

Part 3: Medications for Tobacco Use Cessation

DESCRIPTION & EXAMPLES	PROS & CONS	COMMENTS/LIMITATIONS	DOSING RECOMMENDATIONS
<p>Nicotine Patch</p> <p>24-hour delivery systems 21, 14, 7 mg/24 hr</p> <p>16-hour delivery systems 15 mg/16 hr</p> <p>(Generic available, over-the-counter (OTC))</p> <p><i>Delivers nicotine directly through the skin.</i></p>	<p>PROS</p> <ul style="list-style-type: none"> • Achieve constant levels of replacement • Easy to use • Only needs to be applied once a day • Few side effects <p>CONS</p> <ul style="list-style-type: none"> • Less-flexible dosing — cannot titrate dose to acutely manage withdrawal symptoms • Slow onset of delivery • Mild skin rashes and irritation 	<ul style="list-style-type: none"> • Patches vary in strengths and the length of time over which nicotine is delivered. • Patches may be placed anywhere on the upper body, including arms and back. • Avoid hairy areas. • Rotate the patch site each time a new patch is applied. 	<ul style="list-style-type: none"> • ≥10 cigs/day = 21 mg/day x 4–6 wks, then 14mg/day x 2–3 wks, then 7mg/day x 2–3 wks. • <10 cigs/day = 14 mg/day x 6wks, then 7mg/day x 2 wks. • Adjust based on withdrawal symptoms, urges, and comfort. After 4–6 weeks of abstinence, taper every 2–4 weeks in 7–14 mg steps as tolerated. <p>DURATION</p> <ul style="list-style-type: none"> • 8–12 weeks
<p>Nicotine Lozenge</p> <p>2 mg, 4 mg</p> <p>(OTC)</p> <p><i>Delivers nicotine through the lining of the mouth while the lozenge dissolves.</i></p>	<p>PROS</p> <ul style="list-style-type: none"> • Easy to use • Can titrate to manage withdrawal symptoms • May satisfy oral cravings • Delivers doses of nicotine approximately 25% higher than nicotine gum <p>CONS</p> <ul style="list-style-type: none"> • Should not eat or drink 15 minutes before use or during use; avoid acidic beverages • Should not be chewed or swallowed • Need for frequent dosing can compromise compliance • Nausea frequent (12–15%) 	<ul style="list-style-type: none"> • Use at least 8–9 lozenges/day initially. • Instruct patients to allow lozenge to dissolve slowly over 20–30 minutes. • Rotate to different sites of the mouth. • Nicotine release may cause a warm, tingling sensation. • Maximum 20 lozenges/day. • Efficacy and frequency of side-effects related to amount used. • Review package directions carefully to maximize benefit of product. 	<ul style="list-style-type: none"> • Based on time to first cigarette of the day: <30 minutes = 4 mg >30 minutes = 2 mg • Based on cigarettes/day: >20 cigs/day = 4 mg <20 cigs/day = 2 mg • Initial dosing = 1–2 lozenges every 1–2 hours (minimum 9/day) x 6wks, then 1 q2–4hrs x 3wks, then 1 q4–8hrs x 3wks. • Taper as tolerated. <p>DURATION</p> <ul style="list-style-type: none"> • 12 weeks

