ICSI

Institute for Clinical Systems Improvement

Health Care Guideline

The information contained in this *ICSI Health Care Guideline* is intended primarily for health professionals and the following expert audiences:

- physicians, nurses, and other health care professional and provider organizations;
- health plans, health systems, health care organizations, hospitals and integrated health care delivery systems;
- medical specialty and professional societies;
- researchers;
- federal, state and local government health care policy makers and specialists; and
- employee benefit managers.

This *ICSI Health Care Guideline* should not be construed as medical advice or medical opinion related to any specific facts or circumstances. If you are not one of the expert audiences listed above you are urged to consult a health care professional regarding your own situation and any specific medical questions you may have. In addition, you should seek assistance from a health care professional in interpreting this *ICSI Health Care Guideline* and applying it in your individual case.

This *ICSI Health Care Guideline* is designed to assist clinicians by providing an analytical framework for the evaluation and treatment of patients, and is not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. An *ICSI Health Care Guideline* rarely will establish the only approach to a problem.

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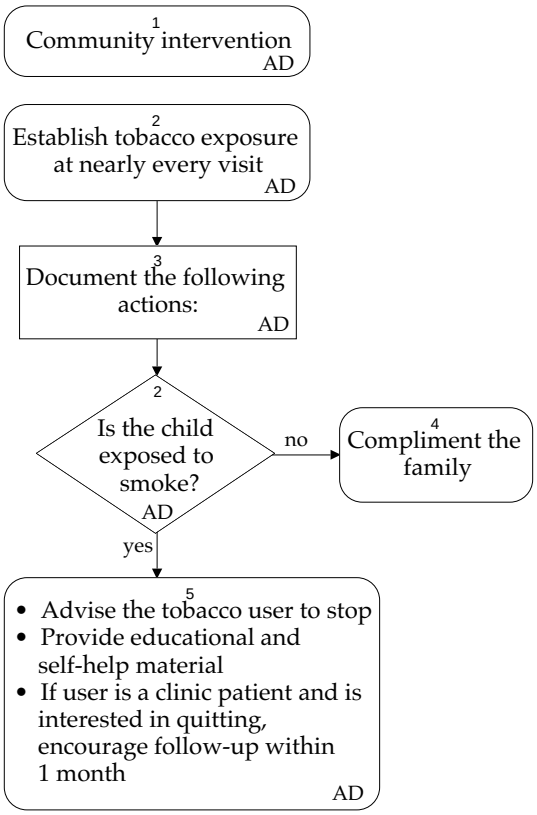
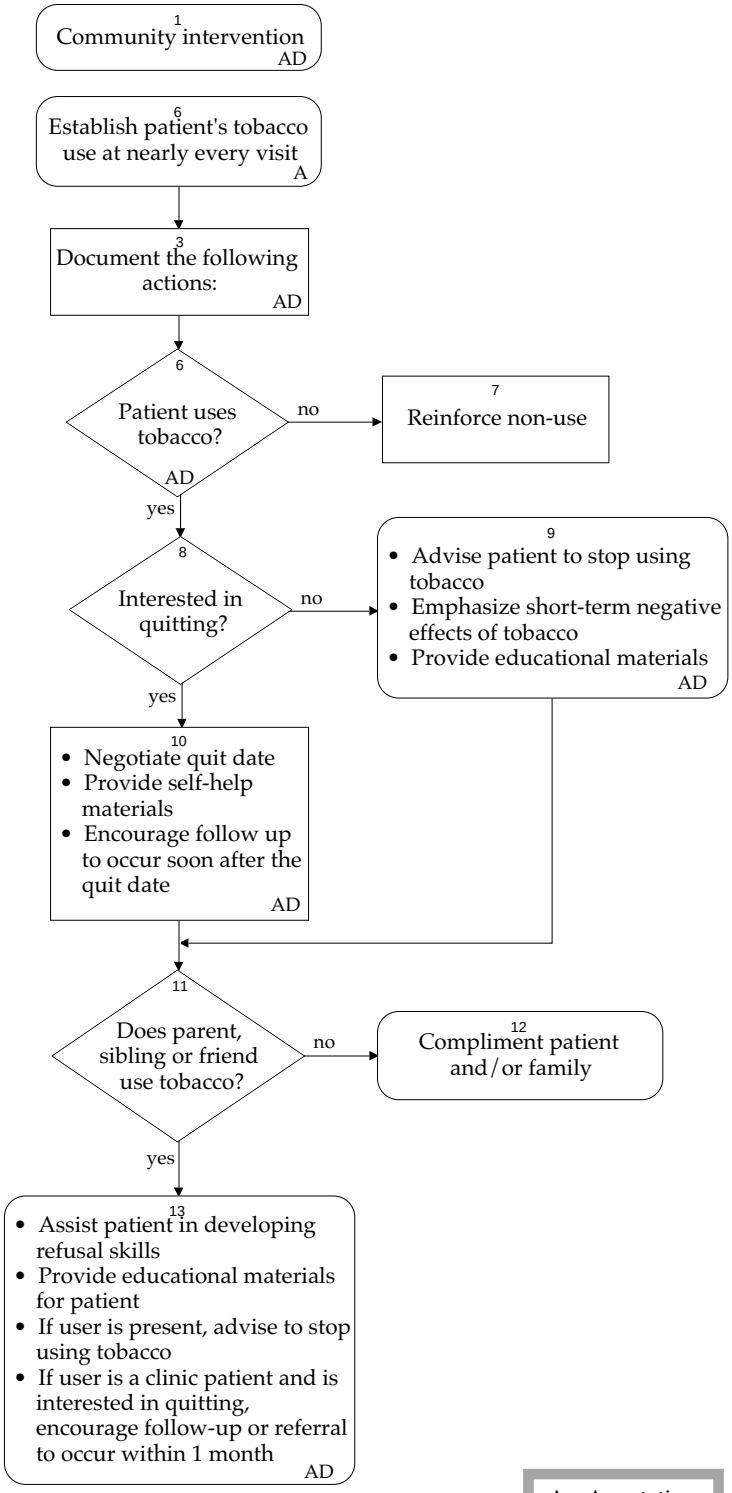
Health Care Guideline:

