Thames Valley
Family Health Team

Medical Directive

Nicotine Cessation	**Assigned Number: 015**
Activation Date: July 1, 2011	**Review due: December 2027**

Approval Signature & Date

Medical Director: _____ Date Reviewed: Aug 11, 2026

Executive Director, Clinical Services: _____ Date Reviewed: Aug 11, 2026

Order and/or Delegated Procedure:	**Appendix Attached:** ☐ **Yes** ☒ **No**

Initiation and renewal of nicotine replacement therapy (NRT) and/or other nicotine cessation medications as appropriate.

Recipient Patients:	**Appendix Attached:** ☐ **Yes** ☒ **No**

All active patients (attached or unattached) served by Thames Valley Family Health Team affiliated physicians and nurse practitioners, as identified on the Authorizer Approval Form.

Authorized Implementers:	**Appendix Attached:** ☐ **Yes** ☒ **No**

Thames Valley Family Health Team Registered Pharmacists (RPh), Registered Nurses/ Registered Practical Nurses (RN/RPN)

The implementer must complete educational requirements for this medical directive, including review of the educational package and medical directive and successful completion of any quizzes. If additional orientation or shadowing is needed, the implementer must make arrangements for this with their clinical supervisor. Once all of the above has been completed, they are required to sign the Implementer Performance Readiness Form electronically, via Citation Canada, indicating they have the knowledge, skill and judgement to safely enact the directive

Indications:	**Appendix Attached:** ☒ **Yes** ☐ **No** Appendix 3 - List of Medications for Nicotine Cessation with Detailed Indications/Contraindications

1. Medication is offered as a nicotine cessation aid option in conjunction with behavioural modification strategies and support.
2. Patient willing and able to follow up with the implementer on a predetermined date.

Contraindications:	**Appendix Attached:** ☒ **Yes** ☐ **No** Appendix 3 - List of Medications for Nicotine Cessation with Detailed Indications/Contraindications

1. Patient is under 18 years old.
2. Patient is pregnant or lactating.
3. Specific contraindications for each product as outlined in List of Medications for Nicotine Cessation with Detailed Indications/Contraindications (Appendix 3).

Consent:	**Appendix Attached:** ☐ **Yes** ☒ **No**

Implementer obtains informed verbal consent from patient/substitute decision maker, per TVFHT: Informed Consent of Patient Healthcare Procedure, consent prior to the implementation of care.

Guidelines for Implementing the Order/ Procedure:	**Appendix Attached:** ☒ **Yes** ☐ **No** Appendix 1 - The Fagerstrom Test for Nicotine Dependence Appendix 2 - The Fagerstrom Test for E-Cigarette Dependence Appendix 3 - List of Prescription Medications for Nicotine Cessation with Detailed Indications/Contraindications Appendix 4 - Nicotine Replacement Dosing Information Appendix 5 - Decision Tree to address Nicotine Withdrawal: Increasing dosage beyond 21mg patch

Conventional Tobacco (e.g. Cigarettes, cigars)

1. **Confirm readiness to quit**
   - Assess the patient's readiness to change nicotine use and history of past quit attempts.
   - Assessments completed by other healthcare professionals may be used.
   - If the patient is in Preparation or Action stage, establish a quit date.

2. **Assess nicotine dependence**
   - Conventional tobacco: Revised Fagerström Test (Appendix 1)
   - E-cigarettes/vaping: E-Cigarette Fagerström Test (Appendix 2)
   - Score >3/10 → pharmacotherapy indicated
   - Score ≤3/10 → medication may not be required

3. **Screen for contraindications and precautions**
   - Check for contraindications/precautions for NRT, bupropion, and varenicline (Appendix 3).

4. **Select and initiate pharmacotherapy**
   - First-line therapy may be NRT, bupropion, or varenicline, based on:

- Patient preference
- Nicotine dependence
- Contraindications/comorbidities
- Evidence-based effectiveness and tolerability

- Initiate nicotine cessation treatment by providing a prescription, and/or by dispensing NRT through the STOP Program.
- Bupropion and varenicline should be started prior to the patient's quit date as per product guidance.

Vaping

- Estimate daily nicotine exposure (mg/mL × mL/day) to guide NRT dosing.
- **Note:** Nicotine content varies across e-cigarette products and use patterns.
  - Salt-based solutions (e.g., JUUL) deliver higher nicotine levels than freebase without harsh effects.
  - Dosing should reflect these differences and reported usage over the past week or month.
- Dosages for vaping cessation are the same as for smoking (Appendix 3).
  - Patients should be informed that medication options follow tobacco cessation treatment principles.

