

Medical Directive

Number:	
Topic:	Dispensing of Nicotine Replacement Therapy (NRT)
Revised:	October 2011
Approved:	May 21, 2007

Description

Nicotine Replacement Therapy, including the patch, gum, lozenge and/or inhaler may be recommended and/or dispensed to tobacco treatment (smoking cessation) clients during the course of counselling who meet the criteria as detailed in this medical directive.

Involvement of a Delegated Controlled Act: Yes

Regulated Health Professionals Act – Controlled Act # 8: Prescribing and Dispensing of Medication.

The Medical Officer of Health for the Simcoe Muskoka District Health Unit (SMDHU) authorizes TEACH trained public health nurses of the SMDHU (Appendix A) to recommend and/or dispense Nicotine Replacement Therapy, including the patch, gum, lozenge and/or inhaler to tobacco treatment clients. Dispensing may include the selection of the appropriate medication and distribution of the medication to the client. (College of Nurses, 1996)

Delegation of the Controlled Act

Identification of risks: The risk of treatment includes the potential for a reaction or allergy along with the possibility that the client will experience medication side effects. These risks are minimized by checking for previous drug allergies, and assessing present and past medical history.

See Agency Policy #B1.020 Policy Definitions and Interpretation for definitions of Medical Directives/Orders and Controlled Acts.

Indications

This medical directive applies when clients of the SMDHU, or clients involved in the STOP Project who are being counselled about tobacco treatment, have indicated a desire to stop/reduce tobacco use, wish to use NRT, and have been assessed as being a suitable candidate.

Implementation

The PHN must assess clients who present for tobacco treatment for the following:

- contraindications as per chart below
- smoking status and tobacco dependence – number of cigarettes per day, length of use of cigarettes, time after waking to first cigarette
- readiness to change behaviours, goals (reduction, abstinence)
- prior experience with any NRT including side effects and reactions
- client preference for type of NRT

Client must sign the NRT Consent Form stating they have read and understand the following:

- contraindications for NRT use
- instructions for taking NRT products
- potential side effects of NRT use, including nicotine toxicity, and agree to seek medical attention if they experience any side effects while taking NRT

To support continuity of care, if the client wishes and provides consent, a letter will be sent to their health care provider(s) informing them that the client is receiving tobacco treatment and indicating that NRT has been recommended/dispensed.

NOTE:

Bupropion SR (Zyban) and varenicline (Champix) are smoking cessation aids available by prescription. Nicotine replacement therapy may be used in conjunction with bupropion, but not with varenicline.

PHN may recommend and/or dispense the nicotine patch, gum, lozenge and/or inhaler to tobacco treatment clients as indicated below with consideration of client preference. This chart serves as a baseline, different forms of NRT can be used in combination and titrated based on client preference. Nurses will administer NRT based on the recommendations of the Ontario Medical Association's position paper "Rethinking Stop-Smoking Medications: Treatment Myths and Medical Realities (2008)."

<https://www.oma.org/Resources/Documents/e2008RethinkingStop-SmokingMedications.pdf>

PHN may fax a voucher to a participating pharmacist that allows the pharmacist to provide a client with nicotine replacement therapy at no cost to the client. The voucher will note the type and number of weeks of NRT to be dispensed by pharmacy and will expire no later than 30 days from time of initial assessment.