Tobacco Use Prevention and Cessation for Infants, Children and Adolescents

Infants and Children from Birth to 10 Years Old



Children and Adolescents Aged 10 Years and Above



A = Annotation
D = Discussion

General Implementation
January 2000

Work Group Members
Work Group Leader
David Klevan, MD
HealthPartners
Cardiology
Thomas E. Kottke, MD
Mayo Clinic
Family Practice
Donald A. Pine, MD
HealthSystem Minnesota
Michael Schoenleber, MD
HealthPartners
David Rossmiller, MD
FHSM-MinnesotaHealth
Internal Medicine
David Klevan, MD
HealthPartners
Pediatrics
Susan Asch, MD
Stillwater Medical Group
Ob/Gyn Nurse Practitioner
Renee Compo, RN, CNP
HealthPartners
Nursing
Joanne Kellen, RN
HealthPartners
Health Education
Jane A. Norstrom
Institute for Research & Education
BHCAG Representative
Sandra Dahl
Honeywell, Inc.
Measurement Advisor
Diane Jacobsen, MPH
ICSI
Facilitator
Jenelle Meyer, RN
ICSI

POPULATION OF INTEREST

Children and adolescents.

RELATED GUIDELINES

Other ICSI guidelines whose scope and/or recommendations are closely related to the content of the guideline are:

1. Preventive Counseling and Education
2. Lipid Treatment in Adults
3. Preventive Services for Adults
4. Stable Coronary Artery Disease

PRIORITY AIMS FOR MEDICAL GROUPS WHEN USING THIS GUIDELINE

1. To improve the proportion of patients whose current use of tobacco or exposure to tobacco smoke is obvious in the chart at any primary care clinic encounter.

   Possible measure of accomplishing this aim:

   a. The percentage of patients' charts that either show that there is no tobacco use/exposure or (if a user) that the current use was documented at the most recent clinician visit.

2. To improve the proportion of tobacco-users whose interest in quitting is assessed or who receive cessation advice at any clinic encounter.

   Possible measure of accomplishing this aim:

   a. The percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit.

3. To increase the likelihood that tobacco-using patients who visit the clinic will quit.

   Possible measure of accomplishing this aim:

   a. Although it is difficult to measure the quit rate accurately, this rate can be approximated by the percentage of users now or in the past 6 months who have quit at the time of an office visit.

