Algorithm for Tailoring Pharmacotherapy in Primary Care Setting

**ASK:** About tobacco use. How many cigarettes do you smoke a day? (Large pack = 25, Small pack = 20).

**ADVISE:** Your patient to quit.

As your healthcare provider, I am concerned about your tobacco use and advise you to quit. Would you mind if we spent a few minutes so that I can better understand your smoking addiction?

If YES: Assess readiness
If NO: If you change your mind, I am willing to discuss this further

**ASSESS:** Readiness to quit.
1. Given everything going on in your life right now, how important is it for you to quit smoking?
2. How confident are you that you can quit smoking? Scale each question 0-10.

**Desire to quit / confidence > 5**
**Desire to quit / confidence ≤ 5**

**ASSIST:**

**Cold Turkey**
Supportive counseling arrange follow-up

**Reduce to Quit**
See reverse

**Pharmacotherapy +/- Counseling**
If patient smokes ≥ 10 cigarettes/day, offer pharmacotherapy

**Fluoxetine (Prozac®)**

**Nicotine Replacement Therapy (NRT) OTC**

**Delivery:** Transdermal (patch), Oral mucosa (gum, lozenge, mouth spray), Oropharynx (inhaler)

**Dose:**
Patch: Different doses are tapered down over 12 weeks
Inhaler: Cartridge = 10mg nicotine + 1 mg menthol, puff PRN, max 10d
Gum: Nicorette® (2.4mg) Thrice® (1.2mg) max 20d
Lozenges: 2mg (<25 cigarettes/d) and 4 mg (>25 cigarettes/d) max 20d
Mouth spray: 1mg (per spray), 1-2 sprays per 30-60 min., max 4 sprays/hr.
Quit Date: Same day as starting NRT
How to use:
Patch: apply to non-hairy areas for 16 or 24 hours
Gum, lozenge: Chew slowly until taste is strong then place between cheek and gum, wait till fades then repeat
Inhaler: Insert cartridge into cylinder and draw in (most ends up in oropharynx)
Mouth Spray: spray towards inside of your cheeks/under the tongue, avoid lips. Avoid swallowing for a few seconds after spraying.
Common side effects:
Patch: Abnormal dreams/insomnia (remove before bed)
Inhaler: gum, lozenge: mouth spray: mouth irritation, dyspepsia
Caution:
Inhaler: Still has nicotine when finished dispose properly
Patch: Actually OK if families, leave patch on and try to quit again
Advantages:
Quit rate is double placebo, patch is the most effective NRT and is safe in stable cardiac disease

**Varenicline (Champix®)**

**Dose:**
0.5 mg PO OD x 3 then BID, can increase to 1 mg BID at 7 x 12-24 weeks
Quit date: 7-14 days (up to 35) after starting
Common side effects:
Nausea, bad dreams, insomnia
Caution:
Unstable psychiatric illness, serious neuropsychiatric events (may be worsened by smoking or alcohol), risk of increased cardiac events in patients with heart disease, Stevens-Johnson, angioedema, erythema multiforme, reduce dose in renal disease, avoid driving/machinery if sedated
Advantages:
No drug interactions except NRT (may increase NRT failure)
May increase advance events, most effective medication quit rate is triple placebo

With varenicline has the highest quit rate, therapy should be tailored to the individual’s needs and preferences.

**Bupropion (Wellbutrin SR®)**

**Dose:**
0.5 mg PO OD x 3 then BID 7 x 12 weeks
Quit date: 7-10 days after starting
Common side effects:
Dizziness, mood changes, suicide, drug interactions
Caution:
Seizures, mood changes, suicide, drug interactions
Advantages:
Minimal weight gain, helps depression, can use with NRT, as effective as NRT

**ARRANGE:** Follow up 1-4 weeks post quit date

**Maintenance**
Full response

**Partial response**
Assess medication adherence
Adjust dose
Increase counseling

**Combination Therapy**

**Bupropion SR + Varenicline**
No Varenicline with NRT
*currently there are no randomized controlled trials

**Bupropion SR + NRT**
Bupropion + Patch
Bupropion + Gum

**Two forms of NRT**
Patch (15mg) + Gum (2mg)
Patch + Inhaler
Patch + Lozenge

**Different First Line Therapy**

**More cigarettes smoked, more weight gained**

**Delay weight gain** with Bupropion SR, NRT.
4mg gum/lozenge

**PRODUCT MONOGRAPH:**
Thorough consideration should be given to nicotine replacement therapy alone prior to prescribing varenicline or bupropion.


Additional references used to develop this algorithm are listed on the reverse.
Reduce to Quit

Step 1: (0-6 weeks) Smoker sets a target for no. of cigarettes per day to cut down (at least 50% recommended) and a date to achieve it by. Smoker uses gum to manage cravings.

Step 2: (6 weeks up to 6 months) Smoker continues to cut down cigarettes using gum. Goal should be complete stop by 6 months. Smoker should seek advice from HCP if smoking has not stopped within 9 months.

Step 3: (within 9 months) Smoker stops all cigarettes and continues to use gum to relieve cravings.

Step 4: (within 12 months) Smoker cuts down the amount of gum used, then stops gum use completely (within 3 months of stopping smoking).

Glossary

BID: Twice a day
COPD: Chronic obstructive pulmonary disease
d: Days
lbs: Pounds
LU: Limited use
NRT: Nicotine replacement therapy
MAOI: Monoamine oxidase inhibitor
Max: Maximum
ODB: Ontario drug benefit
OTC: No prescription needed
PO: By mouth
PRN: As needed
qam: Every morning
℞: Requires a prescription
SR: Slow release
Wt: Weight

References

Information provided is evidence-based but may not be approved for use in certain regions. Refer to your local regulatory authority for approved indication, guidelines, and updated safety information.


4. CAN-ADAPTT. Canadian Smoking Cessation Clinical Practice Guideline. Toronto: Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment, Centre for Addiction and Mental Health; 2011.

5. CAN-ADAPTT. Canadian Smoking Cessation Clinical Practice Guideline: Pharmacotherapy section. Toronto: Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment, Centre for Addiction and Mental Health; 2012.