Planning, Implementing, and Evaluating Tobacco Use Treatment Education in Medical School

Educator Resources for Curriculum Development

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**Introduction:** This manual is offered as a resource to educators who are interested in formalizing their institution’s approach to tobacco use treatment. While standardized patient scenarios form the core instructional method, the manual contains a complete framework for working through a tobacco use treatment curriculum. Planning resources are offered to assist educators in identifying appropriate learning objectives based on US Public Health Service Guidelines, catalog available institutional resources while identifying gaps, and outline measurable educational outcomes along with evaluation strategies. Content materials focus on improving the knowledge base of tobacco use treatment and the patient communication skills necessary to improve addiction treatment effectiveness. Our approach also focuses heavily on developing an empathic, supportive and hopeful attitude among trainees. Evaluation materials are also offered to assist course directors in devising a strategy for monitoring effectiveness of the educational intervention.

**Purpose of materials:** As early as 1989, evidence began accumulating which suggested that the most effective time to introduce formal tobacco use treatment training is during the medical school experience. (Cummings et al., 1989) Unfortunately, a decade later only a minority of schools reported substantial resources dedicated to clinical smoking cessation instruction within the four year curriculum. (Ferry, Grissino, & Runfola, 1999) Though increasing attention has been given to this important training goal, the most appropriate methods for both delivering this information and for evaluating the impact on clinical behavior have yet to be settled. (Geller et al., 2005)

In 1994 the National Cancer Institute convened an expert panel charged with assessing the evidence regarding tobacco treatment in undergraduate medical education. Their report suggested several important considerations for maximizing the impact of undergraduate training on tobacco use treatment. Important recommendations included the notion that tobacco curricula should be based on current evidence, should be sufficiently flexible to meet a school’s idiosyncratic needs, and should be evaluated to measure the effectiveness of the intervention. (Fiore, Epps, & Manley, 1994)

**Description of development process:** Following its participation in the Master Settlement Agreement (MSA), the Commonwealth of Pennsylvania developed a strategic vision for comprehensive tobacco control, based in large part on the *Centers for Disease Control and Prevention Best Practices for Comprehensive Tobacco Control Programs* recommendations for fully integrated policies. (U.S. Department of Health and Human Services., 1999) One of the explicit goals of Pennsylvania’s Continuum of Tobacco Education Project was to create a curriculum model that would allow sufficient flexibility in application and engage three medical schools from geographically diverse areas of the state to pilot the project. A leadership working group of key faculty, with expertise in tobacco treatment, curriculum design, or educational outcome measurement, devised the implementation plan and facilitated integration into the pilot schools.

Development of educational interventions was site specific, and confined by existing curriculum structure. Prior to implementation, each school’s proposed strategy was
evaluated for its capacity to: 1) demonstrate direct relevance to tobacco use treatment, 2) provide sufficient opportunity for clinical instruction, 3) provide sufficient opportunity for self reflection, 4) facilitate formal program evaluation, 5) be equivalently experienced by the entire class, 6) enjoy sufficient faculty support, and 7) minimize disruption to existing instructional methods. Jefferson Medical College selected an implementation strategy that involved a compressed educational exposure within the Internal Medicine clerkship of junior year.

**How the materials have been used:** Third-year medical students participated in a five-hour seminar devoted exclusively to the diagnosis and treatment of tobacco dependence during their required Internal Medicine clerkship. The initial 2-hour didactic portion of the training focused on developing the students’ tobacco related knowledge and attitudes. Knowledge objectives included developing an understanding of: the neurophysiologic impact of nicotine and its resulting behavioral manifestations, the need for tobacco use assessment beyond simple pack-years, and the content necessary to recommend and discuss available cessation resources. Faculty addressed students’ tobacco-related attitudes by exploring myths and misconceptions surrounding tobacco use and redefining tobacco dependence as a chronic disease requiring appropriate attention and empathy. Fallacies potentially interfering with the provision of care, such as “Smokers have to want to quit smoking before I can help” or “I can make them quit by threatening to stop care” were challenged in order to expunge any counterproductive attitudes. The theoretical basis of cognitive behavioral therapy and motivational interviewing were briefly explored. The final 3-hour portion of the training gave the students a unique opportunity to integrate their newly developed knowledge, skills and attitudes by interviewing and interacting with trained standardized patients (SPs).

**Methods used for training:** A cadre of 9 SPs was trained specifically to help students develop empathy and respect while treating nicotine addicted patients. All SPs were trained on 4 case scenarios, specifically the care of the willing patient, the care of the reluctant patient, the care of patients following relapse, and the care of the hospitalized smoker. Their training consisted of a general review of the complexity of nicotine addiction, and then a thorough analysis of each case, including pertinent teaching points and scripts. SPs practiced each case and were critiqued by the project director and manager. All SP sessions were recorded and monitored for Quality Assurance. Corrections and modifications to the SP approach were made on an ongoing basis by course directors.

**Data to support the content of the materials:** A leadership working group of key faculty, with expertise in tobacco treatment, curriculum design, or educational outcome measurement, devised the implementation plan and facilitated integration into the pilot schools. Materials and methods employed were evidence based, and were required to reflect the goals and ideals of the US Public Health Service guidelines on tobacco use treatment. Content materials were referenced heavily. A partial list of references employed is included for review:


Data to support the reliability of any related checklists or rating scales: After each student interview, the SPs provided the students with constructive feedback based on checklists developed to identify the aspects of the encounter that were correctly performed. Aspects related to history taking and the ability to assist the smoker included a demonstrated attempt to assess past quit attempts, an ability to answer questions regarding NRT side effects, and a demonstrated ability to provide both intra- and extra-treatment social support. Items related to non-verbal communication skills were also included, such as the ability to create a supportive atmosphere and the demonstrated ability to remain non-judgmental. Dichotomous checklist items were scored “yes/no” while qualitative items were scored on a 5-point Likert Scale. The checklist was developed as a guide for instructional feedback; consequently results did not impact the medicine clerkship grade.

Factor analysis of the Confidential Tobacco Survey responses in the first year of the project yielded five independent factors with eigenvalues greater than 1, which accounted for 75 percent of the total variance. The first and largest factor (eigenvalue 7.3, 37% of variance) included six items related to students’ self-assessment of knowledge and skills related to tobacco cessation (e.g. “I am comfortable prescribing medications that help in cessation”). Other factors were related to students’ perceptions regarding tobacco advertising, the utility of nicotine replacement therapy, the prospects for counseling patients in an ambulatory setting, and their level of frustration with smokers who choose not to quit.

- Self-assessment of cessation skills (6 items alpha=.93)
- Attitudes toward tobacco advertising (2 items alpha=.66)
- Nicotine replacement (3 items alpha=.75)
- Counseling in ambulatory settings (4 items alpha=.74)
- Frustration with unwilling patients (2 items alpha=.60)

Data to support the accuracy of case portrayal: SPs practiced each case and were critiqued by the project director and manager. All SP sessions were recorded and monitored for Quality Assurance. Corrections and modifications to the SP approach were made on an ongoing basis by course directors.

Relevant data from use of materials: Table 1 summarizes the changes in standard scores on the five factors between baseline and one month follow-up assessment at the end of the Medicine clerkship. The largest changes were observed in the factors related to both students’ self-assessment of their skills and their understanding of nicotine replacement therapy. There was a significant change in their beliefs about counseling in ambulatory settings. There was no statistically significant change in advertising or frustration factor scores.

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<table>
<thead>
<tr>
<th>Subscale</th>
<th>Baseline</th>
<th>Clerkship End</th>
<th>t-score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>SD</td>
<td>SD</td>
</tr>
<tr>
<td>Self-assessment of cessation skills (6 items alpha=.93)</td>
<td>47.1</td>
<td>57.5</td>
<td>7.2</td>
<td>5.9</td>
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<tr>
<td>Attitudes toward tobacco advertising (2 items alpha=.66)</td>
<td>49.2</td>
<td>50.9</td>
<td>14.8</td>
<td>14.1</td>
</tr>
<tr>
<td>Nicotine replacement (3 items alpha=.75)</td>
<td>49.2</td>
<td>60.8</td>
<td>6.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Counseling in ambulatory settings (4 items alpha=.74)</td>
<td>49.4</td>
<td>55.0</td>
<td>10.1</td>
<td>9.2</td>
</tr>
<tr>
<td>Frustration with unwilling patients (2 items alpha=.60)</td>
<td>41.4</td>
<td>43.4</td>
<td>10.1</td>
<td>9.8</td>
</tr>
</tbody>
</table>

**Table 1:** Change in mean attitude scores within each of 5 subtests identified through factor analysis, pre- vs. post-intervention. Scores are reported on a scale with an overall mean of 50 and standard deviation of 10 for the five subtests. Positive changes reflect a desirable effect on attitude.

**Figure 1:** Rate at which students obtained a tobacco history (Ask) - standardized by time to / from intervention. History rates were derived from data submitted by 414 students who reported 62,418 encounters with adolescent and adult patients that involved taking a history.

The graph traces the rate at which students obtained a tobacco history before the intervention month (months –6 through -1), during the intervention month (blue arrow), during the peri-intervention period (months 0, 1, and 2), and during the post-intervention period (months 3 through 9). The overall baseline rate was 52% during the months before the Medicine clerkship for all students. Average rate during the peri-intervention period was 87.2%, and 59.4% during the post-intervention period.
Figure 2: Rate at which students counseled (Advised) patients about tobacco prevention or cessation - standardized by time to / from intervention. Counseling rates were derived from data submitted by 414 students who reported 30,224 encounters with adult and adolescent patients that involved some type of health counseling.

The graph traces the rate at which students provided counseling about tobacco before the intervention month (months –6 through -1), during the intervention month (blue arrow), during the peri-intervention period (months 0, 1, and 2), and during the post-intervention period (months 3 through 9). The overall baseline rate was 14% during the months before the Medicine clerkship for all students. Average rate during the peri-intervention period was 21.7%, and 16.1% during the post-intervention period.