4. To improve the proportion of clinic-visiting tobacco users interested in quitting who receive self-help materials and offers of support and follow-up after a quit date.

   Possible measure of accomplishing this aim:

   a. The percentage of clinic-visiting tobacco users with documented interest in quitting at the latest visit whose charts also document that they received self-help materials and an offer of support and follow-up after a quit date.

EVIDENCE GRADING SYSTEM

Individual research reports are assigned a letter indicating the class of report based on design type: A, B, C, D, M, R, X. A full explanation of these designators is found in the Discussion and References section of this guideline.

In future versions of this guideline, selected conclusions will include a statement of the grade assigned to the conclusion.

1. Community Intervention

The work group urges ICSI participating medical groups and employers to actively intervene within their community to reduce tobacco use. Participation in school-based education, limiting youth access to tobacco, restrictions on advertising, counteradvertising and increasing economic disincentives to tobacco use are among the effective actions that deserve active support.

2. Establish Smoke Exposure at Nearly Every Visit

Smoke exposure (in home, at day care, etc.) should be established at nearly every visit.

If there is anyone smoking around the child, regard the infant or child as a passive smoker.

3. Documentation

Documentation should be made of every tobacco-use discussion, either in the progress notes or in a separate flow-sheet or card.

5. If Someone In The Child's Home Smokes

The adult accompanying the child should be advised about the dangers to the child of passive tobacco exposure. Educational and self-help material should be provided. If the user is present, s/he should be encouraged to quit. If the user is a clinic patient and is interested in quitting, s/he should follow-up with his/her primary care provider. (Refer to the Tobacco Prevention and Cessation for Adults and Mature Adolescents guideline.)

6. Establish Patient's Use of Tobacco at Appropriate Visits

The patient's use of tobacco should be established at nearly every visit, as the teen years are the main age at which tobacco use begins and use may occur at any time.

9. Patients Not Interested in Quitting

A user not ready to consider quitting is called a *precontemplator* and is helped most when a provider avoids confrontation while conveying both the message that quitting is important and and desire to be helpful when the user is ready to consider quitting. The short-term negative effects of tobacco, such as bad breath, yellowed fingers, and smelly clothes, should be emphasized. The benefits of quitting should also be stressed. These include fewer respiratory illnesses, better performance in sports, and the money saved by not buying tobacco. It can also be noted that it is easier to stop using tobacco in youth than later in adulthood. Educational material should be provided.

10. Patients Interested in Quitting

The *contemplator* is interested in quitting in the next 1–6 months. Contemplators are accepting of support and respectful urging to quit and encouragement to start thinking about a serious plan to do so. Persuasive written, audio or video information about the pros and cons of quitting may be appropriate for contemplators.

Users in the *preparation* stage are ready to attempt to quit in the next month. It is always appropriate to request the user to set a quit date within the next 1–3 weeks, to provide self-help information or suggestions, and (most importantly) to encourage the user to accept some form of follow-up soon after the quit date. Follow-up can occur by mail or telephone.

Evidence supporting this conclusion is of classes: A, M, R

13. If Parent, Sibling or Friend Uses Tobacco

All patients who wish to stop using tobacco or who do not currently use tobacco should be asked if their parents, siblings or friends use tobacco. If someone does smoke around the patient, the patient should be assisted in developing refusal skills and given educational materials.

If the person who uses tobacco is present, she or he should be encouraged to quit. If the user is a clinic patient and is interested in quitting, he or she should be given encouragement, materials and resources at this visit, and referred for follow-up by his or her primary care provider. (Refer to the Tobacco Prevention and Cessation for Adults and Mature Adolescents guideline.)

Discussion and References:

Tobacco Use Prevention and Cessation for Infants, Children and Adolescents

Document Drafted
Jul – Sep 1993

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Pilot Implementation
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Revision/Approval
Sep – Nov 1995

Second Cycle General Implementation
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Feb – Sep 1997

Revision/Approval
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Fourth Cycle General Implementation
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Revision/Approval
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Fifth Cycle General Implementation
Feb – Oct 1999

Revision/Approval
Nov 1999 – Jan 2000

Sixth Cycle General Implementation
Begins Feb 2000

Released in January 2000 for General Implementation.
The next revision will occur within 18 months.

