

# SMOKING CESSATION COUNSELING IN THE INPATIENT SETTING: A MULTI-STATE ACCELERATED PROJECT 2004



Final Report for Colorado Hospitals  
March 2005



## **A Five-State Demonstration Project for Accelerated Improvement**

### **Implementing a Smoking Cessation Counseling Program in Your Hospital A Five-State Demonstration Project for Accelerated Improvement**

#### **Background**

Since cigarette smoking accounts for one out of five deaths in the United States, hospitalization can be an ideal opportunity for a patient to stop smoking. Patients who continue to smoke heavily after acute myocardial infarction (AMI), for example, have a mortality rate that is 1.33 to 2.55 times that of patients who quit.<sup>1</sup> Patients who receive even brief smoking cessation advice (i.e., three minutes or less) from their physician are more likely to quit than those who receive no counseling<sup>2</sup>.

The purpose of the demonstration project was to study how quality improvement organizations (QIOs) and hospitals can apply best practice methods to improve patient care under an accelerated timeline. Forty-nine (49) hospitals in five states - Arizona, Colorado, Maryland, South Carolina and Washington State - worked with their local QIO in the summer and fall of 2004 to ensure that current smokers received smoking cessation counseling during their hospital stay. Participating hospitals assessed their current systems, developed a plan to improve the system and began implementing the identified system improvements while monitoring their delivery of counseling cessation counseling for three consecutive months.

#### **Smoking Cessation Counseling Rates Improve**

An impressive 45 of the 49 of participating hospitals (92%) reported data during this project. In Colorado, eight of nine participating hospitals (89%) reported data for at least one of the project months. Since the number of charts reviewed by each hospital during each month of the data collection period was small, it may require a longer period of time to determine if the hospital's rates are improving. We encourage you to continue auditing your system to help determine whether every appropriate patient is receiving counseling. If not, additional system improvements may be advisable.

Smoking cessation counseling rates were determined from the QIO Clinical Warehouse for patients discharged in Quarter 1, 2004 and from project data reported for patients discharged during the months of August through December 2004. For the 45 hospitals in the five states that reported data for all patient populations:

- 76% of reporting hospitals improved their smoking cessation counseling rates
- As a group, hospital rates increased from a median of 59% at baseline to 89% during the project
- On average, hospitals improved their median rates by 19% over baseline

---

<sup>1</sup> Burling TA, Singleton EG, Bigelow GE, Baile WF, Gottlieb SH. Smoking following myocardial infarction: A critical review of the literature. *Health Psychology*. 1984; 3: 83-96.

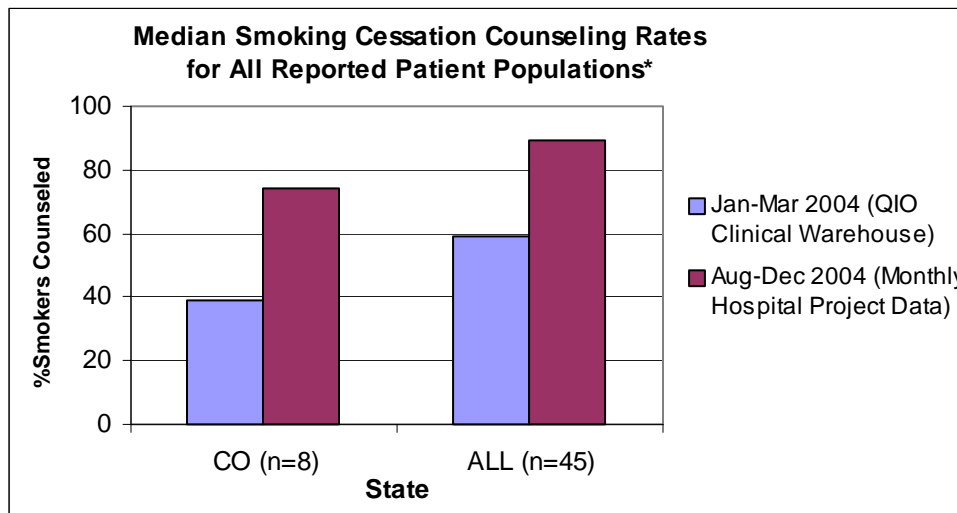
<sup>2</sup> Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. June 2000.

