CAN✦ADAPTT

Canadian Smoking Cessation Guideline

camh
Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

Specific Populations:
Hospital-Based Populations

CAN-ADAPTT's Clinical Practice Guideline Development Group;
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Overview of Evidence

The following recommendations, and supporting evidence, have been extracted from existing clinical practice guidelines to inform the development of the CAN-ADAPTT Summary Statements.

CAN-ADAPTT worked with the Guidelines Advisory Committee (GAC) to conduct a literature search (years: 2002-2009) to identify existing clinical practice guidelines (CPGs). Five existing clinical practice guidelines were identified as meeting the high quality criteria set out in the [AGREE Instrument](#). The recommendations contained in these high-quality CPGs have been used as the evidence base for the CAN-ADAPTT guideline development process. Visit www.can-adaptt.net to view CAN-ADAPTT's [guideline development methodology](#).

U.S. Department of Health and Human Services Public Health Service (2008)[1]

The interventions found to be effective in this Guideline have been shown to be effective in a variety of populations. In addition, many of the studies supporting these interventions comprised diverse samples of tobacco users. Therefore, interventions identified as effective in this Guideline are recommended for all individuals who use tobacco, except when medication use is contraindicated or with specific populations in which medication has not been shown to be effective (pregnant women, smokeless tobacco users, light smokers, and adolescents). *(Strength of Evidence = B)*

Registered Nurses Association of Ontario (2007)[2]

Nurses implement smoking cessation interventions, paying particular attention to gender, ethnicity and age-related issues, and tailor strategies to the diverse needs of the populations. *(Strength of Evidence = C)*

Organizations and Regional Health Authorities should consider smoking cessation as integral to nursing practice, and thereby integrate a variety of professional development opportunities to support nurses in effectively developing skills in smoking cessation intervention and counselling.
All corporate hospital orientation programs should include training to use brief smoking cessation interventions as well as information on pharmacotherapy to support hospitalized persons who smoke. *(Strength of Evidence = B)*

New Zealand Ministry of Health (2007)[3]

Provide brief advice to stop smoking to all hospitalized people who smoke. *(Grade = A)* Arrange multi-session intensive support, medication and follow up for at least 1 month for all hospitalized patients who smoke. *(Grade = A)*

Briefly advise people awaiting surgery who smoke to stop smoking and arrange support (such as NRT) prior to surgery. *(Grade = A)*

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[1] U.S. Department of Health and Human Services Public Health Service. (2008, May). Clinical practice guideline: Treating tobacco use and dependence: 2008 update.

[2] Registered Nurses Association of Ontario (RNAO). (2007, March). Integrating smoking cessation into daily nursing practice. Retrieved October 26, 2007 from:
http://www.rnao.org/bestpractices/PDF/BPG_smoking_cessation.pdf

[3] Ministry of Health. (2007, August). New Zealand smoking cessation guidelines. Wellington: Ministry of Health.

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All hospitals should have systems set up for helping patients to stop smoking. This includes routinely providing advice to stop smoking and either providing a dedicated smoking cessation service within the hospital or arranging for smoking cessation treatment to be provided by an external service. *(Grade = B)*

Advise parents and family members of hospitalized children to stop smoking and offer support to help them. *(Grade = √)*

NRT can be provided to people with cardiovascular disease. However, where people have suffered a serious cardiovascular event (for example, people who have had a myocardial infarction or stroke) in the past 2 weeks or have a poorly controlled disease, treatment should be discussed with a physician. In these cases, oral NRT products rather than patches are recommended as the preferred option. *(Grade = B)*

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Background

Smoking is known to have a significant negative impact on risks associated with hospitalization; quitting smoking prior to admission has been shown to be beneficial for postoperative complication rates[4].

Hospitalization provides an ideal window of opportunity to deliver smoking cessation services and supports for patients. Moreover, patients admitted for a smoking-related reason may be more receptive to smoking cessation interventions[5]. A recent Cochrane review has demonstrated that smoking cessation interventions, which begin during hospitalization and continue for at least one month post-discharge are effective[5].

Furthermore, with the prevalence of hospital smoke-free policies on the rise, the provision of nicotine withdrawal treatment and availability of smoking cessation services to patients is becoming increasingly vital.

A model of systematic hospital interventions for smoking cessation, *The Ottawa model*, has been shown to be effective in increasing abstinence rates for patients[6] and has been implemented in nearly 70 sites across Canada to date[7].

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[4] Tonnesen H, Nielsen PR, Lauritzen JB, Moller AM. Smoking and alcohol intervention before surgery—evidence for best practice. Br J Anaesth 2009; 102: 297–306; T. Thomsen, H. Tønnesen, A. M. Møller. Effect of preoperative smoking cessation interventions on postoperative complications and smoking cessation. Volume 96, Issue 5, pages 451–461, May 2009.