I. CLASSES OF RESEARCH REPORTS

A. Primary Reports of New Data Collection:

Class A:	Randomized, controlled trial
Class B:	Cohort study
Class C:	Non-randomized trial with concurrent or historical controls Case-control study Study of sensitivity and specificity of a diagnostic test Population-based descriptive study
Class D:	Cross-sectional study Case series Case report

B. Reports that Synthesize or Reflect upon Collections of Primary Reports:

Class M:	Meta-analysis Decision analysis Cost-benefit analysis Cost-effectiveness study
Class R:	Review article Consensus statement Consensus report
Class X:	Medical opinion

OPPORTUNITY STATEMENT

Former Surgeon General Koop correctly stated that tobacco use is "the chief single avoidable cause of death in our society and the most important public health issue of our time." Many studies have now confirmed that health professional advice and support are a potentially powerful influence on tobacco cessation. Professional organizations widely agree with the US Preventive Services Task Force in its recommendation that "Tobacco cessation counseling should be offered on a regular basis to all patients who smoke… (or) use smokeless tobacco."

The USPSTF recommendation was based in part on a meta-analysis of "attributes of successful smoking cessation interventions in medical practice." This analysis found that success was strongly associated with reinforcement, and that the best result was produced by "a team of physicians and non physicians using multiple intervention modalities to deliver individualized advice on multiple occasions."

U.S. Preventive Services Task Force. "Counseling to prevent tobacco use." *AFP* 39:99-105, 1989. (Class R)

Kottke TE, Battista RN, DeFriese GH, et al. "Attributes of successful smoking cessation interventions in medical practice: a meta-analysis of 39 controlled trials." *JAMA* 259:2882-89, 1988. (Class M)

Smoking Cessation Clinical Practice Guideline Panel and Staff. "The Agency for Health Care Policy and Research smoking cessation clinical practice guideline." *JAMA* 275:1270-80, 1996. (Class R)

The National Cancer Institute, which is the primary federal agency for tobacco control, and which has heavily funded large studies, interventions, and physician/dentist training programs says that the apparent keys are:

- ASK about tobacco use at every opportunity
- ADVISE all users to stop
- ASSIST users' efforts to quit
- ARRANGE follow-up

Husten CG, Manley MW. "How to help your patients stop smoking." *AFP* 42:1017-26, 1990. (Class R)

This guideline is based upon the above scientific evidence and national recommendations, as well as on growing evidence that these methods can be achieved through an organized effort by an entire clinic. Moreover, there are clinics that have demonstrated the ability to put forth such an effort. The spontaneous quit rate will vary by patient population, but the community average is probably about 3-4% per year. Studies of interested physicians without a system in place to identify users, remind physicians, and to provide assistance, support, and follow-up suggest that these physicians have quit rates equivalent to this 3-4% rate. If a system is in place, one should expect at least a 10% quit rate, and 20% is readily attainable.

Solberg LI, Maxwell PL, Kottke TE, et al. "A systematic primary care office-based smoking cessation program." *J Fam Pract* 30:647-54, 1990. (Class D)

Kottke TE, Solberg LI, Brekke ML, et al. "A controlled trial to integrate smoking cessation advice into primary care practice: doctors helping smokers, Round III." *J Fam Pract* 34:701-8, 1992. (Class C)

The documented success of this approach in the adult population has led to the adoption of the same approach in the pediatric guideline.

The theory and practical details of tobacco-related interventions differ with the developmental stages of childhood, accommodating vastly different levels of intellectual and social maturity.

"Across the country and in Minnesota, cigarette smoking among adolescents is increasing. One comparison measure of cigarette smoking is the proportion of students who have smoked cigarettes during the last 30 days. National survey results show that 30–day prevalence of cigarette smoking has steadily increased since 1992 among 8th, 10th, and 12th graders. Minnesota students also showed increased rates of smoking; in fact, the state smoking rates exceeded national rates. More Minnesota 12th graders reported smoking in 1995 than 12th graders across the nation (39% versus 33.5%), and more Minnesota 9th graders reported smoking than national 10th graders (31% versus 28%)."

"Weekly cigarette use also increased for Minnesota for students in all three grades. Of even greater concern, younger students showed a greater proportional increase in weekly use than older students. Although much less common than cigarette smoking, weekly use of chewing tobacco or snuff showed a small increase for 6th graders (from 0.5% in 1992 to 1.0% in 1995), no change for 9th graders (4%), and a decline for 12th graders (from 8.8% in 1992 to 8.2% in 1995). Gender differences for weekly and monthly smoking rates were very small for all three grades."