General suggestions for using the materials: The introduction of a standardized tobacco curriculum into medical school training is both feasible and effective. Attempts to design instructional strategies can simultaneously include several guideline core concepts, remain flexible enough to easily meet any school’s idiosyncratic needs, and demonstrate a sustainable effect.

Our data suggests that tobacco-related knowledge, attitudes, and behaviors are substantially modifiable within a medical school education by focusing on simple and broadly applicable learning objectives, and that the sustained effects are measurable on year-end clinical skill exams. To the extent that brief interventions by students can create an atmosphere for behavior change, we expect that our educational intervention resulted in a significant number of additional quit attempts by our hospitalized patients.
Section 1
Planning
<table>
<thead>
<tr>
<th>Category:</th>
<th>Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Title:</td>
<td>Tobacco Use Treatment Curriculum Planning Worksheet</td>
</tr>
<tr>
<td>Resource Description:</td>
<td>An organizational scheme listing important knowledge, skill and attitude related educational objectives derived from the US Public Health Service guidelines on tobacco use treatment. Facilitates the identification, integration and organization of diverse existing resources at the home institution. Allows the program planner to easily visualize the educational methods to be utilized, and plan the best corresponding evaluation strategies.</td>
</tr>
<tr>
<td>Submitting Institution:</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Corresponding Author:</td>
<td>Sarah Evers-Casey, MPH</td>
</tr>
<tr>
<td>Phone:</td>
<td>(215) 662-8585</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:sarah.evers-casey@uphs.upenn.edu">sarah.evers-casey@uphs.upenn.edu</a></td>
</tr>
<tr>
<td>Fax:</td>
<td>(215) 243 - 4643</td>
</tr>
<tr>
<td>Tool Objectives:</td>
<td>• To restructure the treatment concepts inherent in the USPHS guidelines into discreet, evaluable educational elements • Assist educators identify and organized existing institutional resources • Ensure standardization of content while allowing for variability between sites.</td>
</tr>
<tr>
<td>ACGME Competencies Addressed:</td>
<td>Patient Care Interpersonal and Communication skills</td>
</tr>
<tr>
<td>Keyword(s):</td>
<td>Smoking cessation, Tobacco, Tobacco use treatment, Behavioral health, Counseling Skills, Cognitive therapy, Health promotion.</td>
</tr>
<tr>
<td>Specialty / Discipline:</td>
<td>Undergraduate Medical Education, Graduate Medical Education, Primary Care, Sub-specialty training programs.</td>
</tr>
<tr>
<td>Effectiveness / Significance of Work:</td>
<td>Worksheets were used to successfully plan tobacco treatment educational curricula in three independent institutions across Pennsylvania. The institutions varied widely in terms of available resources, potential insertion points into established learning modules, and approaches to measurement and evaluation. The worksheets allowed planners to share ideas and improved communication. The additional level of organization helped anticipate inherent obstacles to top quality programming, and assisted in developing plans for overcoming these obstacles in all three institutions.</td>
</tr>
<tr>
<td>Special Implementation Requirements:</td>
<td>None. Examples of completed worksheets are provided to assist planners by providing a potential starting point for modification based on local needs.</td>
</tr>
<tr>
<td>Lessons Learned:</td>
<td>Most medical school educators place a high priority on tobacco-use treatment instruction. However, schools are less likely to have a well developed educational strategy, relying instead on the varied interests of faculty to “piecemeal” instruction. An organized approach to structuring tobacco-use instruction ensures a complete exposure over the course of four years, and allows educators to isolate and modify approaches based on evaluated results.</td>
</tr>
<tr>
<td>Resource URL (If web based)</td>
<td>Not Applicable</td>
</tr>
</tbody>
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Tobacco Related Attitudes
Educational Objectives Planning Worksheet

Goal: To develop an understanding of the cultural and social norms associated with tobacco use as a means to distinguish tobacco dependence and use as a chronic disease within our society.

Demonstration Site: ________________________________

<table>
<thead>
<tr>
<th>Educational Objectives</th>
<th>Methods</th>
<th>Outcomes</th>
<th>Measures</th>
<th>Methods of Evaluation</th>
</tr>
</thead>
</table>
| Identify myths and misconceptions related to tobacco and tobacco use. | • Students identify common tobacco related misconceptions.  
| | • Students articulate the effect of misconceptions on tobacco treatment practice.  
| | • Students demonstrate ability to correct misconceptions in others. | | | |
| Describe the normative beliefs, values and behaviors of society that reduce the effectiveness of tobacco cessation treatment practices. | • Students identify common tobacco related public misconceptions  
| | • Students articulate the ways these misconceptions create obstacles to effective tobacco treatment practice.  
| | • Students demonstrate ability to correct misconceptions in self and others. | | | |
| Distinguish tobacco use as a leading health priority | • Students identify tobacco use on their problem list  
• Students correctly identify the magnitude of the effect of tobacco use on their patients.  
• Students communicate appropriate concern/empathy regarding tobacco use with their patients |
|---|---|
| Recognize tobacco dependence as a chronic disease rather than a “bad habit.” | • Students understand that tobacco cessation is a long term process rather than an event.  
• Students acknowledge that relapse is part of this chronic disease, and not construed as “failure.” |
| Define tobacco use treatment as an active treatment of disease rather than preventive medicine | • Students identify tobacco use on their problem list  
• Students express appropriate concern/empathy regarding tobacco use with their patients.  
• Students delineate the reasons behind redefining tobacco use tx as a disease model. |
| Recognize the responsibility and influence of the physician in treating tobacco dependent patients. | • Students acknowledge their role as physicians in the treatment of smokers  
• Students develop confidence in their ability to treat tobacco users and will report improved self-efficacy |
Goal: To articulate the physiological and emotional dependency of tobacco use and/or addiction and determine appropriate treatment interventions.

<table>
<thead>
<tr>
<th>Educational Objectives</th>
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<th>Measures</th>
<th>Methods of Evaluation</th>
</tr>
</thead>
</table>
| Understand the physiology of nicotine                      |                                                                         | Students will demonstrate knowledge of:  
|                                                             |                                                                         | • Mechanism of nicotine addiction  
|                                                             |                                                                         | • Pharmacokinetics of nicotine delivery  
|                                                             |                                                                         | • Nicotinic neurophysiologic effects  
|                                                             |                                                                         | • Factors affecting cigarette nicotine yield  
|                                                             |                                                                         | • Acute and Chronic withdrawal symptoms |          |                       |
| Assess tobacco use beyond pack-years                        |                                                                         | Students will demonstrate an ability to derive and integrate important elements of tobacco use history, including:  
|                                                             |                                                                         | • Quantity  
|                                                             |                                                                         | • Frequency  
|                                                             |                                                                         | • Intensity  
|                                                             |                                                                         | • Duration  
|                                                             |                                                                         | • Brand loyalty  
|                                                             |                                                                         | • Past quit attempts  
|                                                             |                                                                         | • Prior relapse triggers |          |                       |
| Perform specialized assessments | Students will demonstrate an ability to derive and integrate important elements of tobacco cessation planning, including:  
- Quit readiness  
- Confidence  
- Motivation  
- Nicotine dependence  
- Obstacles to cessation  
- Support structures |  |  |
|---|---|---|---|
| Assist quit attempts | Students will demonstrate an ability to identify, recommend and discuss available cessation resources, including:  
- Social support  
- Supplemental written materials  
- Pharmacotherapy |  |  |
## TOBACCO RELATED SKILLS

**Educational Objectives Planning Worksheet**

<table>
<thead>
<tr>
<th>Educational Objectives</th>
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<th>Outcomes</th>
<th>Measures</th>
<th>Methods of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver effective advice to quit</td>
<td>Students will demonstrate the ability to advise patients in a strong, clear, and personal manner</td>
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</tr>
</tbody>
</table>
| Assist patients in quit attempts | • Students will demonstrate:  
  o problem solving skills  
  o ability to teach patients effective ways of seeking social support  
  o ability to deliver “key advice.” | | | |
| Motivate patients unwilling to quit | • Students will demonstrate ability to help patients move along continuum of behavioral change, consistent with AHRQ “5 R’s:”  
  o Relevance  
  o Risk  
  o Rewards  
  o Roadblocks  
  o Repetition | | | |
| Identify verbal and nonverbal behavioral cues in patient/physician communications that promote or inhibit cessation attempts | • Students will articulate and demonstrate an understanding of verbal and nonverbal messages that communicate encouragement and discouragement of cessation attempts. |  |  |
**TOBACCO RELATED ATTITUDES**

Educational Objectives Planning Worksheet

**Goal:** To develop an understanding of the cultural and social norms associated with tobacco use as a means to distinguish tobacco dependence and use as a chronic disease within our society.