## A Five-State Demonstration Project for Accelerated Improvement

- The national average for smoking cessation counseling of adult Medicare beneficiaries who smoke and who are diagnosed with AMI, HF (HF) or PNE (PNE) is 56% (Quarter 2, 2004)

Of the eight Colorado hospitals reporting data for all patient populations:

- 75% of reporting hospitals improved their smoking cessation counseling rates
- As a group, hospital rates increased from a median of 39% at baseline to 74% during the project
- On average, hospitals improved their median rates by 33% over baseline.



\* Eight Colorado hospitals reported project data for all patients for at least one month during the project. QIO Clinical Warehouse rates are based on random samples of patients who smoke discharged Jan – Mar 2004 with a diagnosis of HF, AMI or PNE. Hospital project data rates are based on the hospital's review of charts for patients who smoke with discharge dates spanning the months of August through December 2004 and with a diagnosis of HF, AMI, PNE or other diagnoses that hospital staff deemed appropriate for smoking cessation counseling.

Of the hospitals in the five states that reported data, 35 hospitals (78%) also stratified their patient data into those diagnosed with HF, AMI and PNE, which match those patient populations reported in the QIO Clinical Warehouse. While stratification was not a requirement for this project, it did allow a cleaner comparison between QIO Clinical Warehouse and hospital project data. Again, the monthly data reported by each hospital during the intervention period were combined to obtain a sufficient sample size for analysis.

Of the 35 hospitals in the five states with data stratified by HF, AMI and PNE:

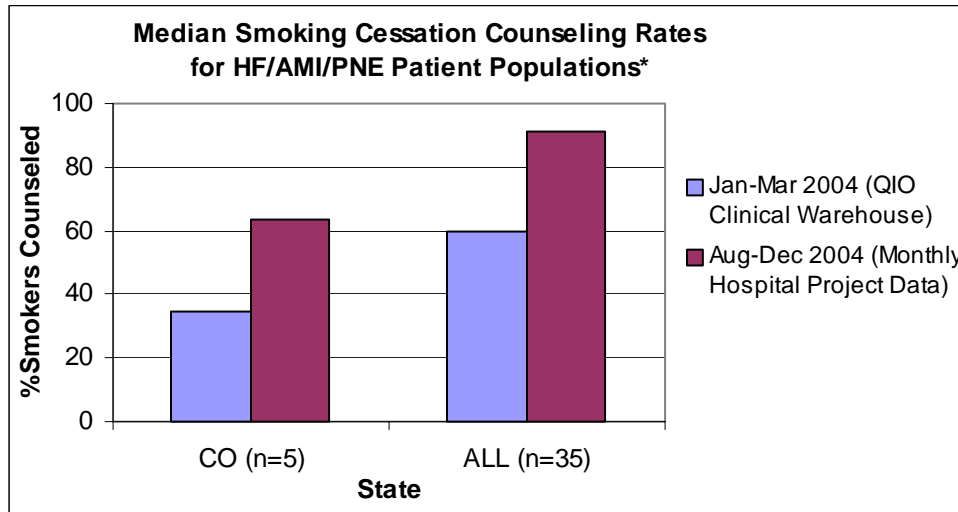
- 83% of reporting hospitals improved their smoking cessation counseling rates
- Hospital rates increased from a median of 60% at baseline to 91% during the project

## A Five-State Demonstration Project for Accelerated Improvement

- Hospitals improved their rates by an average of 20% (median)

Of the five Colorado hospitals with data stratified by HF, AMI and PNE:

- 80% of reporting hospitals improved their smoking cessation counseling rates
- As a group, hospital rates increased from a median of 35% at baseline to 64% during the project
- On average, hospitals improved their median rates by 29% over baseline.



