



Prescription For Success

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Smoking in New Mexico

- NM DOH has set aside \$3 million towards tobacco prevention programs in 2009
- Protocol requires 2 hrs live CE every 2 years
- NM Pharmaceutical Care Foundation and DOH has allowed grant for ~\$100,000 to provide products and counseling at no charge

Statehealthfacts.org

Grant Inclusion Criteria

- Patient must be underinsured or uninsured
 - Schedule the initial appointment with patient (Stage 2 Model for Change)
 - Gather the required information as outlined in the protocol and grant if app.
 - Complete/submit billing info
 - Schedule follow-up

Cessation Grant Reimbursement

- Patient receives up to \$137.50 of pharmacological products at no charge
 - Patient receives counseling (face-to-face, telephone, or via email) at initial pick-up, month 1, month 3, and month 6
 - Patient may/should re-enroll if relapse within/after 6 months

Counseling Includes

- PMH, precautions, side effects
- Process of addiction (Dopamine)
- Behavioral modifications
 - Cognitive behavioral therapy
- Motivational techniques
 - 5A's

Prescriptive Authority

- You do not have to utilize the grant to prescribe
- Identification of smokers or patients looking to quit (stage 2-ready to quit in the next 30 days)
- Patient will have to pay out of pocket cost for the medication prescribed and possible fee for consultation

Prescriptive Authority Exclusion Criteria

1) Referrals required:

- Known contraindications (CV)
- Known hypersensitivity
- Eating disorders
- Seizure disorders
- Pregnant/lactating women

Measuring Nicotine Dependence

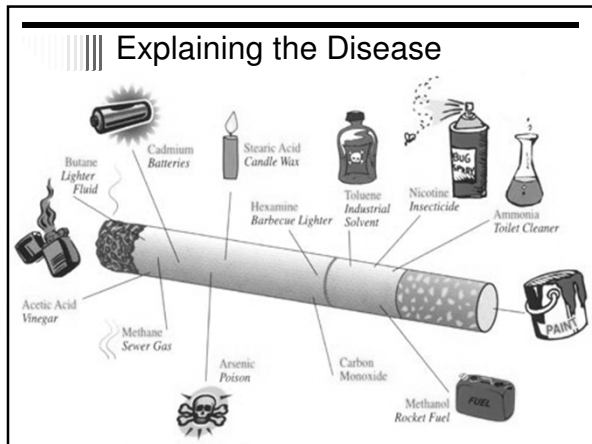
<http://www.aafp.org/afp/20000801/579.html>

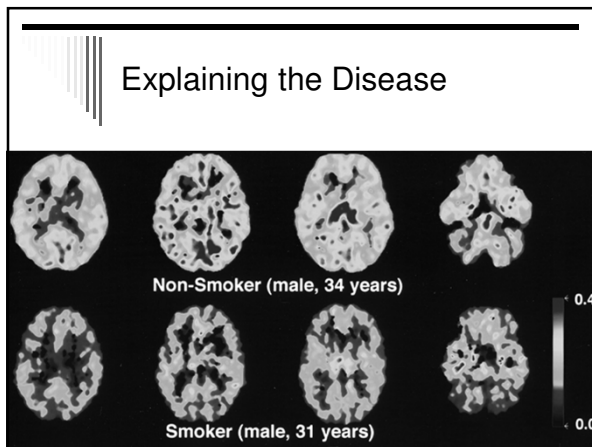
- Fagerstrom
 - Helps document indication for pharmacologic therapy
- CAGE
 - Compulsion, control, cutting down, consequences

Rustin T. AAFP. Assessing Nicotine Dependence. 2000;62(3):579-84,591-2.

Fagerstrom Test

- How soon after waking do you smoke your first cigarette?
 - Time less than 5 minutes: 3 points
 - Time 5 to 30 minutes: 2 points
 - Time 31 to 60 minutes: 1 point
- Interpretation
 - Heavy nicotine dependence: 5-6 points
 - Moderate nicotine dependence: 3-4 points
 - Light nicotine dependence: 0-2 points





Nonpharmacologic

- Aversion therapy
- Acupuncture
- Hypnotherapy
- Quit Key
- Formal cessation programs
 - Telephone counseling
 - 1-800-QUIT-NOW

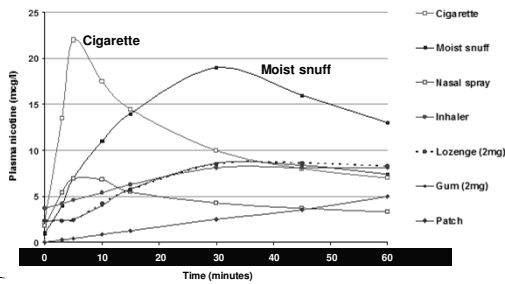
Pharmacologic

Three classes of FDA-approved drugs:

- Nicotine replacement therapy (NRT)
 - Gum, patch, lozenge, nasal spray, inhaler
- Psychotropics
 - Bupropion SR
- Partial nicotinic receptor agonist
 - Varenicline (signed waiver will be required)

Currently, no medications have an FDA indication for use in spit tobacco cessation.