**Demonstration Site:** Thomas Jefferson University

<table>
<thead>
<tr>
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<th>Methods</th>
<th>Outcomes</th>
<th>Measures</th>
<th>Methods of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify myths and misconceptions related to tobacco and tobacco use.</td>
<td>• Slide presentation</td>
<td>• Students identify common tobacco related misconceptions.</td>
<td>• Increase in test scores regarding relevant material on exam</td>
<td>• Administration of a pre and post test</td>
</tr>
<tr>
<td></td>
<td>• “Jeopardy Game” (Video clips of patient testimonial)</td>
<td>• Students articulate the effect of misconceptions on tobacco treatment practice.</td>
<td>• Number of times smoking assessment is performed during patient history</td>
<td>• Patient Encounter Log System (PELS)</td>
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<tr>
<td></td>
<td></td>
<td>• Students demonstrate ability to correct misconceptions in others.</td>
<td>• Number of times smoking cessation/prevention counseling is performed</td>
<td>• PELS</td>
</tr>
<tr>
<td>Describe the normative beliefs, values and behaviors of society that reduce the effectiveness of tobacco cessation treatment practices.</td>
<td>• Slide presentation</td>
<td>• Students identify common tobacco related public misconceptions</td>
<td>• Application of knowledge in clinical setting</td>
<td>• Direct observation and review of videotaped SP interaction (University of Rochester Risk Factor Interview Scale – URRFIS)</td>
</tr>
<tr>
<td></td>
<td>• “Jeopardy Game” (Video clips of patient testimonial)</td>
<td>• Students articulate the ways these misconceptions create obstacles to effective tobacco treatment practice.</td>
<td></td>
<td>• SP checklist</td>
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<td></td>
<td>• Students demonstrate ability to correct misconceptions in self and others.</td>
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<td>• Clinical vignette report</td>
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<tr>
<td>Task</td>
<td>Methods</td>
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<tr>
<td>Distinguish tobacco use as a leading health priority</td>
<td>- Slide presentation</td>
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<td></td>
<td>- Students identify tobacco use on their problem list</td>
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<tr>
<td></td>
<td>- Students correctly identify the magnitude of the effect of tobacco use on their patients.</td>
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<td></td>
<td>- Students communicate appropriate concern/empathy regarding tobacco use with their patients</td>
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<td></td>
<td>- Frequency of documentation tobacco use on problem list in patient medical records</td>
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<td></td>
<td>- Application of knowledge in clinical setting</td>
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<td></td>
<td>- Chart review (planned with TJUH Performance Improvement Department)</td>
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<tr>
<td></td>
<td>- Direct observation and review of videotaped SP interaction (URRFIS)</td>
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<tr>
<td></td>
<td>- SP checklist</td>
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<tr>
<td>Recognize tobacco dependence as a chronic disease rather than a “bad habit.”</td>
<td>- Slide presentation</td>
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<td></td>
<td>- Students understand that tobacco cessation is a long-term process rather than an event.</td>
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<td></td>
<td>- Students acknowledge that relapse is part of this chronic disease, and not construed as “failure.”</td>
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<td></td>
<td>- Application of knowledge in clinical setting</td>
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<td></td>
<td>- Clinical vignette report</td>
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<tr>
<td>Define tobacco use treatment as an active treatment of disease rather than preventive medicine</td>
<td>- Slide presentation</td>
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<td>- Students delineate the reasons behind redefining tobacco use tx as a disease model.</td>
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<td></td>
<td>- Clinical vignette report</td>
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</tbody>
</table>
| Recognize the responsibility and influence of the physician in treating tobacco dependent patients. | • Small groups  
| (Patient testimonial /video) | • Students acknowledge their role as physicians in the treatment of smokers  
| | • Students develop confidence in their ability to treat tobacco users and will report improved self-efficacy  
| | • Improved self-efficacy | • Pre and post assessment using a self-efficacy scale |
# TOBACCO RELATED KNOWLEDGE

## Educational Objectives Planning Worksheet

**Goal:** To articulate the physiological and emotional dependency of tobacco use and/or addiction and determine appropriate treatment interventions.

**Demonstration Site:** Thomas Jefferson University

<table>
<thead>
<tr>
<th>Educational Objectives</th>
<th>Methods</th>
<th>Outcomes</th>
<th>Measures</th>
<th>Methods of Evaluation</th>
</tr>
</thead>
</table>
| Understand the physiology of nicotine | • Slide presentation  
• Standardized patient interaction | Students will demonstrate knowledge of:  
• Mechanism of nicotine addiction  
• Pharmacokinetics of nicotine delivery  
• Nicotinic neurophysiologic effects  
• Factors affecting cigarette nicotine yield  
• Acute and Chronic withdrawal symptoms | • Increase in test scores regarding relevant material on exam | • Administration of a pre and post test  
• Direct observation and review of videotaped SP interaction (URRFIS)  
• SP checklist  
• Clinical vignette report |
| Assess tobacco use beyond pack-years | • Slide presentation  
• Standardized patient interaction | Students will demonstrate an ability to derive and integrate important elements of tobacco use history, including:  
• Quantity  
• Frequency  
• Intensity  
• Duration  
• Brand loyalty  
• Past quit attempts  
• Prior relapse triggers | • Application of knowledge in clinical setting | • Direct observation and review of videotaped SP interaction (URRFIS)  
• SP checklist  
• Clinical vignette report |
| Perform specialized assessments | Students will demonstrate an ability to derive and integrate important elements of tobacco cessation planning, including:  
- Quit readiness  
- Confidence  
- Motivation  
- Nicotine dependence  
- Obstacles to cessation  
- Support structures | Application of knowledge in clinical setting |  
- Direct observation and review of videotaped SP interaction (URRFIS)  
- SP checklist  
- Clinical vignette report |
|---|---|---|---|
| Assist quit attempts | Students will demonstrate an ability to identify, recommend and discuss available cessation resources, including:  
- Social support  
- Supplemental written materials  
- Pharmacotherapy | Increase in test scores regarding relevant material on exam  
- Application of knowledge in clinical setting |  
- Administration of a pre and post test  
- Direct observation and review of videotaped SP interaction (URRFIS)  
- SP checklist  
- Clinical vignette report |
<table>
<thead>
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<th>Outcomes</th>
<th>Measures</th>
<th>Methods of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver effective advice to quit</td>
<td>• Standardized patient interaction</td>
<td>• Students will demonstrate the ability to advise patients in a strong, clear, and personal manner</td>
<td>• Application of knowledge in clinical setting</td>
<td>• Direct observation and review of videotaped SP interaction (URRFIS)</td>
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<td>• Clinical vignette report</td>
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<tr>
<td>Assist patients in quit attempts</td>
<td>• Slide presentation</td>
<td>• Students will demonstrate:</td>
<td>• Increase in test scores regarding relevant material on exam</td>
<td>• Administration of a pre and post test</td>
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<td></td>
<td>• Standardized patient interaction</td>
<td>o problem solving skills</td>
<td>• Application of knowledge in clinical setting</td>
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<td></td>
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<td>o ability to teach patients effective ways of seeking social support</td>
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<td>• Direct observation and review of videotaped SP interaction (URRFIS)</td>
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<td>o ability to deliver “key advice.”</td>
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<td>• SP checklist</td>
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<td>• Clinical vignette report</td>
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<tr>
<td>Motivate patients unwilling to quit</td>
<td>• Slide presentation</td>
<td>• Students will demonstrate ability to help patients move along continuum of behavioral change, consistent with AHRQ “5 R’s:”</td>
<td>• Increase in test scores regarding relevant material on exam</td>
<td>• Administration of a pre and post test</td>
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<tr>
<td></td>
<td>• Standardized patient interaction</td>
<td>o Relevance</td>
<td>• Application of knowledge in clinical setting</td>
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<td></td>
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<td>o Risk</td>
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<td>• Direct observation and review of videotaped SP interaction (URRFIS)</td>
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<td>o Rewards</td>
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<td>• SP checklist</td>
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<td>o Roadblocks</td>
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<td>• Clinical vignette report</td>
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<td>o Repetition</td>
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<td>Identify verbal and nonverbal behavioral cues in patient/physician communications that promote or inhibit cessation attempts</td>
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<tr>
<td>• Video student/patient interaction</td>
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<td>• Small group/SP critique</td>
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<td>• Students will articulate and demonstrate an understanding of verbal and nonverbal messages that communicate encouragement and discouragement of cessation attempts.</td>
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<td>• Application of knowledge in clinical setting</td>
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<td>• Direct observation and review of videotaped SP interaction (URRFIS)</td>
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<td>• Clinical vignette report</td>
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Section 2

Training
### Pennsylvania Continuum of Tobacco Education Project - Medical School Module

**Category:** Training  
**Resource Title:** Standardized Patient (SP) Scenario Training Manual  
**Resource Description:** Several typical scenarios are presented, along with pertinent background and rationale necessary for actors to accurately represent the smoker’s perspective. Educational goals associated with each scenario are outlined, as are the expectations of the students. Sample conversation questions are included with each scenario to facilitate SP focus on appropriate teaching points. Short sample checklists are included to assist actors in identifying targeted outcomes derived from the USPHS Guidelines on tobacco use treatment. Taken together, the scenarios are representative of several stages of change within both outpatient and inpatient settings.

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**Corresponding Author:** Sarah Evers-Casey, MPH  
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**E-mail:** sarah.evers-casey@uphs.upenn.edu  
**Fax:** (215) 243 - 4643

**Tool Objectives:**  
- Provide a basic structure for training SP actors, including pertinent background necessary to understanding the smokers’ perspective.  
- Provide SP scenarios that represent several stages of change, pertinent to the medical student experience.  
- Provide a rudimentary checklist to assess target outcomes based on USPHS guidelines.

**ACGME Competencies Addressed:** Patient Care  
**Interpersonal and Communication skills**

**Keyword(s):** Smoking cessation, Tobacco, Tobacco use treatment, Behavioral health, Counseling Skills, Cognitive therapy, Health promotion, SP scenarios.

**Specialty / Discipline:** Undergraduate Medical Education, Graduate Medical Education, Primary Care, Sub-specialty training programs.

**Effectiveness / Significance of Work:**

Our training program required delivering an SP-based practical training session every month for three years. These SP training materials were used to help standardize the students’ SP experience by providing a consistent point of reference. We were able to develop a cadre of SPs, each familiar with multiple scenarios, helping to overcome difficulties with SP availability and turnover over time. By connecting the checklists directly to the scenario training, we were able to improve the consistency of student skill evaluation over the entire course of the project.

**Special Implementation Requirements:** None

**Lessons Learned:** Clinical skills training focused on important knowledge, attitudes and skills related to tobacco use treatment can be successfully accomplished by splitting up targeted outcomes across several scenarios, typical of the clerkship experience. Alternating outpatient and inpatient contexts allows students to explore ways of overcoming several predictable obstacles.

**Related Publications / Presentations or Citations:**  

**References:**  

**Resource URL (If web based)** N/A
Continuum of Tobacco Treatment

Provider Training

Medical School Project

Standardized Patient Training Manual

Center for Tobacco Research & Treatment
Thomas Jefferson University

Pennsylvania Area Health Education Centers

Pennsylvania Department of Health
Section 1: General Description of the Project

In 1998, Pennsylvania entered into the Master Settlement Agreement with several tobacco companies and recovered a portion of the healthcare costs associated with smoking. In order to reduce the burden of tobacco related illnesses in Pennsylvania, a substantial portion of that money was dedicated to helping people stop smoking and to teach their healthcare providers how to be more effective in helping.