\* Five Colorado hospitals reported project data for AMI, HF or PNE patients for at least one month during the project. QIO Clinical Warehouse rates are based on random samples of patients who smoke discharged Jan – Mar 2004 with a diagnosis of HF, AMI or PNE. Hospital project data rates are based on hospital review of charts for patients who smoke with discharge dates spanning the months of August through December 2004 and with a diagnosis of HF, AMI or PNE.

### Hospitals Make Changes to their Systems

- Most (45 of 49) participating hospitals reported making at least one system change during the project.
- Hospitals reported an average of 3.7 system changes per hospital.

Hospitals participating in the project were most likely to make system changes around

- How staff receive training on providing effective smoking cessation counseling;
- How a patient's smoking status is documented; and
- How staff documents smoking cessation counseling when it is delivered.

Other common areas of effort included:

- Changes in the process of identifying smokers;

## **A Five-State Demonstration Project for Accelerated Improvement**

- Changes in policy to ensure that smoking cessation counseling was offered to all current smokers;
- Changes in staff roles and accountabilities for reinforcing smoking cessation messages with patients;
- Changes in staff roles and accountabilities for delivering smoking cessation counseling;
- Changes in the process for referring smokers to community resources; and
- Changes in the process for offering pharmacotherapy to smokers.

## A Five-State Demonstration Project for Accelerated Improvement

**Table 1. A highlight of system changes reported in each state**

Change	Number of hospitals reporting each change	
	CO	ALL
Staff training is provided on smoking cessation counseling	4	34
Specific area in the medical record to document smoking status of each patient	3	22
Specific area in the medical record to document smoking cessation counseling	1	18
Hospital has a process for the identification of smokers	6	16
Other (see below)*	1	15
Policy supporting smoking cessation counseling for all patients that smoke	4	13
Physicians and all staff members are encouraged to reinforce smoking cessation messages with patients	1	13
Patients are referred to community resources such as smoking cessation programs and support groups	5	13
Hospital assigns specific staff members to conduct smoking cessation counseling	4	11
Physicians are encouraged to prescribe smoking cessation pharmacotherapy	1	9
Physician's order no longer required for smoking cessation counseling	2	2

\* Examples of other changes reported include the following:

- One hospital reported that patients must now sign a form if they insist on going outside to smoke to relieve the hospital of liability.
- One hospital reported modifying their electronic medical record system. They moved the smoking cessation assessment question to the assessment screen in the hospital electronic medical record system, with a yearly reminder prompt. A place to document "Patient refused counseling" was added to the screen.
- One hospital reported obtaining a physician champion for smoking cessation counseling.
- For staff training, one hospital reported placing table tents in the cafeteria to remind staff to assess patients' smoking history and to provide information on counseling and documentation. Another hospital reported offering weekly short power point presentations.
- For patient education, one hospital reported developing patient education posters and placed them in the patient smoking area. Another hospital improved the

## **A Five-State Demonstration Project for Accelerated Improvement**

process to ensure that smoking cessation brochures were available by assigning responsibility for restocking brochures on floors, and purchasing and installing brochure racks on all floors. Another hospital explored putting patient education materials on the hospital intranet.

Examples of some of the resources developed and used by the participating hospitals are included in Appendix A.

### **Appendix A: Examples of Resources**

- A-1 Example of a smoking cessation standard of care, clarifying process and staff roles and responsibilities
- A-2 Example of revised scripting and documentation at admission, as modified in a hospital's electronic medical record system
- A-3 Example of a prescription pad for smoking cessation, to reinforce the importance of smoking cessation counseling to patients