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<p>Nicotine Gum</p> <p>2mg, 4mg</p> <p>(Generic available, OTC)</p> <p><i>Delivers nicotine through the lining of the mouth while gum is parked between cheek and gum.</i></p>	<p>PROS</p> <ul style="list-style-type: none"> • Convenient/flexible dosing that allows for titration to manage withdrawal symptoms • Faster delivery of nicotine than the patches • Might satisfy oral cravings <p>CONS</p> <ul style="list-style-type: none"> • May be inappropriate for people with dental problems and those with temporomandibular joint (TMJ) syndrome • Should not eat or drink 15 minutes before use or during use; avoid acidic beverages • Frequent use during the day required to obtain adequate nicotine levels — may compromise compliance • Requires proper chewing technique for maximum benefit and to minimize adverse effects 	<ul style="list-style-type: none"> • The term “gum” is misleading; it is not chewed like regular gum. • Many people use this medication incorrectly. • Advise patients to chew each piece slowly. • Chew for 15–30 chews and park between cheek and gum when peppery or tingling sensation appears. • Rotate to different sites of the mouth. • Resume chewing when taste or tingle fades. • Repeat chew/park steps until taste or tingle does not return (about 30 minutes). • Review package directions carefully to maximize benefit of product. 	<ul style="list-style-type: none"> • Based on cigarettes/day: <ul style="list-style-type: none"> >20 cigs/day = 4 mg gum <20 cigs/day = 2 mg gum • Based on time to first cigarette of the day: <ul style="list-style-type: none"> <30 minutes = 4 mg ≥30 minutes = 2 mg • Initial dosing = 1–2 pieces every 1–2 hrs (10–12 pieces/day) x 6 wks, then 1 piece every 2–4 hours x 3 wks, then 1 piece every 4–8 hours x 3 wks. • Taper as tolerated. <p>DURATION</p> <ul style="list-style-type: none"> • Standard duration is up to 12 weeks. Longer durations have been studied and associated with better abstinence rates.
<p>Combination Nicotine Replacement Therapy (NRT)</p> <p><i>Nicotine patch + Nicotine gum PRN</i></p> <p><i>Nicotine patch + Nicotine lozenge PRN</i></p>	<p>PROS</p> <ul style="list-style-type: none"> • Permits sustained levels of nicotine (patch) with rapid adjustment for acute cravings and urges (PRN gum or lozenge) • More efficacious than monotherapy <p>CONS</p> <ul style="list-style-type: none"> • May increase risk of nicotine toxicity • Added cost of two NRT products versus one 	<ul style="list-style-type: none"> • Providing two types of delivery system, one passive and one active, appears to be more efficacious. • Should be considered for those who have failed single therapy in the past or those considered highly tobacco dependent. • Considered a first-line treatment in the 2008 Update USPHS Clinical Practice Guidelines. • Not a FDA-approved strategy. 	<ul style="list-style-type: none"> • Dose patch as described above. • Prescribe 2mg or 4mg gum or lozenge (according to dose-dependence level described above) on an as-needed basis when acute withdrawal symptoms and urges to use tobacco occur. (Initially, most patients require about 6–8 pieces of gum or lozenges/day.) • Nicotine patch dose may be increased if patient is requiring more frequent use of PRN gum or lozenge after patch taper. <p>DURATION</p> <ul style="list-style-type: none"> • Patch: 8–10 weeks (with lozenge) or 8–24weeks (with gum) • Gum: 26–52 weeks • Lozenge: 12 weeks