Minnesota Student Survey 1989 • 1991 • 1995: Perspectives on Youth. St. Paul: Minnesota Department of Children Families and Learning - Office of Community Collaboration, 1995:11-12. (Class not assignable)

1. Community Intervention

The acceptability of tobacco use is to a great extent socially determined.

Bal DG, Lloyd JC, Manley MW. "The role of the primary care physician in tobacco use prevention and cessation." *CA Cancer J Clin* 45:369-74, 1995. (Class R)

Lynch BS, Bonnie RJ, eds. Growing up tobacco free - preventing nicotine addiction in children and youths. Washington DC: National Academy Press, 1994. (Class R)

2. Establish Tobacco Use

The only way to accomplish the objectives of this guideline is to establish the tobacco use status of all patients (and in the case of infants and children, the use status of everyone in the home) in/on the chart by staff, and to remind providers of this status in some way.

Novello AC. "From the Surgeon General, US Public Health Service." *JAMA* 270:806, 1993. (Class X)

Minnesota Tobacco-Use Prevention Initiative 1989-1990. St. Paul: Minnesota Department of Health, 1991. (Class not assignable)

All of the attention devoted to encouraging cessation by smokers in the child's environment is because:

1 - It is important for that person's health to quit smoking

2 - We know that children whose parents smoke are much more likely to begin smoking as they grow older.

3 - Intensive efforts to reduce environmental smoke by encouraging avoidance of smoking in infants' vicinity have been unsuccessful.

Strecher VJ, Bauman KE, Boat B, et al. "The development and formative evaluation of a home-based intervention to reduce passive smoking by infants." *Health Educ Res* 4:225-32, 1989. (Class D)

3. Documentation

Documentation is necessary to facilitate follow-up, to enhance coordination between various providers and their support staff, to permit follow-up and referral arrangements, and to allow subsequent visits to build on discussions started earlier.

5. Advise Smoking Person to Stop/Provide Materials/ Arrange Follow-up

The harmful effects of cigarette smoke on nonsmokers are well-documented. Children of smokers experience retarded development of lung function and suffer increased episodes of otitis media and bronchopneumonia.

Environmental Protection Agency. Respiratory health effects of passive smoking: lung cancer and other disorders. Pub. EPA/600/6-90/006F. Washington DC: Environmental Protection Agency, 1992. (Class R)

6. Establish Tobacco Use

See Discussion and References #2.

9. Advise Adolescent Patient/Emphasize Short Term Negative Effects/ Provide Educational Materials

The scientifically-based concept of readiness stages for behavior change developed by Prochaska and DiClimente has been incorporated into this guideline. This approach requires that the provider first assess readiness to quit by asking if a user would consider quitting. The strategy taken would then be tailored to the individual user's readiness stage.

Adolescent users who are not ready to quit have been shown to be swayed by information concerning the short term negative consequences of tobacco.

Prochaska JO, DiClemente CC, Norcross JC. "In search of how people change: applications to addictive behaviors." *Amer Psych* 47:1102-14, 1992. (Class R)

10. Set Quit Date/Provide Materials/ Arrange Follow-up

Virtually every tobacco-cessation expert and program including the NCI program recommends asking a tobacco-user who is ready to quit to set his/her own quit date. They also recommend some type of follow-up, often a return visit. Because physicians are often reluctant to ask for a follow-up appointment for this purpose and users are unlikely to keep the appointment, alternatives like phone calls are usually substituted.

Husten CG, Manley MW. "How to help your patients stop smoking." *AFP* 42:1017-26, 1990. (Class R)

Kottke TE, Battista RN, DeFriese GH, et al. "Attributes of successful smoking cessation interventions in medical practice: a meta-analysis of 39 controlled trials." *JAMA* 259:2882-89, 1988. (Class M)

Wilson DM, Taylor DW, Gilbert JR, et al. "A randomized trial of a family physician intervention for smoking cessation." *JAMA* 260:1570-74, 1988. (Class A)

Ockene JK, Kristeller J, Goldberg R, et al. "Increasing the efficacy of physician-delivered smoking interventions: a randomized clinical trial." *J Gen Intern Med* 6:1-8, 1991. (Class A)

Cohen SJ, Stookey GK, Katz BP, et al. "Encouraging primary care physicians to help smokers quit: a randomized, controlled trial." *Ann Intern Med* 110:648-52, 1989. (Class A)

13. Assist Patient in Developing Refusal Skills

Adolescents are particularly susceptible to peer pressure. It is important to assist the nonuser in resisting this pressure by assisting the patient in developing refusal skills and by providing the patient with educational material about tobacco use and cessation techniques.