Medication/Dosage	Indications	Standard Dose	Contraindications	Side Effects
<u>Nicotine Patch</u>				
Can be used alone or in combination with gum, lozenge and/or inhaler.				
Nicotine Patch 21 mg/24 hrs	Smoking more than 15 cigarettes per day (cpd) Weigh more than 45 kg.	21 mg in 24 hrs <u>Use:</u> 21 mg/day X 4-6 weeks then 14 mg/day X 2-4 weeks then 7 mg/day X 2-4 weeks	Myocardial infarction in the last 2 weeks, recent cerebrovascular accident, life-threatening arrhythmias, severe or worsening angina pectoris. Hypersensitivity to any component of the patch. Clients with generalized skin disorders.	Skin sensitivity and irritation; abnormal dreams; insomnia; nausea; dyspepsia.
Nicotine Patch 14 mg/24 hrs	Smoking 7-15 cpd and/or weigh less than 45 kg.	14 mg in 24 hrs <u>Use:</u> 14 mg/day X 6 weeks then 7 mg/day X 2-4 weeks	As above	As above
Nicotine Patch 7 mg/24 hrs	If unable to tolerate higher doses of patch.	7 mg in 24 hrs	As above	As above
<u>Nicotine Gum</u>				
Can be used alone or in combination with nicotine patch, lozenge and/or inhaler.				
Nicotine Gum 4 mg	Smoking more than 25 cpd OR *Fagerstrom score is 7 or greater. Willing to learn proper technique. If still having cravings when using 2 mg nicotine	Indication: Quitting Abruptly (Stop-to-Quit) 1 st month – 1 piece/hr or when having a craving to smoke. Do not exceed 20 pieces/day. 2 nd month – chew 1 piece q 2-4 hrs. 3 rd month –	Myocardial infarction in last 2 weeks; recent cerebrovascular accident, life-threatening arrhythmias; severe or worsening angina pectoris. Hypersensitivity or allergy to nicotine. Temporomandibular joint dysfunction.	Mouth soreness, hiccups, dyspepsia, jaw ache.

Medication/Dosage	Indications	Standard Dose	Contraindications	Side Effects
	gum.	<p>chew 1 piece q 4-8 hrs.</p> <p>Months 4-6, chew 1 piece if the urge to smoke returns.</p> <p>Tapering: 1 piece/day each week, as withdrawal symptoms allow.</p> <p>If gum is used in combination with the patch, maximum dose is 6 pieces in 24 hours.</p> <p>Indication: Quitting Gradually (Reduce-to-Quit)</p> <p>To facilitate smoking reduction prior to making a quit attempt.</p> <p>Chew 1 piece when having a craving to prolong smoke-free intervals with the goal of achieving 50% reduction in daily cigarette consumption between 6 weeks and 4 months of treatment. Do not exceed 20 pieces/day.</p>		
Nicotine Gum 2 mg	<p>Smoking less than 25 cpd</p> <p>OR</p> <p>Fagerstrom score is 6 or less.</p> <p>If unable to tolerate 4 mg gum.</p>	<p>Indication: Quitting Abruptly (Stop-to-Quit)</p> <p>1st month – 1 piece/hr. Do not exceed 20 pieces/day.</p> <p>2nd month – chew 1 piece q</p>	As above	As above

Medication/Dosage	Indications	Standard Dose	Contraindications	Side Effects
	If willing to learn proper technique.	2-4 hrs. 3 rd month – chew 1 piece q 4-8 hrs. Indication: Quitting Gradually (Reduce-to-Quit) To facilitate smoking reduction prior to making a quit attempt. Chew 1 piece when having a craving to prolong smoke-free intervals with the goal of achieving 50% reduction in daily cigarette consumption between 6 weeks and 4 months of treatment. Do not exceed 20 pieces/day. If gum is used in combination with the patch, maximum dose is 6 pieces in 24 hours.		
<u>Nicotine Lozenge</u> Can be used alone or in combination with nicotine patch, gum and/or inhaler.				
Nicotine Lozenge 2 mg	Smoke 20 or more cpd	Suck 1 lozenge every 1-2 hrs up to 6 wks; 1 lozenge every 2-4 hrs weeks 7 to 9; 1 lozenge every 4-8 hrs wks 10-12. Do not exceed 15 lozenges/day.	Myocardial infarction in last 2 weeks; recent cerebrovascular accident, life-threatening arrhythmias; severe or worsening angina pectoris. Hypersensitivity or allergy to nicotine.	Nausea, hiccups, heartburn, headache, coughing.
Nicotine Lozenge	Smoke less than 20 cpd	Suck 1 lozenge every 1-2 hrs	As above	As above