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<p>NON-NICOTINE MEDICATION</p> <hr/> <p>Bupropion SR</p> <p><i>(Generic available)</i></p>	<p>PROS</p> <ul style="list-style-type: none"> • Easy to use • Pill form — may be associated with better compliance • Few side effects • May be beneficial in patients with depression • May be used in combination with NRT <p>CONS</p> <ul style="list-style-type: none"> • Contraindicated with certain medical conditions and medications • Increased seizure risk 	<ul style="list-style-type: none"> • Treatment should be initiated 1 week prior to quit date and titrated. • Avoid bedtime dosing to minimize insomnia, but allow 8 hours between doses. • Use with caution in patients with liver disease (dose adjustment necessary). • A slight risk of seizure (1:1000) is associated with use of this medication. • Assess seizure risk and avoid if: <ul style="list-style-type: none"> • Personal history of seizures • Significant head trauma/brain injury • Anorexia nervosa or bulimia • Abrupt discontinuation of alcohol or sedatives • Concurrent use of medications that lower the seizure threshold 	<ul style="list-style-type: none"> • Start medication 1 week prior to the quit date: <ul style="list-style-type: none"> • 150 mg QD x 3 days, then • 150 mg BID x 4 days, then • On quit date STOP SMOKING • Continue at 150 mg BID x 8–12 weeks. • If patient has been successful at quitting, an additional 12 weeks may be considered. • May stop abruptly. • No need to taper.
<p>COMBINATION MEDICATION</p> <hr/> <p>Bupropion SR + Nicotine Patch</p>	<p>PROS</p> <ul style="list-style-type: none"> • Easy-to-use combination (FDA approved) • Uses agents with two different mechanisms of action <p>CONS</p> <ul style="list-style-type: none"> • Does not allow for adjustment of acute cravings or urges • Added cost of two NRT products versus one • May be associated with more side effects than monotherapy 	<ul style="list-style-type: none"> • Should be considered for those who have failed single therapy in the past or those considered highly tobacco dependent. • Considered a first-line treatment in the 2008 Update USPHS Clinical Practice Guidelines. 	<ul style="list-style-type: none"> • Use standard doses and duration. • Bupropion: See bupropion dosing above; continue for 8–12 weeks. • If patient has been successful at quitting, an additional 12 weeks may be considered. • Nicotine patch: Dose patch as described above for total duration of 8–12 weeks.

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<p>COMBINATION MEDICATION</p> <hr/> <p>Bupropion SR + Nicotine Lozenge or Gum</p>	<p>PROS</p> <ul style="list-style-type: none"> • Uses agents with two different mechanisms of action • Allows for rapid adjustment for acute cravings and urges (PRN gum or lozenge) • More efficacious than monotherapy <p>CONS</p> <ul style="list-style-type: none"> • Added cost of two NRT products versus one • May be associated with more side effects than monotherapy 	<ul style="list-style-type: none"> • Providing two types of mechanisms of action, including an active delivery system, appears to be more efficacious. • Should be considered for those who have failed single therapy in the past or those considered highly tobacco dependent. • Though not included in the 2008 Update USPHS Clinical Practice Guidelines, data published after the Update supports this combination. • Not a FDA-approved strategy. 	<ul style="list-style-type: none"> • Use standard doses and duration. • Bupropion: See bupropion dosing above; continue for 8–12 weeks. • If patient has been successful at quitting, an additional 12 weeks may be considered. • Prescribe 2mg or 4mg gum or lozenge (according to dose-dependence level described above) on an as-needed basis when acute withdrawal symptoms and urges to use tobacco occur. (Initially, most patients require about 6–8 pieces of gum or lozenges/day.)
<p>NON-NICOTINE MEDICATION</p> <hr/> <p>Varenicline</p>	<p>PROS</p> <ul style="list-style-type: none"> • Easy to use • Pill form — may be associated with better compliance • No known drug interactions • Unique mechanism of action <p>CONS</p> <ul style="list-style-type: none"> • Nausea common in up to 1/3rd of patients • Severe neuropsychiatric symptoms may occur • Safety and efficacy have not been established in patients with serious psychiatric illness 	<ul style="list-style-type: none"> • Treatment should be initiated 1 week prior to quit date and titrated. • Taking the medication with food and titrating the dose as directed may help with nausea. • Take with a full glass of water. • Varenicline should not be used in combination with NRT. • Dose must be adjusted if kidney function is impaired. • VHA-specific varenicline prescribing guidelines at: www.pbm.va.gov/Clinical Guidance/Criteria For Use/Varenicline Criteria for Prescribing.doc 	<ul style="list-style-type: none"> • TAKE WITH FOOD and full glass of water • Start medication one week prior to the quit date: <ul style="list-style-type: none"> • 0.5 mg QD x 3 days, then • 0.5 mg BID x 4 days, then • On quit date STOP SMOKING and • Take 1.0 mg BID x 11 weeks • If not smoking at the end of twelve weeks, may continue for an additional 12 weeks. • May stop abruptly. • No need to taper.