When measuring for improvement, it is critical that the measurements used are responsive to individual medical groups, and support medical groups' own clinical improvements. The following section of Specifications for Selected Measures is included in the guideline document to serve as an aid to the medical groups' own implementation efforts. It is likely that medical groups may need to adapt these measures to specific clinical practice or administrative systems.

Overview of Ideas for Measurement

The following aims were identified by the guideline work group as key areas in which medical groups may receive benefits in implementing this guideline.

The measures associated with these aims are presented as suggested measures. Measures of aim help medical groups determine progress in achieving a particular aim. However, additional approaches may be customized by individual medical groups to ferret out improvement information important to the medical group's individual practice.

Priority Aims for Medical Groups When Using This Guideline

1. To improve the proportion of patients whose current use of tobacco or exposure to tobacco smoke is obvious in the chart at any primary care clinic encounter.

   Possible measure of accomplishing this aim:

   a. The percentage of patients' charts that either show that there is no tobacco use/exposure or (if a user) that the current use was documented at the most recent clinician visit.

2. To improve the proportion of tobacco-users whose interest in quitting is assessed or who receive cessation advice at any clinic encounter.

   Possible measure of accomplishing this aim:

   a. The percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit.

3. To increase the likelihood that tobacco-using patients who visit the clinic will quit.

   Possible measure of accomplishing this aim:

   a. Although it is difficult to measure the quit rate accurately, this rate can be approximated by the percentage of users now or in the past 6 months who have quit at the time of an office visit.

4. To improve the proportion of clinic-visiting tobacco users interested in quitting who receive self-help materials and offers of support and follow-up after a quit date.

   Possible measure of accomplishing this aim:

   a. The percentage of clinic-visiting tobacco users with documented interest in quitting at the latest visit whose charts also document that they received self-help materials and an offer of support and follow-up after a quit date.

Possible Success Measure #1a

Percentage of patients' charts that either show that there is no tobacco use/exposure or (if a user) that the current use was documented at the most recent clinician visit.

Population

All patients visiting the practice, regardless of age.

Data of Interest

$$\frac{\text{\# of patients audited whose current tobacco status is documented in the medical record}}{\text{total \# of patients audited}}$$

Numerator/Denominator Definitions

Numerator: "Current tobacco status documented" means that the medical record shows that the patient either does not use tobacco or, if a user, that the use status was documented at the most recent visit to a clinician. For children and adolescents, being a user includes having a parent or guardian who smokes.

Denominator: Random sample of at least 50 charts with patients of all ages who visited a clinician within the past month.

Method/Source of Data Collection

Sample Selection:

Records should be selected in a random way designed to represent a cross section of patients of all age and gender groups seen by a clinician at a clinic in the last month for any reason. There are various ways to accomplish this:

1. Use the appointment list or lists (if various specialties and departments are present) from a recent day or days and take every name (if a small list) or every 5th or 10th name (if a large list) until at least 50 charts have been found. Note that it is important to include documentation of the recent visit, so if this information is dictated, choose a date that will assure that the dictated record is back in the chart.
2. Select charts randomly from those that are being refiled from a recent visit (if they contain documentation of the visit) until at least 50 charts have been found. These should be selected in a way that allows inclusion of all types of patients being seen.
3. If charts are refiled before visit documentation is included, you may randomly select from the dictated notes as they are being prepared to be filed in the charts.