## Smoking Cessation Standard of Care

Nursing Staff Admission Assessment	Nursing or Ward Clerk  ORDER	Pulmonary Staff  INTERVENTION	Pulmonary Staff Patient who has <b>DESIRE</b> to Quit Smoking <b>INTERVENTION</b>	Pulmonary Staff Patient who has <b>NO DESIRE</b> to Quit Smoking <b>INTERVENTION</b>	Pulmonary Rehabilitation  <b>OUT-COMES</b>
<b>NEED</b> 1. Complete the Inpatient Admission History section of the Initial Assessment Form. <b>Yes</b> , the patient is currently smoking or has smoked within the last 12 months					
	2. Order entered for Smoking Cessation	3. Assessment of the patients desire to quite smoking 5 A's (document on the order) 20 min			
			<b>4. Discuss the How To Quit Pamphlet</b> Includes list of Community Smoking Cessation Programs <b>Provide a Survival Kit</b> Water Bottle Tootsie Roll Pop Hard Candy (sugar free available) Rubber Band Rock Additional Literature as available <b>Referral-Release and Fax Information Form</b> Complete the form allowing the patient to choose the program from community. Attach RRFI Form to the order and place both in the	<b>4. Discuss 5 R's with patient</b> Relevance: to condition Risks: of continued smoking Rewards: benefits of quitting Roadblocks: barriers Repetition: reinforce potential for success <b>Discuss the How To Quit Pamphlet</b> Includes list of Community Smoking Cessation Programs <b>Physician Notification Form</b> Check the correct boxes and place the sticker on the outside cover of the chart. <b>Document refusal in chart</b> <b>Interdisciplinary Patient Discharge Goals/Teaching</b>	

	<p><b>Sign &amp; initial</b></p> <p><b>Document reason for the refusal, the time and your name on the order.</b></p> <p><b>Place the order in the folder marked complete located in the Respiratory Dept. Smoking Cessation Box.</b></p> <p><b>Enter Charges</b></p>	<p><b>5. Data Base Entry</b></p> <p><b>1 month status phone call Outcomes documented in database.</b></p> <p><b>3 month status phone call Outcomes documented in database.</b></p> <p><b>Physician patient status letter</b></p>
<p><b>folder marked complete located in the Respiratory Dept. Smoking Cessation Box.</b></p> <p><b>Pulmonary Rehabilitation will fax RRFI Form to the program.</b></p> <p><b>Physician Notification Form</b></p> <p><b>Check the correct boxes and place the sticker on the outside cover of the chart.</b></p> <p><b>Document in chart Interdisciplinary Patient Discharge Goals/Teaching</b></p> <p><b>Sign and initial</b></p> <p><b>Enter Charges</b></p>		

# A Five-State Demonstration Project for Accelerated Improvement

Administration and Information - SDO, Two

Performed on: 12/22/2004 07:28

**Tobacco Use**

"As [redacted], we are very concerned about the effects of smoking on your health. We would like to share some materials that other patients have found helpful about tobacco use and secondhand smoke exposure."

Have you smoked or used tobacco in any form in the last 12 months?

If patient has quit smoking, congratulate him/her, and re-emphasize importance of not smoking. **Quit Date** [text box]

\* We know that if you smoke, one of the most important things you can do for your health is to quit smoking. Would you like to talk with a member of our team about quitting? \*

**Tobacco Type**

Cigarettes  
 Cigars  
 Pipe  
 Chewing tobacco  
 Other

**Cigarette Use Packs/Day**

0.5 pack/day  
 1 pack/day  
 2 packs/day  
 3 packs/day  
 >3 packs/day  
 Other

**Years of Tobacco Use** [text box]

**Pack Years** [text box]

**Alcohol Use**

**Caffeine Use**

Tobacco Given  
 Materials offered but patient refused

Yes  
 No  
 Never used tobacco  
 Quit > 1 year ago

Yes - RT notified for Smoking Cessation counseling  
 Advice Given by Nurse  
 Declined Counseling/Referral

If response is "Yes" - Respiratory Therapy will be electronically notified to begin smoking cessation protocol or counseling.

Start | User-defined Applicat... | PowerChart Office - (C... | Tab 10000 dtd 12-24-04... | 7:21



**I Recommend That You  
Quit Smoking**

You Can Quit. We Can Help.

**CALL 1-800-639-QUIT (7848)  
For Free Counseling & Assistance**

Rx

No Substitutions

As your medical provider, I recommend that you stop smoking.

Signature \_\_\_\_\_ M.D.