This portion of the project focuses on the needs of medical students. Because of their unique position, junior medical students are at the ideal point in their career to learn how to integrate the medical knowledge necessary to treat this complex addiction, with the supportive counseling techniques and empathy necessary to help smokers feel comfortable and safe.

In a one-day, five hour seminar, we will attempt to improve the students’ effectiveness in treating tobacco use. Their day will begin by examining some of the cultural assumptions that are likely to undermine their future efforts. Ideas such as “smokers have to want to quit smoking before I can help” or “I can make them quit by threatening to stop caring for them” or “there is nothing I can do, they just have to stop” will be challenged, thereby shaping the attitudes of the student.

The core content of the curriculum is designed to assist the young clinician in understanding the brain chemistry of nicotine, and to become more comfortable prescribing medications effective in overcoming its effect. Though they won’t have time to learn the subtleties of prescribing, they should develop a basic familiarity with several types of drugs. Core knowledge also includes an understanding of some simple behavioral counseling concepts and techniques that are often useful in cessation.

The final part of the afternoon represents an opportunity for the students to integrate their new found knowledge and attitude into treatment approaches, both verbal and nonverbal behaviors that reflect several important key points:

1. **Empathy.** The student should be able to show an understanding of the smoker’s problem, irrespective of whether or not they themselves have ever smoked.
2. **Respect.** Too often the therapeutic relationship between the doctor and the patient is undermined by the smoker’s sense of shame, embarrassment or failure. The clinician can establish a great deal of trust by maintaining a respectful, non-judgmental tone.
3. **Support.** The hallmark of addiction is remission and relapse. As with other chronic illnesses, the clinician should expect to commit a substantial effort to treatment, and should be able to use available “outside” resources to maximum effect. Finally, clinicians should arrange for follow-up visits to monitor for relapse.
Section 2. The Standardized Patient (SP) Session.

Students will be introduced to four scenarios during the SP experience that are meant to reproduce the most frequently encountered clinical situations. The scenarios are described in detail below, but are roughly organized to represent the care of the willing, the care of the reluctant, the care of relapse, and the care of the hospitalized patient.

Each scenario describes a fictitious patient. Though each is written using female gender references for clarity, neither the age nor gender are important and can be modified as needed to conform with the actual SP characteristics. Rather than based on a continuum of disease severity, the scenarios are loosely based on a continuum of “stage of change.” Each scenario contains a reference to the behavioral stage, and familiarity with these stages can provide useful reference (i.e. character motivation) for the SPs. For our cases, the possibilities are:

1. **Pre-contemplative** – These patients are generally reluctant to stop smoking. This reluctance can manifest itself in varied ways ranging from an apparent lack of thought to the subject, polite but quick dismissal, an assurance that the smoker will quit when ready, all the way to outright offense taken at the suggestion of quitting. Most pre-contemplative smokers use a variety of approaches to avoid talking about quitting.

2. **Contemplative** – These smokers have been thinking about quitting for some time. They are usually motivated to quit by health concerns, but financial, social, and employment concerns also enter the equation. Generally, these people may be interested in quitting, but are frequently reluctant to quit now. Sometimes there is a lack of support among family and friends, sometimes there are financial concerns, frequently there is the sense that “this just isn’t a great time.”

3. **Action** – Smokers in the action stage are ready to quit today and frequently appear excited to start right away. However the hallmark of addiction is an irrational fear of stopping, which many people have described as loosing a best friend. Consider the analogous stage in a personal relationship: a person may experience relief and empowerment after coming to the conclusion that a relationship must end, but still feel great sadness or fear over the loss.

4. **Relapse** – Smokers who have relapsed generally experience great shame, guilt, and disappointment. They are frequently reluctant to discuss the circumstances of their relapse, especially within a healthcare setting, for fear that the listener will judge them as “weak” or “stupid.” Besides frustration, there is frequently a sense of being “condemned” to a lifetime of smoking, and all of its consequences.

It is important to understand that a successful student intervention is not necessarily defined as one which results in cessation, but rather one in which the behavioral stage of change has been moved one step closer to action. To create a
more realistic feel, each scenario suggests an appropriate behavioral stage for the beginning of the session, as well as the result of a successful intervention (e.g. Pre-contemplative → Contemplative).

The priority for the SP session is to help the student become more comfortable dealing with smokers within a healthcare setting. As such, the scenarios are simple and open to interpretation (i.e. embellishment) by the SP. Each scenario is followed first by a performance checklist specific to the details of that scenario, then by a general behaviors checklist based on the three key behaviors listed above.

At the conclusion of each SP small group, the SP should provide constructive feedback based on the checklists, but should also feel free to comment on specific style elements that may have made it a more “comfortable” or effective encounter. SPs should be prepared to answer (from the character’s perspective) the question: “Did this encounter move you closer to quitting? Why or why not?” The completed checklists should be returned to the course director so that the results can be used for quality improvement purposes and tracking.

Finally, students will be re-convened in a large group format to review select sections of the videotaped SP sessions in order to reinforce key learning points and to brainstorm on alternative approaches.
Section 3: Patient Scenarios

Scenario 1: The care of the willing

Primary diagnosis: Tobacco Use disorder

Secondary diagnoses: None

Behavioral stage: Action → Action

Setting: Outpatient practice; office visit; an unusually slow day.

A 40-year-old woman presents to the office on the advice of a friend. She states that she recently undertook a strategy to “change her life” including weight loss and exercise. Though she feels no particular desire to quit, she’s interested in doing so because she’s aware of the reported health effects of cigarette smoking. Given her attempts to undertake a healthier lifestyle, it seems logical to stop smoking now, but she doesn’t really know how. She has never made a serious attempt before so she’s not sure what to expect, and she is dreading the possibility of experiencing the withdrawal “mood swings” that everyone talks about. None of her friends or family smoke, but all are supportive of her effort to quit. She has appropriate confidence in her ability to remain abstinent, but thinks she might just “need a little help.”

She has smoked approximately one pack of cigarettes per day for the past 28 years. Her first cigarette is immediately upon awakening in the morning. She can go about three hours without smoking, but will become agitated after prolonged periods of forced abstinence. Her only attempt at quitting was five years ago when she tried to give them up as a New Year resolution. She remained abstinent for less than 12 hours.

The student will be expected to ask a few questions about the patient’s tobacco use history, ask about previous quit attempts, and make a recommendation to use some form of nicotine replacement therapy (NRT). Once the recommendation is made, the SP should begin to ask question about the medication, including questions like:

- Are their any side effects?
- What’s the right way to use it?
- Where do I get it?
- Won’t it just prolong the addiction?
- Will I die if smoke a cigarette while on NRT?
- How will I know if it’s working?
- Do I have any other options?

We will also be looking for the student to offer both intra-treatment support (support offered by doctor / office staff, follow-up visits, etc.) and extra-treatment support (referral to PA Free Quitline, community cessation programs, etc.)
Case 1: Instructions to the Students

Outpatient scheduled office visit

Perform a focused history and provide appropriate counseling to patient.

You have 15 minutes to do this….
Teaching Points for standardized patients:

Name: Doris or Fred

Occupation: Secretary at the VA Hospital

Demeanor: Inquisitive, almost perky

Medical Student (MS): What brought you in?
Standardized Patient (SP): I want to change my life for the better-lose some weight, start exercising and try to quit smoking, my friend told me a visit to a Doc is the best first step.

MS: Why do you want to quit?
SP: It will improve my life, I think. I have been reading in Cosmo that quitting smoking and starting exercise may help me live longer.

MS: How long have you smoked?
SP: Approximately one pack of cigarettes per day for the past 28 years.

MS: When do you have your first cigarette?
SP: First thing in the morning

MS: How long can you go without a cigarette?
SP: About three hours without smoking, I am really worried that I am going to have bad mood swings if I quit.

MS: What happens if you don’t have a cigarette for more than 3 hours?
SP: I become very agitated.

MS: Have you ever tried to quit?
SP: Yeah, New Years Eve a couple of years back I made a resolution to quit, but that lasted ‘til Noon the next day. I think I can quit now, but really may need some extra help.

MS: Does anyone in the house or in your immediate family smoke?
SP: No, and they really want me to quit. None of my friends or family smoke, but all are supportive of my effort to quit. In fact, they tell me if I don’t quit, they will no longer speak to me.
**Checklist-Case 1**

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<thead>
<tr>
<th>History</th>
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<th>No</th>
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<tbody>
<tr>
<td>1. Asked about smoking history</td>
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<td>2. Asked number of packs/day</td>
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<td>3. Asked number of years of smoking</td>
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<td>4. Asked at what age I started to smoke</td>
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<td>5. Asked if have tried to quit in past</td>
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<td>6. Asked duration of cessation of smoking</td>
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**Counseling**

| 7. Recommended some form of NRT                                        |     |    |
| 8. Answered questions regarding use of NRT                             |     |    |
| 9. Answered questions regarding if NRT prolongs the addiction          |     |    |
| 10. Answered questions regarding NRT side effects                      |     |    |
| 11. Offered office support such as contact phone numbers, Follow-up appointments |     |    |
| 12. Offered outside support such as PA Quitline, local community programs |     |    |
### Empathy

| 13. Created a supportive environment | 1 | 2 | 3 | 4 | 5 |
| 14. Remained non-judgmental to me     | 1 | 2 | 3 | 4 | 5 |

### Verbal

| 16. Listened carefully                | 1 | 2 | 3 | 4 | 5 |
| 17. Reflected your feelings and concerns, “You seem …” | 1 | 2 | 3 | 4 | 5 |
| 18. Legitimized your feeling or concerns, “It is Okay”   | 1 | 2 | 3 | 4 | 5 |
| 19. Offered support                   | 1 | 2 | 3 | 4 | 5 |

### Non-verbal

| 21. Made eye contact                 | 1 | 2 | 3 | 4 | 5 |
| 22. Leaned forward towards you (non-threatening) | 1 | 2 | 3 | 4 | 5 |
| 23. Appropriate facial expressions matched words | 1 | 2 | 3 | 4 | 5 |
| 24. Act confident in explaining your smoking cessation options to you | 1 | 2 | 3 | 4 | 5 |
| 25. Created a supportive atmosphere  | 1 | 2 | 3 | 4 | 5 |
| 26. Appeared comfortable discussing tobacco treatment | 1 | 2 | 3 | 4 | 5 |

Please indicate your level of agreement or disagreement by circling the appropriate number.