Plasma Nicotine Concentrations



NRT: Considerations

- Not FDA-approved for use in children or adolescents
- Nonprescription sales (patch, gum, lozenge) are restricted to adults ≥ 18 years of age
- Patients should stop using all forms of tobacco upon initiation of the NRT regimen

Case I

A 20 y/o TC patient wants to quit smoking. She has never attempted to quit in the past. She smokes every 15 minutes (1 ppd) while at work (a local gas station). Which regimen do you recommend?

- a) Nicotine patch 7mg
- b) Nicotine gum 2mg
- c) Nicotine gum 4mg
- d) Bupropion

Nicotine gum/lozenge

- Sugar-free
- 2 & 4 mg alone or with NRT or bupropion
- Ideal patient
 - Fagerstrom score of 5 or less
 - Lower nicotine addiction
 - Oral fixation addiction

Nicotine Gum Dosing

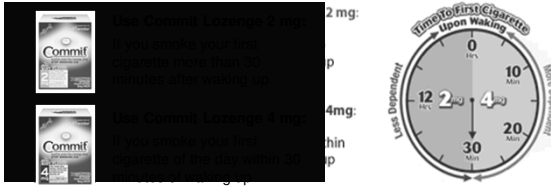
If patient smokes	Recommended strength
≥25 cigarettes/day	4 mg
<25 cigarettes/day	2 mg

Recommended Usage Schedule for Nicotine Gum		
Weeks 1–6	Weeks 7–9	Weeks 10–12
1 piece q 1–2 h	1 piece q 2–4 h	1 piece q 4–8 h

DO NOT USE MORE THAN 24 PIECES PER DAY.

Nicotine Lozenge Dosing

Dosage is based on the "time to first cigarette" (TTFC) as an indicator of nicotine addiction



2 mg:
p
4 mg:
hin
p

Nicotine Lozenge Dosing

Recommended Usage Schedule for Commit Lozenge		
Weeks 1–6	Weeks 7–9	Weeks 10–12
1 lozenge q 1–2 h	1 lozenge q 2–4 h	1 lozenge q 4–8 h
DO NOT USE MORE THAN 20 LOZENGES PER DAY.		

Case II

A 65 y/o diabetic patient wants to quit smoking today, he has uncontrolled HTN and smokes 2 ppd. What treatment regimen do you recommend?

- a) Nicotine patch 21mg
- b) Nicotine patch 21mg + gum 2mg
- c) Nicotine patch 21mg + gum 4mg
- d) Varenicline

Nicotine Patch

- Nicotine is well absorbed across the skin
- Delivery to systemic circulation avoids hepatic first-pass metabolism
- Plasma nicotine levels are lower and fluctuate less than with smoking



Nicotine Patch Dosing

Product	Light Smoker	Heavy Smoker
Nicoderm CQ	<p>≤10 cigarettes/day</p> <p>Step 2 (14 mg x 6 weeks)</p> <p>Step 3 (7 mg x 2 weeks)</p>	<p>>10 cigarettes/day</p> <p>Step 1 (21 mg x 6 weeks)</p> <p>Step 2 (14 mg x 2 weeks)</p> <p>Step 3 (7 mg x 2 weeks)</p>
Generic (formerly Habitrol)	<p>≤10 cigarettes/day</p> <p>Step 2 (14 mg x 6 weeks)</p> <p>Step 3 (7 mg x 2 weeks)</p>	<p>>10 cigarettes/day</p> <p>Step 1 (21 mg x 4 weeks)</p> <p>Step 2 (14 mg x 2 weeks)</p> <p>Step 3 (7 mg x 2 weeks)</p>

Case III

- A 30 y/o patient wants to quit smoking, except during his Monday night football games with his friends. What treatment regimen do you recommend?
 - a) Nicotine gum 2mg
 - b) Nicotine inhaler
 - c) Bupropion
 - d) Varenicline

Nicotine Nasal Spray

- Aqueous solution in a 10-ml spray bottle
- Start with 1–2 doses per hour
- Increase prn to max. dosage of 5 doses per hour
- For best results, use at least 8 doses daily for the first 6–8 weeks
- Gradual tapering over an additional 4–6 weeks needed



