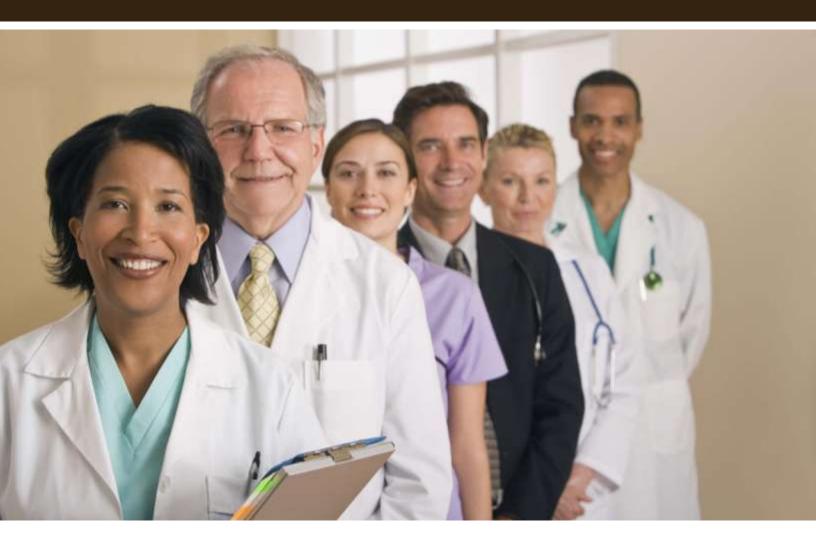




# CANADIAN SMOKING CESSATION CLINICAL PRACTICE GUIDELINE



Funding for CAN-ADAPTT has been made possible through a financial contribution from the Drugs and Tobacco Initiatives Program, Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.



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### NOTE TO USERS

### **OVERVIEW**

This guideline has been developed by the Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment (CAN-ADAPTT). CAN-ADAPTT's Guideline for Smoking Cessation is intended to guide practice and is not intended to serve as a comprehensive overview of smoking cessation management. This guideline is intended to inform provision of evidence based smoking cessation care in Canada.

### **FUNDING**

CAN-ADAPTT has been made possible through a financial contribution from the Drugs and Tobacco Initiatives Program, Health Canada. This guideline is editorially independent of funding sources. The views expressed herein do not necessarily represent the views of Health Canada.

### **REPRODUCTION OF THE GUIDELINE**

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### CITATION

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

### WEBSITE

The guideline is available in its entirety or by individual section online at <u>www.can-adaptt.net</u>.

### CONTRIBUTE



Sections including the information icon above, indicate links to contribute to the guideline via CAN-ADAPTT's website (<u>www.can-adaptt.net</u>). Sections include:

- Clinical Considerations
- Tools/Resources
- Research Gaps





# CAN-ADAPTT GUIDELINE DEVELOPMENT COMMITTEE AND SUPPORT

### **GUIDELINE DEVELOPMENT GROUP COMMITTEE**

The Guideline Development Group (GDG) was directly responsible for the review of existing guidelines and evidence and the development of summary statements for the CAN-ADAPTT Clinical Practice Guideline.

Peter Selby, MBBS, CCFP, FCFP, MHSc, Dip ABAM

Principal Investigator, CAN-ADAPTT Chair, CAN-ADAPTT Guideline Development Group Section Co-Lead: Mental Health and/or Other Addiction(s) Clinical Director, Addictions Program Head, Nicotine Dependence Clinic Centre for Addiction and Mental Health Associate Professor Departments of Family and Community Medicine, Psychiatry and Dalla Lana School of Public Health University of Toronto Toronto, Ontario

### Gerry Brosky, MD, CCFP

Section Lead: Counselling and Psychosocial Approaches Associate Professor, Department of Family Medicine Dalhousie University Halifax, Nova Scotia

### Sheila Cote-Meek, BScN, MBA, PhD

Section Lead: Aboriginal Peoples Associate Vice-President, Academic & Indigenous Programs Laurentian University Sudbury, Ontario