Data Collection:

Use the Tobacco Use Status Audit Form and enter the patient's name or ID # and age in the appropriate column for every chart audited until at least 50 have been entered. In order to know exactly how to record each chart audited, use the following definitions:

Current Non-User = a label or mark anywhere on the chart (or on general forms like a problem list) or on the most recent visit progress note that shows that the patient has been asked at least once and reported not using tobacco. If the patient is a child or adolescent, a similar identification should be used to show that the child is not exposed to smoke from a parent or guardian (i.e., if the child is breathing the smoke of others regularly, s/he is a smoker)

Current User = information at the most recent visit progress note that shows that a user was asked about use at that visit. This task will be simplified if the clinic uses some type of label or general mark on the chart that shows that the patient was a user once. However, for this category it is necessary to document at the most recent visit just what the tobacco use is. If there is a general label but no notation at the most recent visit, the chart should be included in the unknown category

Unknown = either no label or mark on the chart, or a label as a user with no documentation at the recent visit as to the current use status.

Analysis:

Add up all of the charts that are in either the User or the Non-User columns for the numerator. Then add to this number all of the Unknown charts to obtain the denominator. Divide and multiply by 100 in order to obtain the % measure.

Time Frame Pertaining to Data Collection

The suggested schedule is to audit monthly until 75% identification has been achieved. Then it is acceptable to measure only every 3 months until 85% has been achieved, at which time yearly measures will be satisfactory. However, whenever a measure falls below the 85% or 75% level, the reporting frequency should revert to quarterly or monthly as appropriate until the rate has been raised above the cutoff point described.

Notes

This measure is important as a baseline or threshold indication of clinic tobacco activity because until the use status is known, it is not possible to perform any of the actions recommended by the guideline. However, once an organized system is in place that produces consistent documentation of use, then it is possible and desirable to move on to a more direct reflection of those actions.

Possible Success Measure #2a

Percentage of patients with documented tobacco use or exposure at the latest visit who also have documentation that their cessation interest was assessed or that they received advice to quit.

Population

All patients visiting the practice, regardless of age, who have any indication on their charts that they are or may be users of tobacco, or in the case of children that they are regularly exposed to tobacco smoke

Data of Interest

$$\frac{\text{\# of tobacco users advised to quit or whose readiness to quit was assessed at the latest visit}}{\text{total \# of tobacco users audited}}$$

Numerator/Denominator Definitions

Numerator: Tobacco user = Any indication on a chart or in the note from the latest visit that the patient uses tobacco (or, for a child, is regularly exposed to tobacco smoke). Documentation in the progress note from the latest visit with a clinician of either advice to quit or information about the user's current interest or readiness to quit will satisfy the rest of the definition

Denominator: See definition of tobacco user above

Method/Source of Data Collection

Sample Selection:

The charts for this measure are to be obtained in the same way as those for Measure #1 above. In fact, they will be readily identified in the course of that measurement by including in the denominator all those charts in the Tobacco Use Status Audit Form in either:

1. The Current User column; or
2. The Unknown column if they have a chart label/marker showing tobacco use but no indication of current use in the latest progress note.

Data Collection:

Using the Tobacco Use Status Audit Form, write a "+" in the Advice/Assessment column next to every user (as defined above) if there is any evidence in the latest progress note that there was a discussion about tobacco that included either advice to quit **or** an expression of the user's interest in quitting. If neither is present in the note, write a "-".

Analysis:

Add up all the + marks to obtain the numerator and all the + and - marks to obtain the denominator. Divide and multiply the answer by 100 in order to obtain the % measure.

Time Frame Pertaining to Data Collection

The suggested schedule is to audit monthly until 75% identification has been achieved. Then it is acceptable to report only every 3 months until 85% has been achieved, at which time yearly measures will be satisfactory. However, whenever a measure falls below the 85% or 75% level, the reporting frequency should revert to quarterly or monthly as appropriate until the rate has been raised above the cutoff point described.

Notes

Although documentation of advice and/or assessment of quit status is only a measure of the process of raising the issue with tobacco users, there is considerable research to suggest that if this is done regularly in a non-confrontational way, tobacco users will quit. If your group/clinic is interested in a more direct measure of this outcome, see the optional additional implementation success measure.

We recognize that if your group only audits 50 charts for the Identification measure, you may only end up with about 10 users for this measure. That is a small enough number that it will cause considerable fluctuation from measure to measure. In order to obtain a more stable measure that is a more valid reflection of the frequency of advice/assessment, you may want to extend the Identification audit process beyond 50 charts specifically to identify more users until you reach at least 20-25 users.