Comments: \_\_\_\_\_  
\_\_\_\_\_



**I Recommend That You  
Quit Smoking**

You Can Quit. We Can Help.

**CALL 1-800-639-QUIT (7848)  
For Free Counseling & Assistance**

Rx

No Substitutions

As your medical provider, I recommend that you stop smoking.

Signature \_\_\_\_\_ M.D.

Comments: \_\_\_\_\_  
\_\_\_\_\_



**I Recommend That You  
Quit Smoking**

You Can Quit. We Can Help.

**CALL 1-800-639-QUIT (7848)  
For Free Counseling & Assistance**

Rx

No Substitutions

As your medical provider, I recommend that you stop smoking.

Signature \_\_\_\_\_ M.D.

Comments: \_\_\_\_\_  
\_\_\_\_\_



**I Recommend That You  
Quit Smoking**

You Can Quit. We Can Help.

**CALL 1-800-639-QUIT (7848)  
For Free Counseling & Assistance**

Rx

No Substitutions

As your medical provider, I recommend that you stop smoking.

Signature \_\_\_\_\_ M.D.

Comments: \_\_\_\_\_  
\_\_\_\_\_

## A Five-State Demonstration Project for Accelerated Improvement

### Quit and Save Yourself Money

- At \$3.00 per pack, if you smoke 1 pack per day, you will save \$1,100.00 each year and \$11,000.00 in 10 years.
- What else could you do with this money?

### Quit and Enjoy Many Health Benefits

At 1 day	Risk of a heart attack decreases
At 2 days	Nerve endings regenerate; sense of smell and taste improve
At 2 weeks	Circulation improves and lung function increases
At 1 year	Likelihood of a heart attack is cut in half
At 5 years	Risk of a stroke is reduced to the same levels of a non-smoker
At 10 years	Risk of dying from lung cancer is about half that of a current smoker
At 15 years	Risk of coronary heart disease and death become roughly equal to those who have never smoked

### Quit and Save Yourself Money

- At \$3.00 per pack, if you smoke 1 pack per day, you will save \$1,100.00 each year and \$11,000.00 in 10 years.
- What else could you do with this money?

### Quit and Enjoy Many Health Benefits

At 1 day	Risk of a heart attack decreases
At 2 days	Nerve endings regenerate; sense of smell and taste improve
At 2 weeks	Circulation improves and lung function increases
At 1 year	Likelihood of a heart attack is cut in half
At 5 years	Risk of a stroke is reduced to the same levels of a non-smoker
At 10 years	Risk of dying from lung cancer is about half that of a current smoker
At 15 years	Risk of coronary heart disease and death become roughly equal to those who have never smoked

### Quit and Save Yourself Money

- At \$3.00 per pack, if you smoke 1 pack per day, you will save \$1,100.00 each year and \$11,000.00 in 10 years.
- What else could you do with this money?

### Quit and Enjoy Many Health Benefits

At 1 day	Risk of a heart attack decreases
At 2 days	Nerve endings regenerate; sense of smell and taste improve
At 2 weeks	Circulation improves and lung function increases
At 1 year	Likelihood of a heart attack is cut in half
At 5 years	Risk of a stroke is reduced to the same levels of a non-smoker
At 10 years	Risk of dying from lung cancer is about half that of a current smoker
At 15 years	Risk of coronary heart disease and death become roughly equal to those who have never smoked

### Quit and Save Yourself Money

- At \$3.00 per pack, if you smoke 1 pack per day, you will save \$1,100.00 each year and \$11,000.00 in 10 years.
- What else could you do with this money?

### Quit and Enjoy Many Health Benefits

At 1 day	Risk of a heart attack decreases
At 2 days	Nerve endings regenerate; sense of smell and taste improve
At 2 weeks	Circulation improves and lung function increases
At 1 year	Likelihood of a heart attack is cut in half
At 5 years	Risk of a stroke is reduced to the same levels of a non-smoker
At 10 years	Risk of dying from lung cancer is about half that of a current smoker
At 15 years	Risk of coronary heart disease and death become roughly equal to those who have never smoked