# Charl Els, MBChB, FCPsych, MMedPsych (cum laude), ABAM, MROCC

Section Co-Lead: Mental Health and/or Other Addiction(s) Addiction Psychiatrist, Medical Review Officer Associate Professor (adjunct), School of Public Health Associate Clinical Professor, Faculty of Medicine and Dentistry Associate Clinical Professor, John Dossetor Health Ethics Centre University of Alberta Edmonton, Alberta

### Jennifer O'Loughlin, PhD, CRC, CAHS fellow

Section Lead: Youth (Children and Adolescents) Epidemiologist, CRCHUM Professor, Department of Social and Preventive Medicine University of Montreal Montreal, Quebec

### Alice Ordean MD, CCFP, MHSc

Section Lead: Pregnant and Breastfeeding Women Family Physician, Urban Family Health Team, St. Joseph's Health Centre Medical Director, Toronto Centre for Substance Use in Pregnancy, St. Joseph's Health Centre Assistant Professor, Department of Family and Community Medicine, University of Toronto Toronto, Ontario

### Robert D. Reid, PhD, MBA

Section Lead: Hospital-based Populations Deputy Chief, Division of Prevention and Rehabilitation, University of Ottawa Heart Institute Professor, Faculty of Medicine, University of Ottawa Ottawa, Ontario





### **CAN-ADAPTT COORDINATING TEAM**

### Peter Selby, MBBS, CCFP, FCFP, MHSc, Dip ABAM

Principal Investigator, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Virginia Chow, BSc

Former Network Manager, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Mary-Jean Costello, MSc

Former Evaluation Coordinator, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Rosa Dragonetti, MSc

Manager, Nicotine Dependence Service Centre for Addiction and Mental Health, Toronto, Ontario

#### Stephanie Elliott

Administrative Secretary, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Katie Hunter, MSc

Atlantic Canada Regional Coordinator, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Denise Koubanioudakis, MA

Quebec Provincial Coordinator, CAN-ADAPTT Institut national de santé publique du Québec, CHUM Research Centre, Montreal, Quebec

#### Tamar Meyer, MA

Ontario Provincial Coordinator, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Janet Ngo, MA

Western Canada Regional Coordinator, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Jenna Robinson, MA

Outreach Coordinator, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Jess Rogers, BA

Manager, CAN-ADAPTT (secondment) Director, Centre for Effective Practice, Toronto, Ontario

#### Sophie Soklaridis, PhD

Knowledge Translation Scientist, Nicotine Dependence Service Centre for Addiction and Mental Health, Toronto, Ontario

### Anna Tapia

Administrative Secretary, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

#### Louise Walker, BA, BSc(Hons)

Former Manager, CAN-ADAPTT Centre for Addiction and Mental Health, Toronto, Ontario

### ACKNOWLEDGEMENTS

CAN-ADAPTT wishes to acknowledge the contribution to the Clinical Practice Guideline from Paul McDonald. Dr. McDonald was involved in the early Guideline Development Group meetings but was not involved in the final review and approval of the Clinical Practice Guideline.

In addition to the work of the CAN-ADAPTT Guideline Development Group, CAN-ADAPTT wishes to acknowledge the Executive Committee and Evaluation Committee of CAN-ADAPTT for their contribution to the development of the Canadian Guideline for Smoking Cessation and the support of the CAN-ADAPTT Project as a whole. A complete list of these Committees and a brief description of their roles can be found in <u>Appendix G.</u>

The development of this guideline would not have been possible without the efforts, knowledge and expertise of the CAN-ADAPTT Network. The Network provided valuable input into the guideline through contributions on the discussion board, through attendance at CAN-ADAPTT's Annual General Meetings and during partnership meetings/ workshops. CAN-ADAPTT would like to acknowledge and thank these individuals for their time and support.



# **EXECUTIVE SUMMARY**

### COUNSELLING AND PSYCHOSOCIAL APPROACHES

### SUMMARY STATEMENT #1

ASK: Tobacco use status should be updated, for all patients/clients, by all health care providers on a regular basis.