Non-Responders

- If patients don't respond or partially respond to NRT—consider dual NRT (patch + short-acting NRT) or adding/switching to varenicline or bupropion.
- For higher-than-standard NRT doses, refer to the Decision Tree to Address Nicotine Withdrawal (Appendix 5).

5. **Education and Plan**

- Provide education on:
  - Proper use of NRT/medications
  - Expected adverse effects and management
  - Storage and disposal
  - Maximum dosing (for as-needed short-acting NRT)
  - Signs and symptoms of nicotine toxicity
- Collaborate with the patient to develop an individualized cessation plan addressing lifestyle changes and behavioural interventions.

6. **Follow-up**

- Arrange follow-up if requested or clinically indicated.
- Monitor response to therapy, withdrawal symptoms, adverse effects, and adherence.

Documentation and Communication:	**Appendix Attached:** ☐ **Yes** ☒ **No**

- The implementer will follow the documentation standards set by their governing college.
- In the patient's medical record, documentation must be completed using the TVFHT documentation template provided for this directive.
- Information regarding implementation of the directive and the patient's response will be documented in the patient's medical record, in accordance with standard documentation practices.
- Prescriptions must include the name and number of the directive, name of authorizer, name and signature of implementer.
- Dispensed NRT will be documented in the EMR, including the date dispensed, type of NRT, quantity (including number of boxes of patches, lozenges, gum, or inhaler), lot number(s), expiry date(s), and any adverse reactions.

Review and Quality Monitoring Guidelines:	**Appendix Attached:** ☐ **Yes** ☒ **No**
The directive remains in effect until amended. It will be reviewed biennially or under the following circumstances: 1. The Medical Director identifies a need for change 2. Issues arise related to the directive's use—the team must promptly communicate concerns to their clinical supervisor, Medical Directives Coordinator, or Clinical Director 3. New information becomes available between scheduled reviews, particularly if it affects outcomes The Medical Directives Committee will then review the concerns in consultation with at least one implementer and the Medical Director, as needed, before making necessary changes.	
Approving Authorizer(s):	**Appendix Attached:** ☐ **Yes** ☒ **No**
Authorizer Approval Form signed in Citation Canada.	

Appendix 1 - The Fagerstrom Test for Nicotine Dependence

Score each of the following questions (the scores are given in brackets)

1. How soon after you wake up do you have your first cigarette?

   A. Within 5 minutes (3) B. 6-30 minutes (2)
   C. 31-60 minutes (1) D. After 60 minutes (0)

2. Do you find it difficult to refrain from smoking in places where it is forbidden, e.g., in church, the library, the cinema, etc.?

   A. Yes (1) B. No (0)

3. Which cigarette would you hate most to give up?

   A. The first one in the morning (1) B. All others (0)

4. How many cigarettes do you smoke per day?

   A. 10 or fewer (0) B. 11-20 (1)
   C. 21-30 (2) D. 31 or more (3)

5. Do you smoke more often during the first hours after waking than during the rest of the day?

   A. Yes (1) B. No (0)

6. Do you smoke even if you are so ill that you are in bed most of the day?

   A. Yes (1) B. No (0)

Now add up your score:
7 to 10 points = highly dependent on nicotine
4 to 6 points = moderately dependent on nicotine
less than 4 points = less dependent.
The higher your score, the more likely you are to have withdrawal symptoms if you give up smoking, and the withdrawal symptoms are likely to be stronger.

Appendix 2 – The Fagerstrom Test for E-Cigarette Dependence

The E-cigarette Fagerström Test of Cigarette Dependence

Tool taken from: Piper, M.E., Baker, T.B., Benowitz, N.L., Smith, S.S., & Jorenby, D.E. (2020). E-cigarette dependence measures in dual users: reliability and relations with dependence criteria and e-cigarette cessation. Nicotine and Tobacco Research, 22(5), 756-763.