[5] Rigotti N, Munafo' MR, Stead LF. Interventions for smoking cessation in hospitalised patients (Review). *The Cochrane Library* 2008, Issue 4.

[6] Reid RD, Mullen KA, Slovinec D'Angelo ME, Aitken DA, Papadakis , Haley PM, McLaughlin CA, & Pipe AL. Smoking cessation for hospitalized smokers: An evaluation of the "Ottawa Model". Nicotine & Tobacco Research, Volume 12 (1):11–18

[7] University of Ottawa Heart Institute. Ottawa Model for Smoking Cessation. http://ottawamodel.ca/en_about.php, accessed November 16, 2010.

CAN-ADAPTT Summary Statements   *Comment on the discussion board*

CAN-ADAPTT's development process reflects a dynamic opportunity to ensure that its guideline is practice informed and addresses issues of applicability in the Canadian context. It has built from the evidence and recommendations contained in existing guidelines. It did not review the primary literature to inform the development of its Summary Statements unless emerging evidence was identified by the Guideline Development Group. The CAN-ADAPTT Guideline Development Group has provided the below Summary Statements for Hospital-Based Populations.

Summary Statement #1 –

> All patients should be made aware of hospital smoke-free policies.
> GRADE*: 1C

Summary Statement #2 –

> All elective patients who smoke should be directed to resources to assist them to quit smoking prior to hospital admission or surgery, where possible.
> GRADE*: 1B

Summary Statement #3 –

> All hospitals should have systems in place to:
> a) identify all smokers; GRADE*: 1A
> b) manage nicotine withdrawal during hospitalization; GRADE*: 1C
> c) promote attempts toward long-term cessation and; GRADE*: 1A
> d) provide patients with follow-up support post-hospitalization. GRADE*: 1A

Summary Statement #4 –

> Pharmacotherapy should be considered:
> a) to assist patients to manage nicotine withdrawal in hospital; GRADE*: 1C
> b) for use in-hospital and post-hospitalization to promote long term cessation.
> GRADE*: 1B

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*GRADE: See below or click here for Grade of Recommendation and Level of Evidence Summary Table.

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Clinical Considerations   *Comment on the discussion board*

Processes in smoking cessation interventions with hospitalized patients

- Managing nicotine withdrawal during hospitalization should be distinguished from a long term cessation attempt.

- Mechanisms such as standing orders, medical directives or order sets, should be implemented where possible to ensure a consistent process or approach for smoking cessation interventions across the hospital setting.

- A systematic approach to identify, treat and follow up with all admitted smokers has been demonstrated to be an effective model and should be considered where possible. One example of such an approach is the Ottawa Model.

- Patient documentation/charting should include consistent data capture (performance indicators) to track the intervention, pharmacotherapy and follow-up.

- Follow-up discharge planning and referral to community supports/services will benefit sustained cessation efforts, as with supportive counselling post-discharge.

- As to the duration for follow-up post-discharge, existing evidence suggests at least one month[8], however, continuous follow-up is preferable.

- Efforts should be made to link patients to their primary healthcare provider upon discharge to ensure continuation of treatment and follow-up.

Pharmacotherapy

- It should be recognized that pharmacotherapy can be provided to treat withdrawal during hospitalization as well as to promote long term cessation attempts.

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[8] Rigotti N, Munafo' MR, Stead LF. Interventions for smoking cessation in hospitalised patients (Review). *The Cochrane Library* 2008, Issue 4.

Hospital Policies

- Opportunity to discuss or prioritize the implementation of smoke-free policies in hospital settings can assist in establishing or supporting smoking cessation processes/programming. Examples can be drawn from institutions such as [Centre for Addiction and Mental Health](#)

- Hospital management teams and staff should be encouraged to support smoking cessation for hospitalized patients.

- Smoking Cessation interventions should also be made available for hospital staff.

- There are challenges determining which practitioner(s) are in a position or have capacity to engage in the provision of smoking cessation interventions. Standing orders, medical directives could be considered and included in the development of a hospital smoking cessation system/process.

- To ensure and sustain capacity of smoking cessation program/services appropriate resource allocation is an important consideration.

- Approaches may differ for smokers admitted via emergency vs. pre-admission, according to policies. In addition, some approaches may differ for patients who stop smoking for hospitalizations versus those patients who have a desire to quit while hospitalized.

- Hospital policies may support cessation from the perspective of harm reduction.