### GRADE\*: 1A

### SUMMARY STATEMENT #2

ADVISE: Health care providers should clearly advise patients/clients to quit.

### **GRADE\*: 1C**

### **SUMMARY STATEMENT #3**

ASSESS: Health care providers should assess the willingness of patients/clients to begin treatment to achieve abstinence (quitting).

### GRADE\*: 1C

### SUMMARY STATEMENT #4

ASSIST: Every tobacco user who expresses the willingness to begin treatment to quit should be offered assistance.

### GRADE\*: 1A

a) Minimal interventions, of 1-3 minutes, are effective and should be offered to every tobacco user. However, there is a strong dose-response relationship between the session length and successful treatment, and so intensive interventions should be used whenever possible.

### **GRADE\*: 1A**

b) Counselling by a variety or combination of delivery formats (self-help, individual, group, helpline, web-based) is effective and should be used to assist patients/clients who express a willingness to quit.

### **GRADE\*: 1A**

c) Because multiple counselling sessions increase the chances of prolonged abstinence, health care providers should provide four or more counselling sessions where possible.

### **GRADE\*: 1A**

d) Combining counselling and smoking cessation medication is more effective than either alone, therefore both should be provided to patients/clients trying to stop smoking where feasible.

### **GRADE\*: 1A**

e) Motivational interviewing is encouraged to support patients/clients willingness to engage in treatment now and in the future.

**GRADE\*: 1B** 



### SUMMARY STATEMENT #4 (cont'd)

 f) Two types of counselling and behavioural therapies yield significantly higher abstinence rates and should be included in smoking cessation treatment: 1) providing practical counselling on problem solving skills or skill training and 2) providing support as a part of treatment.

GRADE\*: 1B

### **SUMMARY STATEMENT #5**

**ARRANGE: Health care providers:** 

a) should conduct regular follow-up to assess response, provide support and modify treatment as necessary.

### **GRADE\*: 1C**

b) are encouraged to refer patients/clients to relevant resources as part of the provision of treatment, where appropriate.

### **GRADE\*: 1A**

### ABORIGINAL PEOPLES<sup>†</sup>

### **SUMMARY STATEMENT #1**

Tobacco misuse<sup> $\Delta$ </sup> status should be updated for all Aboriginal peoples by all health care providers on a regular basis.

GRADE\*: 1A

### **SUMMARY STATEMENT #2**

All health care providers should offer assistance to Aboriginal peoples who misuse tobacco with specific emphasis on culturally appropriate methods.

**GRADE\*: 1C** 

### **SUMMARY STATEMENT #3**

All health care providers should be familiar with available cessation support services for Aboriginal peoples.

### **GRADE\*: 1C**

### **SUMMARY STATEMENT #4**

All individuals working with Aboriginal peoples should seek appropriate training in providing evidence-based smoking cessation support.

**GRADE\*: 1C** 



<sup>&</sup>lt;sup>†</sup> Aboriginal peoples is used as an inclusive term which includes First Nations (both on and off reserve), Inuit, and Métis. This is not meant to take away from the diversity that exists among Aboriginal peoples

<sup>&</sup>lt;sup>a</sup> Tobacco misuse does not refer to tobacco use for traditional/ceremonial purposes.

### 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 posthospitalization to promote long term cessation.

### GRADE\*: 1B

# MENTAL HEALTH AND/OR OTHER ADDICTION(S)

### SUMMARY STATEMENT #1

Health care providers should screen persons with mental illness and/or addictions for tobacco use.

**GRADE\*: 1A** 

### **SUMMARY STATEMENT #2**

Health care providers should offer counselling and pharmacotherapy treatment to persons who smoke and have a mental illness and/or addiction to other substances.

**GRADE\*: 1A** 

### SUMMARY STATEMENT #3

While reducing smoking or abstaining (quitting), health care providers should monitor the patients'/clients' psychiatric condition(s) (mental health status and/or other addiction(s)). Medication dosage should be monitored and adjusted as necessary.