Scoring taken from: Johnson, J. M., Muilenburg, J. L., Rathbun, S. L., Yu, X., Naeher, L. P., & Wang, J. S. (2018). Elevated Nicotine Dependence Scores among Electronic Cigarette Users at an Electronic Cigarette Convention. Journal of community health, 43(1), 164–174. https://doi-org.myaccess.library.utoronto.ca/10.1007/s10900-017-0399-3

1	How many times per day do you usually use your electronic cigarette? (Assume that one "time" consists of around 15 puffs or lasts around 10 minutes.)	O 0-4 times/day (0) O 5-9 (0) O 10-14 (1) O 15-19 (1) O 20-29 (2) O 30+ (3)
2	Do you find it difficult to refrain from vaping in places where it is forbidden (e.g. in church, at the library, in the cinema)?	O Yes (1) O No (0)
3	When would you hate most to give up e-cigarette use?	O In the morning (1) O During or after meals (0) O During or after stressful situations (0) O None of the above (0)
4	On days that you can use your electronic cigarette freely, how soon after you wake up do you first use your electronic cigarette?	O 0-5 mins (3) O 6-15 (2) O 16-30 (2) O 31-60 (1) O 61-120 (0) O 121+ (0)
5	Do you use your e-cigarette more frequently during the first two hours of the day than during the rest of the day?	O Yes (1) O No (0)
6	Do you use your e-cigarette when you are so ill that you are in bed most of the day?	O Yes (1) O No (0)

Scoring eFTND: Sum the items. Total score: 0-2 = low dependence, 3-4 = low to moderate dependence, 5-7 = moderate dependence, 8+ = high dependence

Appendix 3 - List of Prescription Medications for Nicotine Cessation with Detailed Indications/Contraindications

Dosing and duration	Use, side effects and indications for adjustment	Contraindications / precautions
Champix (varenicline)		
Start 1-2 weeks prior to quit date 0.5 mg PO once daily for days 1-3, then increase to 0.5 mg PO BID for days 4-7, then increase to 1 mg PO BID on day 8 for 11 weeks. Max daily dose 2 mg. ODB covers 12-weeks treatment per 365-day period. 12-weeks treatment duration. May extend to 24 weeks to prevent relapse if patient has successfully quit nicotine products.	Most effective – highest quit rates. Common side effects: nausea, insomnia, vivid dreams or nightmares. Dizziness or somnolence possible. Dose adjustment if CrCL <30 mL/min: initial dose 0.5 mg daily and max dose 0.5 mg BID Ensure other nicotine cessation strategies (behaviour modification and supports) are in place for Quit Date	Contraindications: • Patients who are hypersensitive to varenicline or to any ingredient in the formulation or component of the container • Patients under 18 years of age • Pregnancy or lactation Precautions: • The concomitant use of NRT may result in increase in adverse reactions including nausea, headache, vomiting, dizziness, dyspepsia, and fatigue • Consider drug interactions with smoking cessation
Zyban (bupropion SR)		
Set quit date 7-10 days after starting. 150 mg SR PO qAM for 3 days then increase to 150 mg SR PO BID for 7-12 weeks. Max daily dose 300 mg. ODB covers 12-weeks treatment per 365-day period. With close supervision, therapy may continue for 3-6 months. If within 3 months patient has not stopped using nicotine products, stop therapy, and offer alternatives, setting another stop date with support.	As effective as NRT. Can be used with NRT if strong physical component to nicotine addiction (moderate to high Fagerstrom score). Do not take doses any closer than 8 hours apart due to increased seizure risk. Side effects: Insomnia, agitation, tremor, dry mouth, headache, constipation. Renal Dysfunction: Use with caution; manufacturer's labeling suggests a reduction in dose and/or frequency be considered but does not provide specific dosing recommendations. Ensure other nicotine cessation strategies (behaviour modification and supports) are in place for Quit Date	Contraindications: • Known hypersensitivity to Bupropion • Already being treated with bupropion, Wellbutrin SR or Wellbutrin XL for depression • Current treatment with MAO inhibitors (Isocarboxazid; Linezolid; Methylene Blue; Moclobemide; Phenelzine; Rasagiline; Safinamide; Selegiline; Tranylcypromine), Thioridazine (within 14 days), St. John's Wort • Pregnant (1st Trimester) • Lactation • Under 18 years old Precautions: • Consider drug interactions with smoking cessation • Caution with recent MI, unstable heart disease, uncontrolled hypertension, risk of seizure (e.g., history of head trauma) • Caution with medications that lower seizure threshold - e.g., antipsychotic, antidepressants,