<table>
<thead>
<tr>
<th>I have enough information to attempt to quit.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain /No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>4</td>
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Scenario 2: The care of the reluctant

Primary diagnosis: Coronary Artery Disease
Secondary diagnoses: Toxic Effects of Tobacco
Behavioral stage: Pre-contemplative → Contemplative
Setting: Outpatient visit; follow-up after hospital discharge.

A 60 year old woman presents to the office for a follow-up visit 7 days after being discharged from the hospital following a heart attack. She is there for a routine visit and currently has no symptoms. Her past medical history includes treatment for diabetes and hypertension and is on appropriate medications for each. Her family members have suffered heart attacks at an early age, her father died at age 47. She has smoked since she was 13.

She remained mostly abstinent during her hospital stay. However, she had a very hard time with her period of forced abstinence; always thinking about cigarettes, feeling a bit depressed, becoming quite anxious when the hospital nurses offered cessation information, and occasionally sneaking out to the loading dock to have a smoke. On the morning of her hospital discharge, she stopped off at the local convenience store for cigarettes on the way home.

She has smoked 1½ packs of cigarettes per day for the past 47 years. She has attempted to quit on several occasions, but has never been able to abstain comfortably, and never longer than a few days. She has tried nicotine patches, nicotine gum, Zyban, hypnosis, and ear clips at various points over the years but none were very helpful. She is now convinced that smoking cessation is impossible and is resigned to smoke and “enjoy myself as long as I’m alive.”

The student will be expected to ask a few questions about the patient’s tobacco use history, ask about previous quit attempts, and make a tactful, supportive recommendation to attempt cessation again. The SP should express reluctance to quit, perhaps initially motivated by the sense of resignation, frustration and fear. The student will have been introduced to a few approaches to help patients unwilling to quit. If the student is successful in creating a comfortable and supportive encounter, the SP should transition into a contemplative stage. A successful conclusion to this encounter would lead to questions like:

- “You really think it’s possible?”
- “What kinds of medicines are helpful?”
- “Are there places I can go to learn more?”
- “Are there any support groups in the area?”
Case 2: Instructions to the Students

Outpatient scheduled office visit, 7 days after discharge for an acute myocardial infarction.

Perform a focused history and provide appropriate counseling to patient.

No physical examination is necessary.

*You have 15 minutes to do this*....
Teaching Points for standardized patients:

Name: Lucy or Frederick

Occupation: Nurses Assistant at a Nursing Home

Demeanor: Tentative, concerned, exploring

Medical Student (MS): What brought you in?
Standardized Patient (SP): I am here for follow-up after my heart attack. I was discharged from hospital 7 days ago.

MS: How are you doing?
SP: OK, for just having a heart attack, no chest pain or tightness. I just saw my Cardiologist yesterday, she said that I looked fine and to keep my medications the same.

MS: Do you have diabetes?
SP: Yes, controlled with medication.

MS: Do you have high blood pressure?
SP: Yes, controlled with medication.

MS: Do you have high blood cholesterol?
SP: No, not that they have told me, and boy I have had a lot of blood tests!

MS: Any family history of heart disease?
SP: Dad died at age 47 of a heart attack. No siblings, mother still alive.

Do you smoke cigarettes?
Yeah. I have smoked 1-2 packs a day since I was 13 years old.

MS: Have you ever tried to quit?
SP: Oh yeah-many times.

MS: For how long did you quit?
SP: Oh several times I made it a couple of days, I just haven’t been able to do it. I have even tried those patches with nicotine, some of that nicotine gum, hypnosis and even that pill, but nothing works. In fact the longest I’ve gone was a couple of days when I was in the CCU after my heart attack... but I have to admit, I bummed a cigarette and smoked it on the loading dock the day before discharge.
MS: Are you smoking now?
SP: Yeah, about the same amount, I bought a pack from the store on the way home. You know, I just can’t quit and I guess I might as well quit fighting it, I’ll “enjoy myself as long as I’m alive.”

MS: Does anyone in the house or in your immediate family smoke?
SP: I live alone.

MS: Why do you think you can’t quit?
SP: I really don’t know, I guess I enjoy it.

MS: Do you know the risks of not quitting?
SP: Sure, another heart attack.

MS: Can you think of any rewards of quitting?
SP: I am not certain.
**Checklist Case 2**

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<tr>
<th>History</th>
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<td>1. Asked about smoking history</td>
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<tr>
<td>2. Asked number of packs/day</td>
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<tr>
<td>3. Asked number of years of smoking</td>
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<td>4. Asked at what age I started to smoke</td>
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<tr>
<td>5. Asked me what might make it difficult to quit</td>
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<tr>
<td>6. Appeared comfortable discussing tobacco treatment</td>
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<tr>
<th>Counseling</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>7. Advised me to consider quitting</td>
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<tr>
<td>8. Explored my personal rewards of quitting</td>
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<tr>
<td>9. Identified my personal risks of not quitting</td>
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<tr>
<td>10. Answered questions regarding support groups</td>
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<tr>
<td>11. Offered office support such as contact phone numbers, Follow up appointments</td>
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<tr>
<td>12. Offered outside support such as PA Quitline, local community programs</td>
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<td>☐</td>
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<tr>
<td>13. Offered support for any future quit attempt</td>
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<tr>
<td>Empathy</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
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<tr>
<td>15. Created a supportive environment</td>
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<tr>
<td>16. Remained non-judgmental to me</td>
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<tr>
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<tr>
<td>17. Listened carefully</td>
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<td>18. Reflected your feelings and concerns, “You seem …”</td>
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<td>19. Legitimized your feeling or concerns, “It is Okay”</td>
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<td>5</td>
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<tr>
<td>20. Offered support</td>
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<tbody>
<tr>
<td>21. Made eye contact</td>
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<tr>
<td>22. Leaned forward towards you (non-threatening)</td>
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<tr>
<td>23. Appropriate facial expressions matched words</td>
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<tr>
<td>24. Act confident in explaining your smoking cessation options to you</td>
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<td>25. Created a supportive atmosphere</td>
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<td>26. Appeared comfortable discussing tobacco treatment</td>
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Please indicate your level of agreement or disagreement by circling the appropriate number.

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<tr>
<th>I am ready to consider quitting.</th>
<th>Strongly Disagree</th>
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**Scenario 3: The care of the relapsed smoker**

Primary diagnosis: Emphysema

Secondary diagnoses: Toxic Effects of Tobacco

Behavioral stage: Relapse → Action

Setting: Outpatient visit; routine care of emphysema.

A 60-year-old woman with a history of emphysema has been struggling with her illness for nearly 15 years. Her symptoms have gotten progressively worse over time and as a consequence, her activities have become limited and her medication regimen has become more complex. On a recent visit to the doctor’s office, she expressed a desire to quit smoking. She was placed on combination therapy using Zyban and nicotine patch, and experienced an easy transition into non-smoking. She began feeling better soon after - her cough and sputum decreased and her exercise tolerance improved. Her chart indicates that at a follow-up visit three weeks later she stated that there were “no cravings at all” and that she’s “never going back to smoking.”

During today’s visit, she is initially visibly upset and reluctant to discuss her concerns. After a short while, she admits to her physician that she started smoking again recently. Her relapse occurred two weeks ago – she was with friends, having a nice time, and was convinced that she could smoke just one cigarette on this special occasion, and then return to abstinence. She states that she very quickly thereafter returned to her initial level of smoking.

The patient smoked 1½ packs of cigarettes per day for over 40 years. She has quit “cold-turkey” on several occasions in the past, sometimes lasting as long as 8 months before relapse. She had never tried pharmacologic support until this most recent attempt. Her friends and family are all supportive of her attempt to quit smoking, but many have expressed dismay at her recent relapse, despite being on the medication. She has taken this relapse to be a sign that the medications “don’t work for me” and discontinued their use last week.
The student will be expected to ask a few questions about the circumstances surrounding the relapse and make a tactful, supportive recommendation to attempt cessation again. The SP should initially express reluctance to quit, perhaps motivated by a sense of shame. If the student is successful in creating a comfortable and supportive encounter, the SP should transition into an action stage of change. A successful conclusion to this encounter would lead to questions like:

- “Should I restart my medicine?”
- “When should my next quit day be?”
- “Are there places I can go to learn more?”
- “Are there any support groups in the area?”
- “What else can I do to prevent another relapse?”
Chart 3: Instructions to the Students

Outpatient scheduled office visit

Chart review: Patient has emphysema and quit smoking several months ago with the assistance of Zyban and a nicotine patch. As of her last visit 2 months ago, she remained smoke-free and felt great with a marked decrease in her emphysema-related cough and symptoms. Today she is here to see you for a routine follow-up visit.

Perform a focused history and provide appropriate counseling to patient.

*You have 15 minutes to do this....*
Teaching Points for standardized patients:

Name: Mildred or Freddy

Occupation: Card Dealer in Atlantic City

Demeanor: Poor eye contact, looks anxious
Coughs several times/minute during the encounter.

Medical student (MS): How are you doing?
Standardized patient (SP): Oh, fair.

MS: Any new problems?
SP: I guess the cough has gotten a little worse

MS: Productive of anything?
SP: Just the standard phlegm of my emphysema

MS: Chest pain or tightness?
SP: No

MS: Swelling of legs?
SP: No

MS: Shortness of breath?
SP: A little over the past several days

MS: How are you doing with the smoking cessation?
SP: Oh, damn, I fell off the wagon.