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Tools/Resources   *Contribute a Tool/Resource*

Title	Description	Resource

Ottawa Model for Smoking Cessation	• Ottawa Model for Smoking Cessation: The University of Ottawa Heart Institute (UOHI) has been operating a clinical smoking cessation program for the Ottawa community since the 1990s. In 2002, UOHI smoking cessation experts developed the OMSC – an institutional inpatient program that systematically identifies, provides treatment, and offers follow-up to all admitted smokers.
	
	    • Three Centres of Excellence for Clinical Smoking Cessation established:
	      ▪ New Brunswick's Horizon Health Network in Eastern Canada;
	      ▪ Vancouver Coastal Health in British Columbia, and;
	      ▪ The University of Ottawa Heart Institute in OntarioTraining available in Ottawa (Workshop overview; Upcoming sessions in Ottawa)
		www.ottawamodel.ca

Stop Smoking Before Surgery (SSBS)	• An intervention program for patients on surgical waiting lists in British Columbia. SSBS aims to deliver resources, such as referrals to the provinces' QuitNow Services, to smokers during the critical period when they are preparing for surgery.	http://www.bccancer.bc.ca/PPI/Prevention/tobacco/ssbs.htm
Stop smoking for Safer Surgery	• Ontario's Anaesthesiologists' Stop Smoking for Safer Surgery is a province-wide patient awareness campaign about the benefits of stopping smoking prior to surgery.	http://www.ontarioanesthesiologists.ca/stop-smoking-safe-surgery/

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Research Gaps   *Contribute a Research Gap*

- Emerging evidence in pharmacotherapy in acute settings

- Effectiveness of counselling and medications with hospitalized patients

- Effectiveness of interventions provided by different hospital personnel, including nurses and respiratory therapists

- Relapse prevention once the patient leaves the hospital

- Safety/risks/benefits of NRT use in peri-operative patients

- Impact of hospital-based policy on smoking cessation rates among staff, patients

Overview of CAN-ADAPTT's Practice-Informed Guideline

The full text guideline is available online at www.can-adaptt.net. The Guideline includes the following sections:

- Counselling and Psychosocial Approaches

- Pharmacotherapy *(in development)*

- Aboriginal Peoples

- Hospital-Based Populations

- Mental Health and/or Other Addiction(s)

- Pregnant and Breastfeeding Women

- Youth (Children and Adolescents)

We invite you to comment on the applicability and usability of this section, suggest additional tools and resources, and help to identify any gaps in knowledge.

Table 1. Grade of Recommendation & Level of Evidence Summary Table**

GR/LOE*	Clarity of risk/benefit	Quality of supporting evidence	Implications
1A. Strong recommendation. High quality evidence.	Benefits clearly outweigh risk and burdens, or vice versa	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Strong recommendations, can apply to most patients in most circumstances without reservation. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
1B. Strong recommendation. Moderate quality evidence.	Benefits clearly outweigh risk and burdens, or vice versa	Evidence from randomized, controlled trials with important limitations (inconsistent results, methodologic flaws, indirect or imprecise), or very strong evidence of some other research design. Further research (if performed) is likely to have an impact on our confidence in the estimate of benefit and risk and may change the estimate.	Strong recommendation and applies to most patients. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
1C. Strong recommendation. Low quality evidence.	Benefits appear to outweigh risk and burdens, or vice versa	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Strong recommendation, and applies to most patients. Some of the evidence base supporting the recommendation is, however, of low quality.
2A. Weak recommendation. High quality evidence.	Benefits closely balanced with risks and burdens	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Weak recommendation, best action may differ depending on circumstances or patients or societal values
2B. Weak recommendation. Moderate quality evidence.	Benefits closely balanced with risks and burdens, some uncertainly in the estimates of benefits, risks and burdens	Evidence from randomized, controlled trials with important limitations (inconsistent results, methodologic flaws, indirect or imprecise), or very strong evidence of some other research design. Further research (if performed) is likely to have an impact on our confidence in the estimate of benefit and risk and may change the estimate.	Weak recommendation, alternative approaches likely to be better for some patients under some circumstances
2C. Weak recommendation. Low quality evidence.	Uncertainty in the estimates of benefits, risks, and burdens; benefits may be closely balanced with risks and burdens	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Very weak recommendation; other alternatives may be equally reasonable.

* GR- Grade of Recommendation, LOE – Level of Evidence

** Adapted from: UpToDate. Grading guide. No date. Available from: http://www.uptodate.com/home/about/policies/grade.html; and Guyatt

G, Gutterman D, Baumann MH, Addrizzo-Harris D, Hylek EM, Phillips B, Raskob G, Lewis SZ, Schünemann H. Grading strength of

recommendations and quality of evidence in clinical guidelines: Report from an American College of Chest Physicians task force. Chest.

2006 Jan;129(1):174-81, originally adapted from the GRADE Working Group.