Medication/Dosage	Indications	Standard Dose	Contraindications	Side Effects
1 mg		up to 6 wks; 1 lozenge every 2-4 hrs weeks 7-9; 1 lozenge every 4-8 hrs wks 10-12. Do not exceed 15 lozenges/day		
<u>Nicotine Inhaler</u> Can be used alone or in combination with nicotine patch, gum and/or lozenge.				
Nicotine Inhaler 10 mg cartridge	Helpful for those with strong behavioural (hand-to-mouth) dependency.	<u>Use:</u> 0-12 weeks use 6-12 cartridges per day. <u>Tapering:</u> Gradual reduction in use, stopping when reduced to 1-2/day. Do not exceed 12 cartridges/day. If inhaler is used in combination with the patch, maximum dose is 3 cartridges in 24 hours.	Myocardial infarction in last 2 weeks; recent cerebrovascular accident; life-threatening arrhythmias; severe or worsening angina pectoris. Hypersensitivity or allergy to nicotine or menthol.	

*Fagerstrom Test for Nicotine Dependence is used as one measure to assess the client's degree of nicotine dependence. It aids in tobacco treatment decisions and in determining the best dose/schedule for a client. (RNAO, 2007)

Quality Assurance

- Annual Review of Medical Directive
- Procedure for Certification
- Staff implementing the NRT medical directive will have completed:
 - the Training Enhancement in Applied Cessation Counselling and Health (TEACH) comprehensive course on smoking cessation (core course).
 - the SMDHU Intensive Cessation Interventions Procedures for Dispensing Nicotine Replacement Therapy.
- Procedure for Recertification:
 - staff member is expected to maintain competency by completing ongoing educational activities.
 - the program manager will verify this competency annually.

References

- College of Nurses of Ontario (1996) Delegation of Dispensing
- College of Nurses of Ontario (2008) Medication, Revised 2008
- Regulated Health Professions Act (1991)
- Simcoe Muskoka District Health Unit Policy (2010) Delegation of Controlled Acts
- Simcoe Muskoka District Health Unit Policy (2010) Directives/Standing Orders

Resources

- Bader, P., McDonald, P., & Selby, P. (2008). An Algorithm for Tailoring Pharmacotherapy for Smoking Cessation: Results from a Delphi Panel of International Experts. *Tobacco Control*, 025635v2
- Canadian Pharmacists Association. (2008). *Compendium of Pharmaceuticals and Specialties*. Toronto: Webcom Inc
- Ontario Medical Association. (2008). *Rethinking Stop-Smoking Medications: Treatment Myths and Medical Realities*
- Registered Nurses Association of Ontario. (2007). *Integrating Smoking Cessation into Daily Nursing Practice*. Toronto: Registered Nurses Association of Ontario.

Review/Revise History

- Approved May 21, 2007
- Revised April 2009
- Revised October 25, 2010
- Revised October 31, 2011

Authorized to:

Public health nurses employed by the Simcoe Muskoka District Health Unit and assigned to the CDP Tobacco Program who have met the requirements for authorization. These nurses are Registered Nurses holding a current Certificate of Registration with the College of Nurses of Ontario. A list of authorized public health nurses is appended.

Authorized by:

1. Medical Officer of Health / Associate Medical Officer of Health

Original signed by Dr.

Name	Signature	Date
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Original signed by Dr.

Name	Signature	Date
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Original signed by Dr.

Name	Signature	Date
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2. Medical Consultant (Not applicable)

Original signed by Dr.

Name	Signature	Date
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3. Program Manager

Original signed by

Name	Signature	Date
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APPENDIX A

Public health nurses who meet the requirements of authorization:

Kiersta Agostino

Nancy Bell

Terry Chambers

Shawna Frolick (missed in error in former appendix dated October 2011)

Rebecca Harbridge

Joanne McFarland

Penny Rush

Jennifer Tonn

Appendix revised June 6, 2012