Nicotine Nasal Spray

- Higher dependence potential
- Do not use in nasal disorders or reactive airway disease
- Adverse effects
 - Hot peppery feeling in back of throat or nose
 - Sneezing
 - Coughing
 - Watery eyes
 - Runny nose

Nicotine Inhaler Dosing


- Start with 6 cartridges/day (4mg/cartridge delivered)
- Increase prn to maximum of 16 cartridges/day
- Use for minimum of 3 weeks, maximum of 12 weeks
- Gradual dosage reduction over additional 6–12 weeks



Bupropion SR Dosing

Sustained-release antidepressant (Dopamine and Norep)

- 150mg qam x 3-7 days, then increase to 150mg bid thereafter



Case IV

A 50 y/o patient comes to you looking for bupropion to assist in his quit attempt. Which cautions do you consider prior to prescribing?

- a) LFTs
- b) Seizure disorder
- c) Eating disorder
- d) All of the above

Bupropion Contraindications

- Seizure disorder
- Taking MAO inhibitors in preceding 14 days
- Current or prior diagnosis of anorexia or bulimia nervosa
- Undergoing abrupt discontinuation of alcohol or sedatives (including benzos)
- Liver failure

Case V

□ A 25 y/o patient comes to your pharmacy with a 15 year history of smoking (average 1 ppd). He scored a 8/10 on the Fagerstrom. He has no PMH and NKDA. What do you prescribe?

- a) Bupropion
- b) Nicotine patch
- c) Nicotine gum
- d) Varenicline






Varenicline

- Partial nicotinic receptor agonist
- Oral formulation



Varenicline Dosing

Patients should begin therapy 1 week PRIOR to their quit date. The dose is gradually increased to minimize treatment-related nausea and insomnia.

	Treatment Day	Dose
Initial dose titration	Day 1 to day 3	0.5 mg qd 
	Day 4 to day 7	0.5 mg bid  
	Day 8 to end of treatment*	1 mg bid  

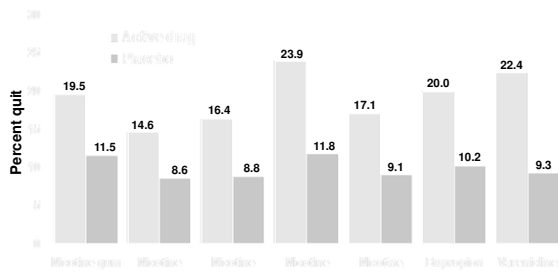
* Up to 12 weeks

Varenicline Adverse Effects

Common side effects ($\geq 5\%$ and twice the rate observed in placebo-treated patients) include:

- Neuropsych symptoms
- Nausea/vomiting
- Sleep disturbances (insomnia, abnormal dreams)
- Constipation

Long-term (≥ 6 month) Quit Rates for Available Products



Data adapted from Silagy et al., (2004), *Cochrane Database Syst Rev*; Hughes et al., (2004), *Cochrane Database Syst Rev*; Gonzales et al., (2006), *JAMA* and Jorenby et al., (2006), *JAMA*

Case VI

□ A patient presents to your pharmacy looking to quit smoking. She reports she may be pregnant, which treatment option do you recommend?

- a) Bupropion
- b) Nicotine patch
- c) Nicotine gum
- d) Varenicline

Case VII

- A 16 y/o patient is trying to quit, but needs some help, he smokes 10 cpd. Which treatment option do you recommend?
- a) Nasal inhaler
 - b) Nicotine patch 21mg
 - c) Nicotine lozenge 2mg
 - d) Bupropion

ADE Case I

- A patient presents to your pharmacy complaining that the lozenge you prescribe worsened his diabetes, what do you do
- a) Call your lawyer
 - b) Check with manufacturer
 - c) Reassure patient it is not possible
 - d) Never use that product again

ADE Case II

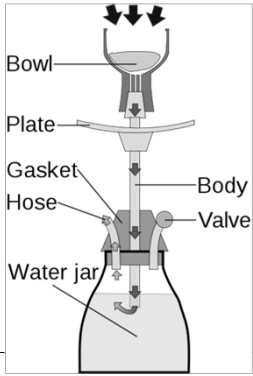
- A patient calls you stating that your varenicline script made them act out at work, they were fired, after telling them to stop the varenicline, what do you do?
- a) Call/Consult your boss
 - b) Consult your malpractice insurance
 - c) Discuss situation with their boss
 - d) Consult their PCP

New Trends

□ 

<http://www.youtube.com/watch?v=eqz6TvAKcBQ&feature=related>

New Trends

□ 

Hookah

□ The slow and relaxed experience of smoking a hookah, which includes preparation of the hookah and the tobacco, is the whole point of hookah smoking

□ <http://www.youtube.com/watch?v=9P5-8kMIP44&feature=related>

New Trends