

Algorithm for tailoring pharmacotherapy.

- Ask** about tobacco use.
"How many cigarettes do you smoke a day?" _____ / day
- Advise** your patient to quit.
"I am concerned about your tobacco use and advise you to quit. Would you mind if we spend a few minutes so that I can better understand your smoking addiction?"

YES

NO

- Assess** readiness to quit on a scale of 1 - 10.
 1. **Desire to quit** - "How important is it for you to quit smoking?" _____ / 10
 2. **Confidence** - "How confident are you that you can quit smoking?" _____ / 10

Desire to quit / Confidence ≥ 5

Desire to quit / Confidence ≤ 5

Motivational Interviewing (MI)

Explore the 5R's using reflective listening:

- Relevance:** why is quitting relevant to health, family, social situation?
- Rewards:** potential benefits of quitting - health, money, taste & smell
- Risk:** Acute (shortness of breath), chronic (CVD, cancer, COPD)
- Roadblocks:** withdrawal symptoms, fear of failure, weight gain
- Repetition:** repeat MI every time the patient visits the clinic

- Assist** with smoking cessation.
 1. How would you like to quit: cold turkey or with assistance?
 2. Do you want to quit abruptly or gradually?
 3. What type of assistance do you need pharmacotherapy, counseling

Cold turkey

Arrange follow-up

Pharmacotherapy +/- counseling

If patient smokes >10 cigarettes/day, offer pharmacotherapy

Reduce to quit

See reverse for steps

Varenicline

Bupropion

NRT

- Arrange** follow up 1-4 weeks post quit date. Determine response to therapy.

Partial response

Full Response

Maintenance

Combination therapy

| | |
|--|--|
| Bupropion SR + Varenicline Varenicline - same dosing as above Bupropion - same dosing as above <i>*limited data on safety</i> | Varenicline + NRT Patch (different doses over 12 weeks) Varenicline - same dosing as above |
| Bupropion ST + NRT Bupropion + Patch Bupropion + Gum | Two forms of NRT Patch (14mg) + Gum (2mg) Patch + Inhaler or Spray or Lozenge |

Assess med adherence
Adjust dose
Increase counseling

Partial response

NRT Dosing

<10 CPD
"Light" Smoker

10 - 29 CPD
"Moderate" Smoker

30+ CPD
"Heavy" Smoker

Start with:

14mg patch x 1-4 weeks

21mg patch x 1-4 weeks

28mg patch (21+7) x 1-4 weeks

+ Choose **one** short-acting NRT (gum, lozenge, mouth spray or inhaler) for breakthrough cravings as needed

Follow up 1-4 weeks post quit date and assess smoking

If smoking 0 CPD

Continue on current dose

If still smoking

10+ CPD: Add a 21mg patch to current dose
6-9 CPD: Add a 14mg patch to current dose
1-5 CPD: Add a 7mg patch to current dose

+ Choose **one** short-acting NRT for breakthrough cravings as needed

Continue with the above guidelines (adding patches if necessary).
NOTE: Maximum is 84mg (4 x21mg)

Additional information:

First line pharmacotherapy

Therapy should be tailored to individual's needs and preferences

| | Varenicline (Champix®) | Nicotine Replacement Therapy (NRT) | Bupropion (Wellbutrin SR®, Zyban®) |
|--------------|---|---|--|
| Advantages | Most effective - highest quit rates. No drug interactions except with NRT (may increase risk of adverse events.) | Safe in stable cardiac disease. Patch is the most effective form of NRT. | Minimal weight gain, helps depression, can use with NRT, as effective as NRT. |
| Quit Date | 7-14d (up to 35) after starting | Same day up to 4 weeks after starting | 7-10d after starting |
| Caution | Risk of increased cardiac events in patients with heart disease; Steven-Johnson Syndrome; and oedema; erythema multiforme. Reduce dose in renal disease. Avoid driving/machinery if sedated | Inhaler: still has nicotine when finished - dispose properly Patch: OK if smokes, leave patch on and try to quit again | Seizures, mood changes, suicide, drug interactions. <i>Contraindications:</i> Seizure disorders, bulimia/anorexia (recent or remote), liver failure, monoamine oxidase inhibitors |
| Side Effects | Nausea, nightmares, insomnia | Patch: abnormal dreams/insomnia (remove before bed) All other forms of NRT- mouth irritation, dyspepsia | Dry mouth, constipation, agitation, insomnia, headache, tremor |
| Dose | Day 1 - 3: 0.5mg PO once daily Day 4 - 7: 0.5mg PO BID Day 8 - onwards: 1mg PO BID x 12 - 24 weeks | Patch: different doses tapered over 12 weeks Inhaler: cartridge=10mg nicotine+1mg menthol, PRN max12/d Gum: Nicorette® (2/4mg); Thrive® (1/2mg), max 20/d Spray: 1mg per spray, 1-2 sprays q30-60m, max 4 sprays/hr Lozenges: 2mg(<25 cig/day); 4mg(>25 cig/day), max20/d | 150mg SR PO qam x 3d; then BID x 7-12 weeks |

Reduce to quit protocol

Step 1: (0-6 weeks)

Set target no. of cigarettes per day to cut down (recommended at least 50%) and a date to achieve it by. Use gum to manage cravings.

Step 2: (6 weeks - 6 months)

Continue to cut down cigarettes using gum. Goal should be complete stop by 6 months. Seek advice from HCP if smoking has not stopped within 9 months.

Step 3: (within 9 months)

Stop all cigarettes and continues to use gum to relieve cravings.

Step 4: (within 12 months)

Cut down the amount of gum used, then stop 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: over-the-counter / no prescription needed

PRN: as needed

qam: every morning

Px: requires subscription

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 indications, guidelines, and updated safety information.

CAN-ADAPTT Summary Statements

Counseling & Psychosocial Approaches

1. **Combining counseling and smoking cessation** medication is more effective than either alone, therefore both should be provided to patients/clients trying to stop smoking where feasible. **(1A)**

CAN-ADAPTT Pharmacotherapy Guidelines - Updated

1. **Offer efficacious pharmacotherapy** to every patient who smokes 10 or more cigarettes daily and is willing to make a quit attempt. **(1A)**
2. Healthcare providers should **tailor smoking cessation** pharmacotherapy to the patient's clinical needs and preferences. **(1C)**
3. **Varenicline** improves smoking cessation rates at 6 and 12 months compared to placebo. **(1A)**
4. **Varenicline** is more efficacious at improving smoking cessation rates at 6 months compared to bupropion. **(1A)**
5. **Varenicline** is more efficacious at improving smoking cessation rates at 6 months compared to NRT. **(1B)**
6. **Bupropion** improves smoking cessation rates at 6 and 12 months compared to placebo. **(1A)**
7. **Nicotine replacement therapy** in any commercially available form (transdermal patch, gum, lozenge, nasal spray, oral inhaler, sublingual tablet) improve smoking cessation rates at 6 and 12 months. **(1A)**
8. 8 weeks of NRT patch therapy is as effective as longer course of therapy for smoking cessation at 6 months. **(1A)**
9. Higher NRT gum dose of 4 mg (vs. 2 mg) is more efficacious for smoking cessation rates at 6 months for high dependency smokers or those who have relapsed with 2 mg. **(1A)**
10. **Combining NRT patch** with other forms of NRT yields higher efficacy for smoking cessation rates at 6 months compared to patch alone, especially where immediate/fast effects are desired. **(2A)**
11. NRT patch high dose (44/42 mg) has a very small or borderline benefit than standard dose (22/21 mg) for smoking cessation rates at 6 months. **(2A)**
12. **Cytisine** may improve smoking cessation rates at 6 and 12 months compared to placebo. **(2C)**
13. **Nortriptyline** may improve smoking cessation rates at 6 and 12 months compared to placebo. **(2C)**
14. There is insufficient evidence to make a recommendation regarding the use of **clonidine** for smoking cessation. **(C)**