PROBING MEASURES

1. Use of the Identification and the Advice/Assessment measures for individual clinics

We strongly recommend doing this for each clinic. As a medical group, doing this audit on a clinic basis will allow you to learn which clinics need the most attention. In addition, unless an individual clinic knows how it is doing, it will not be able to make use of the data for improvement. An overall average value is of neither interest nor value to each clinic site. The technique is the same and having staff at each site collect their own data on this may help to provide them more ownership of the process and its improvement.

ADDITIONAL SUGGESTED MEASURES

1. Descriptive statistics of the process of assisting users to quit

Once your group/clinic has achieved a satisfactorily high frequency of user identification and advice, you may want to gather more information about the process being used to help users to quit. This can be done by simply collecting more information during the same audit used to assess Measure #2. The attached Cessation System Rapid Audit Form is designed to facilitate this. The points identified are those directly related to the guideline and have been associated with better quit success in studies of smoking cessation. However, you may wish to modify them or to add other questions.

2. Estimation of a quit rate

Although it is fairly difficult to actually perform a direct measure of the cessation rate for your patients, two indirect measures are fairly simple to gather and will provide you with a reasonable approximation of the quit rate:

A. Identification of recent quitters

This requires that as your staff identifies user status on patients, two types of labels or other notations are used - one for those who have quit in the last 6 months, and one for those who have quit more than 6 months ago or who have never smoked. A simpler way to accomplish this is to simply put a date (mo/yr) notation by the label or other mark used to show that a patient is not a user. Then, when you perform a chart audit for Measure #1, add another column to show whether the nonuser has quit within the last 6 months or longer ago. Use the number of recent quitters as the numerator and the total number of current users + the recent quitters as the denominator to calculate a percentage estimate of the quit rate.

B. Tobacco user flow sheets ("Smoke Card")

In order to use this approach to identifying a quit rate, you must have decided to keep a current flow sheet or card in each tobacco user's chart that shows at each visit what that user's status is. It has been demonstrated that such a flow sheet can be very helpful for providing continuity of follow-up, especially for making follow-up phone calls after a quit date. If this system is being used for the purpose of providing more effective advice and support, then it becomes easy to look at this form in the chart of any user and to calculate the percentage of quits, both overall and for specific time periods, among users.

Measurement Tool – Tobacco Use Status Audit Form

Directions

Randomly sample 50 charts of patients seen during the past month (See sample selection in the Measurement Section). Write the number of the medical record or patient name in the appropriate column per the definitions in the Measurement Section. For those charts without any label indicating tobacco use status or with a user label on the chart, go into the chart looking only at the most recent visit to determine whether it documents tobacco use status as of that visit. If the patient is a current user, indicate with a "+" or "-" in the space provided whether documentation exists that the patient was advised to quit and/or the patient's readiness to quit was assessed.

	Current Non-users	Current Users	*Advised to Quit and/or Readiness to Quit Assessed?*	Unknowns
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2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
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Directions for Auditing

For each patient, place a "y" or an "n" in each box if applicable. The 9 questions audited should be done sequentially (question 1 should be assessed before assessing question 2). "N/a" should be used in the table if an item is not appropriate to answer given earlier answers. For example, if no discussion took place, all the other rows will be n/a for that patient. Similarly, if a patient is not interested in quitting, the following rows should show n/a.

Directions for Scoring

For each question, determine the percentage of yes entries by using the formula:

$$\frac{\#\text{ "yes"}}{\#\text{ "yes"} + \#\text{ "no"}} \times 100$$

For example, of the 20 patients there were 10 yes responses, 5 no responses, and 5 n/a for question 2. The formula would show that 10 out of 15 or 67% of eligible patients were advised to quit.

ICSI recommends auditing 10 to 20 charts per month and plotting the results on run charts.

QUESTION	Pt 1	Pt 2	Pt 3	Pt 4	Pt 5	Pt 6	Pt 7	Pt 8	Pt 9	Pt 10	Pt 11	Pt 12	Pt 13	Pt 14	Pt 15	Pt 16	Pt 17	Pt 18	Pt 19	Pt 20	Totals
1. Tobacco use discussed?																					
2. Advised to quit?																					
3. Asked about interest in quitting?																					
4. Wants to quit? (if so, when?)																					
5. Quit date set?																					
6. Help offered?																					
7. Follow-up plan?																					
8. NRT prescribed?*																					
9. Bupropion (Zyban®) prescribed?*																					

* Assess this for adults over age 15 only.