

Guidelines for Inpatient Tobacco Cessation Therapy



Cigarette smoking is the leading cause of preventable death in the United States, contributing to over 20% of all mortality.¹ Much of the smoking-attributable mortalities are cancer deaths, but cardiovascular disease and chronic lung disease account for the majority of smoking-related complications.² Therefore, promoting tobacco cessation has become a leading initiative for health care providers and institutions. Intensive intervention in the hospital has been shown to have positive outcomes in a broad range of hospitalized patients, however, many health care providers feel ill-prepared to provide adequate smoking cessation education as part of their clinical practice.^{3,4} It is the goal of this guideline to provide the basic tools to help initiate tobacco cessation and guide pharmacotherapy for inpatients.

There are many important reasons to address smoking cessation during hospitalization, including the desire to avoid withdrawal symptoms. Physical symptoms of nicotine withdrawal can be manifested in patients with bradycardia, insomnia, irritability and restlessness. A study published in *Neurology* in 2001 described five cases of presumed nicotine withdrawal delirium among brain-injured patients treated in an intensive care unit.⁵ Each patient had a history of heavy tobacco use and experienced dramatic and sustained clinical improvement within hours of transdermal nicotine replacement.⁵ These observations and others suggest that nicotine withdrawal may be an under-recognized and therefore undertreated.

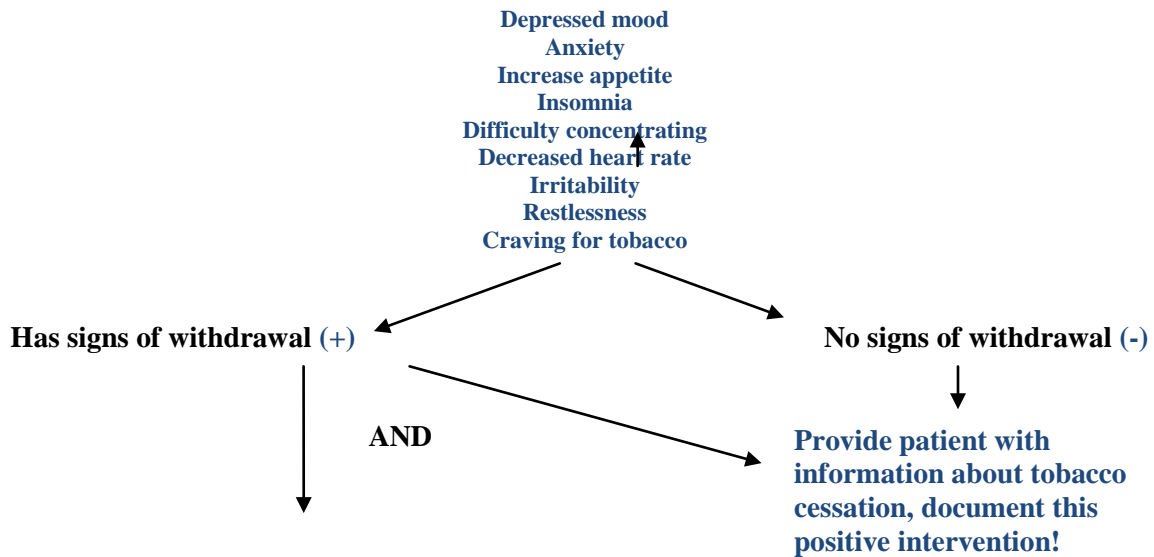
The vast majority of smokers indicate that they would like to stop using tobacco, and hospitalization provides a “teachable moment” for providers to support or encourage smoking cessation. Part of the hospital care should include appropriate intervention for tobacco dependent patients who are motivated to end their addiction. Clinicians can provide a brief, simple, and straightforward behavioral intervention that includes personalized advice for the patient to stop smoking. Next nicotine withdrawal can be avoided by providing patient specific nicotine replacement therapy. Of available pharmacotherapies for smoking cessation, the most widely studied in hospitalized patients is transdermal nicotine replacement therapy. Studies have shown that by targeting the number of cigarette smoked and thereby achieving a greater percentage of nicotine replacement may increase the efficacy over traditional nicotine patch therapy.⁶ Please see Flowsheet below for more detail instructions.

For discharge, more intensive counseling can be provided through local and national quit lines. Other options for discharge medications include bupropion, varenicline, clonidine, and nortriptyline. Bupropion SR provided in a dose of 75 mg twice daily for 3 days then 150 mg twice daily for 7 to 12 weeks has been shown to be effective as a single agent for tobacco dependence treatment, although it may be more effective when combined with continued nicotine replacement therapy.^{7,8} Showing new promise is varenicline.^{9,10} This, like bupropion requires uptitration during initiation, starting with 0.5 mg once daily for days 1 through 3, then 0.5 mg twice daily for days 4 through 7, then 1 mg twice daily for 12 weeks. Most success observed has been in those highly motivated to quit. Due to titration varenicline and bupropion initiation are not ideal during hospitalization, but discharge prescriptions should be considered.

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Patient admitted and is a current smoker or user of smokeless tobacco

Assess for symptoms of nicotine withdrawal:



Assess the number of cigarettes smoked per day and/or the number of cans of smokeless tobacco used. Dose recommendations....

Cigarettes	Nicotine Patch Dose
>40 Cigarettes per day	42 mg total (21 mg + 21 mg)
30-40 Cigarettes per day	35 mg total (14 mg+ 21 mg)
20-30 Cigarettes per day	21 mg patch
<20 Cigarettes per day	14 mg patch
Smokeless Tobacco	
3 cans/pouches per week	42 mg total (21 mg + 21 mg)
2 cans/pouches per week	35 mg total (14 mg+ 21 mg)
1 can/pouch per week	21 mg patch
< 1 can/pouch per week	14 mg patch

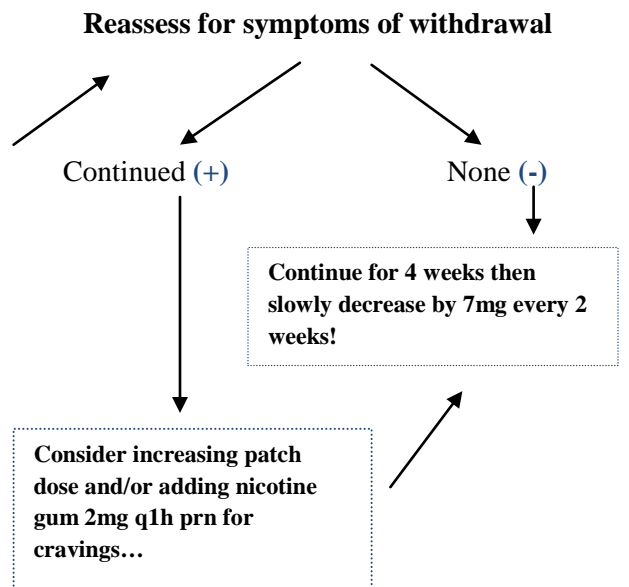


Table approved by the smoking cessation committee 7/30/07, P&T 8/16/07

Contraindications/Warnings

Allergy to tape or adhesive. Relative contraindications include tachycardia and active cardiac ischemia. If choosing not to administer NRT or if the patient refuses, please provide education.

Discharge considerations

Consider Rx for nicotine patch taper +/- bupropion(Zyban®/Wellbutrin®) OR varenacline (Chantix®).

ALWAYS Provide patient with information about tobacco cessation, document this positive intervention

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