minutes.

Another study in 2007 showed that brief walks not only beat back cravings, but also reduced withdrawal symptoms and increased the time between cigarettes smoked.

## THE BOTTOM LINE

Studies show that a brisk walk can ease cravings and help break some habits.

ANAHAD O'CONNOR [scitimes@nytimes.com](mailto:scitimes@nytimes.com)