		Lithium, Amantadine, Theophylline, systemic steroids, Quinolone antibiotics and antimalarials, OTC stimulants or anorectics, diabetes treated with oral hypoglycemic agents or insulin • Caution with medical conditions that lower seizure threshold: ○ History of a seizure disorder ○ History of eating disorder-bulimia or anorexia nervosa ○ Impaired liver or kidney function (eGFR less than 60 mL/min) ○ Undergoing abrupt discontinuation of ethanol or sedatives including anticonvulsants, barbiturates, or benzodiazepines
Nicotine replacement therapy (patch, gum, inhaler and/or lozenge)		
See Appendix 4 – Nicotine Replacement Dosing Information	Patch is the most effective form of NRT, similar efficacy as Zyban. Offer choice of NRT products available as per STOP program or over the counter if covered by insurance or willing to pay out of pocket.	See Appendix 4 – Nicotine Replacement Dosing Information Precautions: • Consider drug interactions with smoking cessation • Caution patients if they continue to use nicotine products while using NRT -may experience adverse effects due to peak nicotine levels higher than those experienced with smoking alone. • Patients are asked to rotate the site of patch application daily to prevent/ minimize local irritation

Reference for above table:
https://intrepidlab.ca/en/teach/Documents/Pharmacotherapy%20Algorithm%20JAN2018%20updated.pdf

Appendix 4 - Nicotine Replacement Dosing Information

Medication/Dosage **Nicotine Replacement Therapy:**	**Indications**	**Contraindications/Cautions**	**Max Dose per 24h**
Nicotine Patch: Can be given alone or in combination with nicotine gum, lozenge and/or inhaler			
Nicotine Patch (21mg) per 24h	Smoking greater than 10 cigarettes per day (CPD) As a general rule for adults who are vaping, using more than 20mg of nicotine per day, can consider starting with 21mg patches to reduce background cravings.	Contact hypersensitivity to the patch. Signs and symptoms of these may include erythema, pruritis, edema, hives, or generalized rash or urticaria. *Pregnancy, recent cerebrovascular event, immediately post MI, angina, life threatening arrhythmias	**42mg
Nicotine Patch (14mg) per 24h	Smoking 7-14 CPD As a general rule, for adults who are vaping, using less than 20mg of nicotine/day, can consider starting with 14mg patches to reduce background cravings.	As above	**42mg
Nicotine Patch (7mg) per 24h	Less than 7 CPD or unable to tolerate higher doses of NRT For adults who are vaping, lower doses can be considered based on withdrawal symptoms.	As above	**42mg

Medication/Dosage **Nicotine Replacement Therapy:**	**Indications**	**Contraindications/Cautions**	**Max Dose per 24h**
Nicotine Gum *Can be used alone or in combination with nicotine patch, inhaler and/or lozenge*			
Nicotine Gum 2 mg or 4mg q 1h prn	Willing to learn the proper technique since nicotine must be absorbed across the buccal mucosa.	Unable to chew gum Wears dentures Immediately post MI, arrhythmias, angina, active TMJ dysfunction	20 pieces of Nicorette gum
Nicotine Inhaler: Can be used alone or in combination with nicotine patch, gum and/or lozenge			
Nicotine Inhaler 10mg cartridge Q1h prn (delivers 4mg nicotine per cartridge)		Recent CVA, immediately post MI, angina, life-threatening arrythmias.	6 cartridges
Nicotine Lozenge *Can be used alone or in combination with nicotine patch, gum and/or inhaler*			
Nicotine Lozenge 2 mg or 4 mg Q 1-2 hrs. PRN		Recent CVA, immediately post MI, angina, life threatening arrhythmias.	15 nicotine lozenges per day

* Recent studies have shown that using NRT is safer than smoking/vaping. Any client who is pregnant or who has a history of heart disease, recent CVA or MI, or any arrhythmias should be initiated on NRT by a provider (MD/NP). The implementer can then continue these clients on NRT and reduce dosages accordingly. Any increase in dosage should be done by the patient's provider.

** Clients can be titrated up to and including 42mg patch dosage by the implementer (including in combination with PRN nicotine gum or inhaler). See Appendix 4 - DECISION TREE TO ADDRESS NICOTINE WITHDRAWAL: INCREASING DOSAGE BEYOND 21MG PATCH

NB If a client experiences nausea or vomiting, diaphoresis, tremors, confusion, or weakness after using NRT, this could mean they are receiving too high a dose and the NRT product should be discontinued. Once the client's condition stabilizes, the implementer can try a lower dose and continue to monitor client closely for the above signs.

Appendix 5 - Decision Tree to Address Nicotine Withdrawal: Increasing Dosage Beyond 21 mg Patch

If client requires greater than 42mg dosage, refer client to see the provider. The implementer can then continue clients on dosages of 42mg or higher. Any additional increases beyond 42mg should be done by the provider.