MS: Tell me what happened. Are you smoking again?
SP: Yes

MS: When did you restart?
SP: Several weeks ago

MS: What precipitated or caused you to restart?
SP: Two weeks ago, I was having a great time with some old friends and was offered a cigarette and because it was such a special time I thought, why not, just one. Well, I guess once you little the genie out of the bottle, you can’t get it back in.

MS: Has your cough gotten worse since restarting?
SP: Oh, yeah
MS: How much are smoking at present time?
SP: *One to two packs/day. It depends on the day.*

MS: Are you still taking the Zyban and the Nicotine patch?
SP: *No, they obviously don’t work for me, so I took them off last week. Nothing will work for me, I just not strong enough to quit.*

MS: Have you quit in the past?
SP: *Oh yeah, but always went back to it.*

MS: Did you use any medications to quit the other times?
SP: *Oh no, I quit “Cold-turkey”, once for 8 months; but again, I started back. Nothing will ever work for me.*

MS: Do you live with anyone who smokes?
SP: *No; all of my family have quit and really want me to quit but I’m too weak I guess.*

MS: Are you interested in trying again?
SP: *Oh, again-just to fail again-Hardly! It is not worth the effort of the meds, right?*
Checklist Case 3

History

1. Asked about if I am smoking
2. Asked number of packs/day
3. Asked when I restarted
4. Asked details of when I restarted
5. Asked if I was taking my smoking cessation meds
6. Asked if I wanted to quit again
7. Asked me what might make it difficult to quit

Counseling

8. Advised me to try again to quit
9. Discussed with me what I might do differently in the future if I am in a similar situation.
10. Answered questions regarding support groups
11. Offered office support such as contact phone numbers, Follow up appointments
12. Offered outside support such as PA Quitline, local Community programs
13. Offered support for any future quit attempt
### Empathy

15. Created a supportive environment
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

16. Remained non-judgmental to me
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

### Verbal

17. Listened carefully
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

18. Reflected your feelings and concerns, “You seem ..”
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

19. Legitimized your feeling or concerns, “It’s Okay”
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

20. Offered support
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

### Non-verbal

21. Made eye contact
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

22. Leaned forward towards you (non-threatening)
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

23. Appropriate facial expressions matched words
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

24. Act confident in explaining your smoking cessation options to you
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

27. Created a supportive atmosphere
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

28. Appeared comfortable discussing tobacco treatment
   - Strongly Disagree
   - Disagree
   - Uncertain
   - Agree
   - Strongly Agree

---

**Please indicate your level of agreement or disagreement by circling the appropriate number.**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Uncertain/No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>I am ready to try to quit smoking again.</td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
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</table>
Scenario 4: The care of the hospitalized patient

Primary diagnosis: Pneumonia

Secondary diagnoses: Asthma, Toxic Effects of Tobacco

Behavioral stage: Pre-contemplative → Contemplative

Setting: Semi-private room, busy hospital ward, 15 minutes until scheduled X-ray, several interruptions during visit.

A 30-year-old woman with a history of asthma since childhood was admitted to the hospital yesterday with progressive shortness of breath and cough. She’s had a fever for the past few days and she feels worse than she’s ever felt with an asthma flare before. She presented to the emergency department for evaluation and was found to have a small pneumonia. Antibiotic and nebulizer therapy were started immediately, and she was admitted to the hospital for hydration and observation.

Today, one day following her admission, she feels considerably better. She’s much less short of breath and her fever is gone, however her cough remains bothersome. During morning rounds, the medical student assigned to her care begins asking questions about her past medical history when she reveals that she currently smokes.

She has used approximately ½ pack of cigarettes per day since she was 15. She really enjoys smoking, especially when she’s out with friends, and above all when she’s had a few drinks. While she knows she should quit, she hasn’t really given much thought to when or how. She’s never really tried to quit before. Something is telling her that being with her friends just won’t be as enjoyable if she does quit. She hasn’t had a cigarette in two days and is beginning to crave one badly. Permission to go to the smoking area outside of the hospital was just now denied by the nurse since the X-ray department has just called for her to return for a follow-up film.
The student will be expected to ask a few questions about the patient’s tobacco use history, ask about previous quit attempts, and make a tactful, supportive recommendation to attempt cessation at this time. The SP should initially express reluctance to quit, perhaps motivated by the sense of loss and isolation from her friends. It should be an easy transition to the contemplative stage if the student is successful in creating a comfortable and supportive encounter. Of note, the SP should feel free to appear distracted by the setting (e.g. nurse coming in to check IV, roommate’s TV noise, time limited by call to X-ray, etc.) A successful conclusion to this encounter would lead to questions like:

- “You really think it’s possible?”
- “What kinds of medicines are helpful?”
- “Are there places I can go to learn more?”
- “Are there any support groups in the area?”
Case 4: Instructions to the Students

Rounds by Student-physician on patient, day after admission for acute exacerbation of Asthma. The resident had given you the following information about the patient:

A 30-year-old woman with a history of asthma since childhood admitted with asthma exacerbation probably due to pneumonia. Overnight she has received hydration, antibiotic and nebulizer therapy and has improved markedly.

Perform a focused history and provide appropriate counseling to patient.

_You have 15 minutes to do this...._
Teaching Points for standardized patients:

Name: Henrietta/Henry

Occupation: Federal employee at Mint

Demeanor: Slightly anxious as though impatiently waiting to do something (in this case to light up a cigarette)

Medical Student (MS): How are you feeling today?
Standardized Patient (SP): So much better—the shortness of breath has improved, but I still have a cough.

MS: Any phlegm?
SP: Yes, some yellow green stuff—much worse than typical asthma attacks I have had.

MS: Do you smoke cigarettes?
SP: Well, sure, I do, but not a lot.

MS: How long have you smoked?
SP: Approximately ½ pack of cigarettes per day for the past 15 years.

MS: When do you smoke?
SP: Everyday, but I really like to smoke when I’m out partying. You know, a couple or beers just don’t taste as good as they should without a few cigarettes.

MS: Do your friends smoke cigarettes?
SP: Oh yeah, of course. It just wouldn’t be a party without a couple of smokes.

MS: Have you ever tried to quit?
SP: Oh no, why? I know it’s not good for me, but it’s only a half pack/per day. I can quit anytime I want to. I am not really addicted.

MS: Do you ever crave cigarettes?
SP: Well when I’m out and, I guess right now—I sure could use one right now but the nurse told me I had to wait for one of these tests. Wait, wait wait that is all I seem to do around here.
Checklist Case #4

History

1. Asked about if I am smoking
   Yes □ No □

2. Asked number of packs/day
   Yes □ No □

3. Asked number of years of smoking
   Yes □ No □

4. Asked at what age I started to smoke
   Yes □ No □

5. Asked if I have tried to quit in past
   Yes □ No □

6. Asked when I smoke
   Yes □ No □

7. Asked what factors made me desire to smoke
   Yes □ No □

8. Asked me what might make it difficult to quit
   Yes □ No □

Counseling

9. Advised me to consider quitting
   Yes □ No □

10. Explored my personal rewards of quitting
    Yes □ No □

11. Identified my personal risks of not quitting
    Yes □ No □

12. Answered questions regarding assistance in quitting
    Yes □ No □

13. Offered office support such as contact phone numbers, follow up appointment
    Yes □ No □

14. Offered outside support such as PA Quitline, local community programs
    Yes □ No □

15. Offered support for any future quit attempt
    Yes □ No □
<table>
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<tr>
<th>Empathy</th>
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<td><strong>Verbal</strong></td>
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<td>5</td>
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<td>22. Offered support</td>
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<td><strong>Non-verbal</strong></td>
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<th>I am ready to consider quitting.</th>
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Section 3

Implementation
**Pennsylvania Continuum of Tobacco Education Project - Medical School Module**

<table>
<thead>
<tr>
<th>Category:</th>
<th>Program Implementation</th>
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<tbody>
<tr>
<td>Resource Title:</td>
<td>Frequently Asked Questions</td>
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<tr>
<td>Resource Description:</td>
<td>Medical students encounter predictable challenges during their clinical encounters with smokers. Anticipating these challenges and modeling effective responses can go a long way toward improving the learner's self-efficacy. We used a series of Frequently Asked Questions (FAQs) to highlight several misconceptions about cessation, and to provide well reasoned approaches to overcoming these barriers. Students were encouraged to review these FAQs prior to participating in the program's SP scenarios. In addition, the FAQs were also provided to SPs to guide appropriate question generation and give structure to anticipated responses.</td>
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</table>

**Submitting Institution:** University of Pennsylvania  
**Corresponding Author:** Sarah Evers-Casey, MPH  
**Phone:** (215) 662 – 9255  
**E-mail:** sarah.evers-casey@uphs.upenn.edu  
**Fax:** (215) 243 - 4643

**Tool Objectives:**  
- Model effective responses to predictable obstacles encountered during a tobacco-related clinical interaction.  
- Provide a basis for discussing several treatment related misconceptions.  
- Provide SP actors with background necessary to facilitate a credible SP session.

**ACGME Competencies Addressed:**  
- Patient Care  
- Interpersonal Interaction

**Keyword(s):** Smoking cessation, Tobacco, Tobacco use treatment, Behavioral health, Counseling Skills, Cognitive therapy, Health promotion, Standardized Patient scenarios.

**Specialty / Discipline:** Undergraduate Medical Education, Graduate Medical Education, Primary Care, Sub-specialty training programs.

**Effectiveness / Significance of Work:** Modeling effective health promotion behavior is difficult, especially with cessation, since many of these interactions happen spontaneously and privately. We observed the students' facility and comfort level with the material improve after reviewing the FAQs. Many students were observed to use answers provided during the SP training sessions later in the day. However, outcomes associated with this tool were not measured.

**Special Implementation Requirements:** None

**Lessons Learned:** Having written materials available that address the most common concerns about cessation helps to ease the anxiety provoked when students engage in counseling about unfamiliar topics. The FAQs could serve as excellent patient education materials, if properly presented.


**References:**  


**Resource URL (If web based):** N/A
The Comprehensive Center for Tobacco Research and Treatment

Frequently Asked Questions

In medical school, it’s not uncommon to feel that your contribution to the care of patients is limited by your relative lack of experience. Sure, most students get to write notes, track down labs, examine undesirable bits and such, but how frequently do you get to fundamentally impact your patient’s life in ways that no one else has before?

