

A 65-year-old male comes into your office for a check-up. He states that he has been feeling tired and short of breath but does not have any fever or cough. He has a history of smoking 1 pack of cigarettes per day for the last 40 years. He cannot climb a set of stairs and states that he has been hospitalized many times over the past year for pneumonia. He is prescribed inhaled corticosteroids along with ipratropium and albuterol. Which of the following is most likely to decrease this patient's risk of hospitalizations for disease exacerbation and development of lung cancer?

- A. Home oxygen therapy
- B. Long acting bet2-agonist
- C. Antibiotics
- D. Smoking Cessation

Developing a Quit Plan: STAR

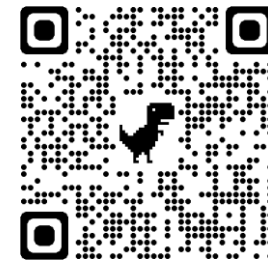


Combining behavioral and pharmacotherapy

- Offering both behavioral and pharmacotherapy double the quit rates of each used alone



- Telephone counseling services:
 - Texas Quitline: 1-877-YES QUIT or www.yesquit.org
 - National Quitline: 1-800-QUIT-NOW (1-800-784-8669) or www.smokefree.gov



First-line Medications for Nicotine Dependence Treatment in Adults

Nicotine Receptor Agonists

- Nicotine Replacement
 - Patch
 - Gum
 - Lozenge
 - Inhaler
 - Nasal Spray

Nicotine Receptor Antagonist

- Bupropion-SR

Nicotine Receptor Partial Agonist

- Varenicline

FDA-Approved Tobacco Cessation Medications

Medication	OTC/Rx	Use
Nicotine patch	OTC	Daily; Steady state
Nicotine gum	OTC	PRN; Craving rescue
Nicotine lozenge	OTC	PRN; Craving rescue
Nicotine inhaler	Rx	PRN; Craving rescue
Nicotine nasal spray	Rx	PRN; Craving rescue
Bupropion SR 150	Rx	Daily; Steady state
Varenicline	Rx	Daily ; Steady state

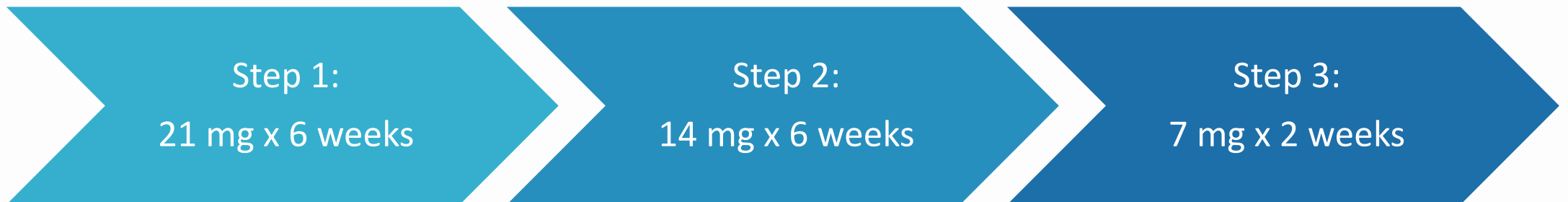
Nicotine Patch

Dosing

Light Smoker (<10 cigarettes/day)



Heavy Smoker(>10 cigarettes/day)



Nicotine Patch

Administration

- Apply to chest, back, abdomen, upper arm
- Lasts for 16 to 24 hours
- May start patch before quit date
- Rotate application site

Nicotine Patch

Side effects, precautions, advantages

Common Side Effects

- Skin irritation
- Insomnia
- Vivid dreams

Precautions

- Cannot alter nicotine level
- Recent myocardial infarction
- Remove for sleeping to avoid insomnia

Advantages

- Provides steady nicotine level
- Easiest product to use

Nicotine Gum

Dosing

- 2 mg if first cigarette > 30 minutes after waking up
- 4 mg if first cigarette within 30 minutes of waking up

Week 1-6:
1 piece/1-2h

Week 7-9:
1 piece/2-4h

Week 10-12:
1 piece/4-8h

Nicotine Gum

Administration

- One piece per hour
- Maximum: ≤ 24 pieces/day
- No food or drink for 5-15 minutes before, during and after use
- Bite once or twice until pepper taste/tingling sensation then cheek
- Repeat for up to 30 minutes per piece.

Nicotine Gum

Side effects, precautions, advantages

Common Side Effects

- Mouth soreness
- Jaw muscle ache
- Heartburn
- Hiccups
- Nausea

Precautions

- Unpleasant taste
- Proper chewing technique required
- May stick to dental work
- Recent myocardial infarction

Advantages

- Able to control nicotine dose
- Oral substitute for cigarettes

Nicotine Lozenge

Dosing



2 mg if first cigarette \geq
30 min after waking



4 mg if first cigarette $<$
30 min after waking



Nicotine Lozenge

Administration

- One piece every one to two hours
- Maximum:
 - 5 lozenges/six hours
 - 20 lozenges/day
- No food or drink for 5-15 minutes before, during and after use

Nicotine Lozenge

Side effects, precautions, advantages

Common Side Effects

- Mouth soreness
- Hiccups
- Heartburn
- Nausea

Precautions

- Unpleasant taste
- Recent myocardial infarction

Advantages

- Able to control nicotine dose
- Oral substitute for cigarettes
- Can use in patients with poor dentition or dentures

Nicotine Inhaler

Dosing

- 10 mg per cartridge
- Delivers 4 mg nicotine vapor, buccal mucosa
- At least 8 cartridges/day for the first 3-6 weeks

Nicotine Inhaler

Administration

- To use 1 cartridge every 1-2 hours
- Maximum: 16 cartridges per day
- Duration of therapy is 3 months

Nicotine Inhaler

Side effects, precautions, advantages

Common Side Effects

- Mild mouth and throat irritation
- Cough
- Rhinitis
- Headache
- Dyspepsia

Precautions

- Device visible when being used
- Use caution in reactive airway disease
- Frequent puffing required

Advantages

- Able to control nicotine dose
- Oral substitute for cigarettes

Nicotine Nasal Spray

Dosing

- 0.5 mg per spray (10 mg/mL)

Nicotine Nasal Spray

Administration

- Apply one spray to each nostril every 1 to 2 hours
- Maximum:
 - 10 sprays/hour
 - 80 sprays/day

Nicotine Nasal Spray

Side effects, precautions, advantages

Common Side Effects

- Hot peppery feeling in throat or nose
- Sneezing
- Coughing
- Watery eyes
- Runny nose

Precautions

- Difficult to tolerate irritation to nasal mucosa

Advantages

- Able to control nicotine dose
- Rapid absorption