By learning how to effectively help your patients quit smoking, you will become an invaluable part of the healthcare team. And you’ll be taking a major step toward improving your patients’ health - for life. RELAX... there’s no pressure. This isn’t brain surgery. You’ll find that most smokers really appreciate your interest and support. Unfortunately, they are often initially desperate to avoid talking about quitting, usually because of fear and misunderstanding.

Enter the third year medical student... A sympathetic ear, a supportive word or two, and bingo(!) you’re helping your patient learn more about quitting, and helping them take those first fearful steps toward abstinence. Just like that. Have fun with it! It’s an opportunity to sit with a patient, talk about something important to them, and make a big contribution in the process.

The following are some questions commonly asked by people who may be making the decision to quit. The more you know about what to expect, the more prepared you will be to help your patients make their transition to smoke-free.

**Will I experience withdrawal?**

How much your patient smokes, is very often related to their level of nicotine dependence. But it’s not the only clue to addiction. In addition, look for clues such as whether or not they need to “nicotine load” in the mornings, and whether they have quit comfortably before. The experience of withdrawal from nicotine is very variable. The average addicted smoker usually experiences mild symptoms such as sudden urges, agitation, or irritability during the first week of abstinence. The chronic withdrawal phase is instead characterized by a prolonged and subtle draw to smoke. One thing you can do to help is to make sure your patient uses some form of nicotine replacement; a very effective way to reduce withdrawal symptoms.

**What are the symptoms of acute withdrawal?**

Some people experience symptoms such as headache, irritability, muscle aches and cramps, anxiety, sleep disturbance, time distortion, or tobacco craving. Most people experience no symptoms other than urges during withdrawal. The anticipation of withdrawal almost always exceeds the actual symptoms, especially when the smoker receives treatment. Nicotine replacement therapy is a primary way to alleviate this discomfort, however several other tools exist to help patients get over the effects of
nicotine withdrawal, including certain anti-depressant medications, behavioral counseling, and simple education.

If withdrawal from tobacco only lasts for one week, why do so many people relapse?

Although physical withdrawal is relatively predictable, the chronic phase of nicotine withdrawal is less straightforward. Because nicotine can effect the function and structure of the brain, long term abstinence from tobacco smoking is often quite complicated. Most people have a number of thoughts and behaviors that they associate with smoking, which become ingrained through prolonged tobacco use. After quitting, these behaviors are often unexpectedly accompanied by an irrational draw to smoke. The good news is that if a person is able to stay smoke free for 90 days, there’s a good chance they’ll stay smoke free for a year. And if smoke free for a year, there’s a 90% chance of staying smoke free for life! But it all starts with the first step. That’s why the effort you put into smoking cessation now could pay big dividends months or even years down the road.

What can I do to enhance the likelihood of success?

It is critical that a "stop date" be established early on. Careful thought and consideration should be given to this date, especially about issues that could interfere with your goal of stopping. Once a date has been established, stick with it!! Other factors which have been proven to enhance the probability of maintaining a smoke-free lifestyle are modest exercise such as walking, and maintaining healthy eating habits. In addition, foods that are associated with smoking should be identified. Regardless of what you decide to do to stop smoking, once you’ve decided on it, write it down! And once you’ve written it down, promise yourself you’ll stick to it. Planning ahead for all of the possibilities is the most effective way to get you through the toughest times.

Will I gain weight after I stop smoking?

Despite what you may have heard, the average weight gain after quitting is only five pounds. The implementation of a light exercise program can minimize or eliminate any weight gain altogether. An increased appetite is not uncommon once you’ve stopped smoking, but a well balanced diet with healthy snacks is an excellent way to control your cravings. Remember, while 80% of those who stop smoking will gain weight, with an improper diet, so will 56% of those who continue smoking. Counseling on proper nutrition while quitting tobacco significantly improves your chances of maintaining your current weight.

What are the odds that I will remain smoke-free?

Relapse is not uncommon, but the likelihood of returning to cigarette smoking diminishes the longer one abstains from tobacco following his/her quit date. In turn, the likelihood of long term success is related to the method that you use to quit! Programs that use appropriate medications in combination with some basic education and behavioral modification techniques in accordance with the Federal Government’s Agency for Health Care Policy and Research: Clinical practice guideline for smoking cessation have been proven to be most cost-effective.

Don't I need to make changes in my environment in order to succeed at remaining smoke free?

The specifics of what you should do, and how you should do it, is something you work out with your smoking cessation counselor. What is recommended is that you make others in your life aware of your commitment to a smoke-free lifestyle. Loved ones and colleagues that have a lot of contact with you should be made aware of difficulties that you may initially experience as a smoke-free person. Don't be shy about asking them for praise and/or support while you boast about your accomplishment. Support from others is very important. Another suggestion is that you acknowledge and reward yourself by
celebrating your accomplishment. Spend the money you would have otherwise spent on cigarettes and do something nice for yourself.

I’m not sure I want to give up smoking. I like it, and I haven’t suffered any consequences.

Obviously, this is a decision you have to evaluate. Whether or not you have experienced any adverse consequences due to smoking, your vulnerability to health problems because of smoking has increased four-fold or more. In the past 25 years, more than 50,000 scientific studies have linked cigarette smoking to heart and lung disorders, as well as various forms of cancer. It is also important to consider the impact of cigarette smoking on others. You have undoubtedly heard the numerous reports in the media about the dangers of second-hand smoke. Did you also know that a strong predictor of teenage smoking is whether or not the parents of the teen smokes? Given the fact that the vast majority of adult cigarette smokers took their first puff as a teen, your decision to give up cigarettes now could have a significant impact on the health of your child, regardless of whether or not you smoke around them.

Does insurance pay for my treatment?

It depends. Based on the reasons why you’d like to quit, whether your doctor has referred you, and whether you suffer from smoking related illnesses, most insurers will cover the evaluation and management visits by a physician. Other services may or may not be covered fully. Some insurers will reimburse expenses upon cessation. Different insurance plans have different regulations regarding reimbursement, so we strongly recommend calling your insurer for details.

Why should I spend time and money on quitting? Can’t I just do it by myself? Quit cold turkey?

Nicotine is one of the most powerfully addictive substances known to medical science. Its hold over some people is even more powerful than heroin! Sure, some people are lucky enough to be able to quit cold turkey. However, for most people, even the idea of quitting is frightening, depressing and uncomfortable. Every smoker should be offered nicotine replacement as a tool to help reduce these uncomfortable feelings.

Won’t using nicotine patches just prolong the addiction? Can’t I get addicted to the patch?

No and no. Does Tylenol prolong the headache? Most nicotine replacement products (certainly those available over the counter) can NOT deliver nicotine in a manner conducive to developing addiction. Think about it... when was the last time you met a patient craving a patch? Sometimes people become dependent on nicotine medications, meaning they become so worried about relapse after stopping the medication that they continue to use it just to be safe.
Section 4

Evaluation
### Pennsylvania Continuum of Tobacco Education Project - Medical School Module

**Category:** Evaluation  
**Resource Title:** Confidential Tobacco Survey  
**Resource Description:** Standardized assessment of students’ knowledge, attitudes and skills related to tobacco use treatment is difficult. With no generally accepted measure available to educators interested in evaluating their programs, it is difficult to provide convincing evidence of the effect of an educational intervention, or to compare outcomes between interventions or schools. Given that preexisting beliefs regarding tobacco use can influence physicians’ behavior, we decided that it would be important to gauge changes in students’ attitudes as a short-term indicator of the effectiveness of a planned program. We combined 55 previously validated items drawn from both published and unpublished sources into a single instrument, or Confidential Tobacco Survey. A subset of 50 items is presented with instructions to respond on a 5-point Likert scale ranging from 1=Strongly Disagree to 5=Strongly Agree. The remaining five items are presented in a multiple-choice format with five appropriate options for each item. A shorter, 30-item instrument is also presented for consideration.

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**E-mail:** sarah.evers-casey@uphs.upenn.edu  
**Fax:** (215) 243 - 4643

**Tool Objectives:**  
- Allow for longitudinal assessment of student progress  
- Provide a mechanism for program monitoring and quality improvement  
- Assist educators in assessing the effects of program modifications

**ACGME Competencies Addressed:**  
- Patient Care  
- Interpersonal Interaction

**Keyword(s):** Smoking cessation, Tobacco, Tobacco use treatment, Behavioral health, Counseling Skills, Cognitive therapy, Health promotion, Standardized Patient scenarios.

**Specialty / Discipline:** Undergraduate Medical Education, Graduate Medical Education, Primary Care, Sub-specialty training programs.

**Effectiveness / Significance of Work:**  
Factor analysis of the Confidential Tobacco Survey responses in a validation sample of third year medical students yielded five independent factors with eigenvalues greater than 1, which accounted for 75 percent of the total variance. The first and largest factor (eigenvalue 7.3, 37% of variance) include six items related to students’ self-assessment of knowledge and skills related to tobacco cessation (e.g. "I am comfortable prescribing medications that help in cessation"). Other factors are related to students’ perceptions regarding tobacco advertising, the utility of nicotine replacement therapy, the prospects for counseling patients in an ambulatory setting, and their level of frustration with smokers who choose not to quit.

**Special Implementation Requirements:** None

**Lessons Learned:** Creating an impact on students’ beliefs and attitudes regarding cessation is an important first step in achieving competence in tobacco treatment skills. Positive changes in tobacco attitudes may be related to self-efficacy and long-term uptake of favorable practice habits. Statistically significant changes in Confidential Tobacco Survey scores tracked along side concurrent improvements in patient counseling and standardized test performance related to tobacco.


**References:**  

**Resource URL**
N/A
We are collecting the following information for program evaluation and quality improvement. Your responses will not be considered in your final clerkship grade.

Last four digits of student number ___________________________ Date ____/____/2004

Please indicate your level of agreement or disagreement by circling the appropriate number.

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<td>The physician’s role in influencing a patient’s decision to quit smoking is very important.</td>
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<td>13.</td>
<td>It is possible to counsel patients adequately regarding smoking cessation during their regular outpatient visits.</td>
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<td>17. Smoking cessation treatment has been shown to be effective in hospitalized patients.</td>
<td>1</td>
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</tr>
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<td>19. A combination of counseling and pharmacotherapy is necessary in assisting smokers who want to quit.</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>20. The health hazards of smoking are roughly similar to the health hazards of air pollution.</td>
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<td>5</td>
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<td>21. Staying in a room that has asbestos has roughly the same risks as staying in a room with many people smoking.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<tr>
<td>22. Smoking only kills old people.</td>
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<td>2</td>
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<tr>
<td>23. Teenage smoking is fairly safe.</td>
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</tr>
<tr>
<td>24. The health hazards of smoking are roughly similar to the health hazards of drinking (alcohol).</td>
<td>1</td>
<td>2</td>
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<tr>
<td>25. Mortality for non-smokers has been decreasing in <em>developed</em> (i.e., Western) countries.</td>
<td>1</td>
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<td>26. Only heavy smokers are at a serious risk.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>27. Smokers usually die from lung cancer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>28. If a smoker has smoked for a long period (say about 10 years) it is too late for her/him to stop smoking.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>29. About 1 out of 20 (i.e., 5%) smokers, if they continue to smoke, will eventually be killed by smoking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. Smoking is the single most preventable cause of death.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>31. All forms of tobacco promotion (including indirect advertising and tobacco sponsorship) should be banned.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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<tr>
<td>32. Tobacco advertising should be completely banned.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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</tr>
<tr>
<td>33. Doctors’ advice to their patients to stop smoking is totally ineffective.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>34. I am capable of motivating patients who are reluctant to quit smoking to consider quitting.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>Please indicate the degree to which you agree that each of the following is a BARRIER or OBSTACLE to helping patients to stop smoking</td>
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<tr>
<td>35. Smoking is a personal decision; no manner of counseling can make a difference.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>36. Patients are generally not willing to discuss their smoking habit with a physician.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37. Routine outpatient office visits do not allow enough time for smoking cessation counseling.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>38. Providing smokers with written cessation materials is financially prohibitive.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>39. There are no structured support programs in my area to help my patients remain abstinent after I help them quit.</td>
<td>1</td>
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<td>5</td>
</tr>
<tr>
<td>40. Routine office visits do not provide the opportunity for effective smoking cessation counseling.</td>
<td>1</td>
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</tr>
<tr>
<td>41. Smokers will give up smoking only after they find out they are sick.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>42. Physicians will be frustrated by smokers who choose not to quit.</td>
<td>1</td>
<td>2</td>
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<td>43. Nicotine replacement products are difficult for patients to use.</td>
<td>1</td>
<td>2</td>
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<td>44. Smokers typically cannot afford the medications that help improve their chances of quitting.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>45. Patients will find it offensive if you discuss their smoking habits too often.</td>
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<tr>
<td>46. There is no mechanism of reimbursement currently available.</td>
<td>1</td>
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<td>48. There are no truly effective medications available.</td>
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<tr>
<td>49. Participating in counseling is emotionally draining.</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>
50. According to recent surveys, approximately what percent of American adults smoke?
   A. 5 percent  
   B. 10 percent  
   C. 15 percent  
   D. 25 percent  
   E. 45 percent  

51. **Item dropped from survey**

52. Ninety-five percent of unaided cessation attempts end in failure. Clinicians who offer pharmacological support to their smoking patients could expect a cessation rate of:
   A. 5 percent  
   B. 10 percent  
   C. 25 percent  
   D. 33 percent  
   E. 45 percent  

53. The guidelines suggest that even a short intervention can be effective. The shortest intervention with proven clinical efficacy is:
   A. 3 minutes  
   B. 10 minutes  
   C. 30 minutes  
   D. 60 minutes  

54. Factors that affect nicotine yield include all of the following EXCEPT:
   A. temperature of the smoke  
   B. pH of the smoke  
   C. nicotine content on the label  
   D. tobacco volume per cigarette  

55. How long did it take you to complete this survey? ____________ minutes

Comments:
9-30-03
We are collecting the following information for program evaluation and quality improvement. Your responses will not be considered in your final clerkship grade.

Last four digits of student number  

Date ___/___/2005

Please indicate your level of agreement or disagreement by circling the appropriate number.

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<td>21. Smoking cessation counseling is predominately an outpatient intervention.</td>
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<td>25. There are no truly effective medications available.</td>
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<td>26. Counseling patients to stop smoking is likely to be emotionally draining.</td>
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<td>27. Counseling patients to quit smoking upon admission to the hospital is highly effective.</td>
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28. Physicians should expect to manage the effects of nicotine withdrawal for up to:
   A. 3 weeks
   B. 3 months
   C. 3 years
   D. Forever

29. Which of the following statements is a core concept of the AHRQ guidelines?
   A. Physicians should ask about smoking status at every visit
   B. Unless contraindicated, physicians should prescribe nicotine replacement therapy for all patients who are quitting.
   C. Physicians should consider a “contract for care” requiring that patients stop smoking as a condition for continued medical care.
   D. A & B
   E. A, B & C

30. Which of the following statements regarding the nicotine patch is correct?
   A. It helps to treat sudden cravings.
   B. It should be started at the lowest tolerable dose and increased over a period of 8-10 weeks.
   C. It is safe when combined with other forms of nicotine replacement therapy.
   D. The most common side effects are “hot flashes” and “palpitations.”
   E. It is available by prescription only.
Pennsylvania Continuum of Tobacco Education Project - Medical School Module

Category: Evaluation

Resource Title: Patient Encounter Log System

Resource Description: Students routinely use some form of encounter log to track their clinical experience. At Jefferson Medical College, students use a hand-held, computerized Patient Encounter Log System (PELS) to record data about their encounters with patients during their third and fourth year clinical clerkships. The PELS was modified prior to the initiation of the educational program to include several items reflecting key behaviors derived from tobacco treatment guidelines. A touch screen checklist labeled History Information was modified to include a checkbox for “smoking status obtained” (the Ask behavior) while the Counseling Details screen was modified to include checkboxes for both “smoking cessation counseling” and “prevention of tobacco use” (the Advise behavior). PELS modifications were reviewed by the Curriculum Committee, and assessed for responsiveness to change across time, clerkship, and institution.

Submitting Institution: University of Pennsylvania

Corresponding Author: Sarah Evers-Casey, MPH

Phone: (215) 662 – 9255

E-mail: sarah.evers-casey@uphs.upenn.edu

Fax: (215) 243 - 4643

Tool Objectives:
- Assist educators in tracking key behaviors among students
- Assessment of the effectiveness of an educational intervention
- Provide regular cues to encourage targeted behaviors

ACGME Competencies Addressed:
- Patient Care
- Interpersonal Interaction

Keyword(s): Smoking cessation, Tobacco, Tobacco use treatment, Behavioral health, Counseling Skills, Cognitive therapy, Health promotion, Case-based reporting.

Specialty / Discipline: Undergraduate Medical Education, Graduate Medical Education, Primary Care, Sub-specialty training programs.

Effectiveness / Significance of Work: As an intermediate measure of the effectiveness of our educational program, we monitored the change in the rate of students’ self-reported key behaviors over time. Over a two-year period, students reported data for 85,728 encounters with adult and adolescent patients during the study period, of which 62,418 included a clinical history. Of the encounters with a clinical history, 37,023 (59%) included documentation that a smoking history was obtained. The highest rate of collecting the smoking history (86%) was seen during the Medicine clerkship. The lowest rates were reported in Pediatrics (29%) and Surgery (25%). PELS remained responsive across time, rotation type, and location, reflecting anticipated differences between primary versus tertiary care, community versus university settings and pre- versus post-training periods.

Special Implementation Requirements: Palm OS based hand-held computer device (PDA)

Lessons Learned: Measurements had to be standardized relative to the point at which the student participated in the educational intervention in order to minimize the inherent performance improvements expected from progression through general medical training. In this way, each student served as his or her own control.


References:

Resource URL: N/A
The Ask Behavior

The Advise Behavior
# Tobacco Assessment and Plan

**Effective educational interventions should include an opportunity for organized student reflection and integration. The Tobacco Assessment and Plan provides a mechanism for students to document their clinical experiences related to tobacco use treatment, think through the obstacles to cessation, and articulate a general approach to care. In addition to formalizing the students' thoughts on treatment, the case studies also provide educators with an opportunity to extend experiential learning to a larger cohort of students through discussion and reflection.**

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**Tool Objectives:**
- Provide students with a formal structure for assessing tobacco patients' needs.
- Provide a mechanism for students to develop and document a treatment plan.
- Provide a mechanism for program monitoring and quality improvement.
- Assist educators in program modification and planning.

**ACGME Competencies Addressed:**
- Patient Care
- Interpersonal Interaction

**Keyword(s):** Smoking cessation, Tobacco, Tobacco use treatment, Behavioral health, Counseling Skills, Cognitive therapy, Health promotion, Case-based reporting.

**Specialty / Discipline:** Undergraduate Medical Education, Graduate Medical Education, Primary Care, Sub-specialty training programs.

**Effectiveness / Significance of Work:** Practically, the main effect of this tool was to allow the educator to reconvene the student learners at a pre-designated time following the intervention. This allowed educators to review and consolidate ideas that were presented earlier, as well as to expand the depth of discussion. An additional effect was to highlight to students that a complete tobacco use history should include more than simple consideration of pack-years.

**Special Implementation Requirements:** None

**Lessons Learned:** Students tend to use these feedback forms to report back on their most difficult cases. This creates an environment in which they: 1) appreciate the complexity of tobacco use treatment, 2) think through the intrinsic obstacles inherent in the healthcare system, and 3) seek advice on overcoming these obstacles.

**Related Publications / Presentations or Citations:**

**References:**

**Resource URL**
N/A
# Tobacco Assessment and Plan

Student’s Name _________________________ Date _____________________

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