### GRADE\*: 1A

Lcamh

# PREGNANT AND BREASTFEEDING WOMEN

### SUMMARY STATEMENT #1

Smoking cessation should be encouraged for all pregnant, breastfeeding and postpartum women.

### **GRADE\*: 1A**

### SUMMARY STATEMENT #2

During pregnancy and breastfeeding, counselling is recommended as first line treatment for smoking cessation.

### **GRADE\*: 1A**

### **SUMMARY STATEMENT #3**

If counselling is found ineffective, intermittent dosing nicotine replacement therapies (such as lozenges, gum) are preferred over continuous dosing of the patch after a riskbenefit analysis.

### **GRADE\*: 1C**

### **SUMMARY STATEMENT #4**

Partners, friends and family members should also be offered smoking cessation interventions.

### **GRADE\*: 2B**

### **SUMMARY STATEMENT #5**

A smoke-free home environment should be encouraged for pregnant and breastfeeding women to avoid exposure to second-hand smoke.

### GRADE\*: 1B

YOUTH (Children and Adolescents)

### **SUMMARY STATEMENT #1**

Health care providers, who work with youth (children and adolescents) should obtain information about tobacco use (cigarettes, cigarillos, waterpipe, etc.) on a regular basis.

### **GRADE\*: 1A**

### **SUMMARY STATEMENT #2**

Health care providers are encouraged to provide counselling that supports abstinence from tobacco and/or cessation to youth (children and adolescents) that use tobacco.

### **GRADE\*: 2C**

### SUMMARY STATEMENT #3

Health care providers in pediatric health care settings should counsel parents/guardians about the potential harmful effects of secondhand smoke on the health of their children.

### **GRADE\*: 2C<sup>42</sup>**

\* GRADE: See <u>Appendix B</u> for Grade of Recommendation and Level of Evidence Summary Table.



CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

### **GUIDELINE RATIONALE**

While approximately 17% of Canadians are current smokers<sup>7</sup>, a large proportion have been shown to be willing to make a quit attempt<sup>2</sup>. Health care providers have an important role to play in assisting individuals to quit smoking. Moreover, even brief interventions by providers are known to be effective in increasing the likelihood of a quit attempt by a person who smokes<sup>3</sup>. Clinical practice guidelines are known to be an important and effective provider tool to close the gap between recommended care and actual care provided<sup>4</sup>.

The need for national clinical practice guidelines has also been identified by the World Health Organization's Framework Convention for Tobacco Control (FCTC), which states that parties to the treaty "...shall develop and disseminate appropriate, comprehensive and integrated guidelines based on scientific evidence and best practice, taking into account national circumstances and priorities, and shall take effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence"<sup>5</sup>.

### **BACKGROUND OF CAN-ADAPTT**

In May 2007, the Tobacco Control Program of Health Canada assembled selected members of the tobacco control community for a roundtable discussion pertaining to tobacco cessation guidelines. This roundtable of experts highlighted several issues and needs, including:

- Traditional methods of guideline development have relied on a narrow field of evidence, focusing mainly on randomized controlled trials (that typically fail to account for conditions and factors that influence treatment)
- Need to approach guideline/guidance development with inter-professional collaboration that significantly contributes both clinically practical and population level perspectives
- Need to engage stakeholders in guideline development and implementation processes
- Need for effective vehicles of communication and knowledge translation between the different audiences and stakeholders

To address these needs, the Canadian Action Network for the Advancement, Dissemination, and Adoption of Practice-informed Tobacco Treatment (CAN-ADAPTT) was established in 2008, with funding from the Drugs and Tobacco Initiatives Program of Health Canada.

# 



CAN-ADAPTT's vision is to encourage a Canada where health care providers have access to the tools needed to deliver up to date evidence-based smoking cessation interventions to reduce the prevalence of tobacco use and dependence. Its overall goal is to establish a national Practice-Based Research Network (PBRN) to facilitate research and knowledge exchange to inform the development of a dynamic cessation guideline for use in clinical practice and population-based strategies within Canada.

CAN-ADAPTT is committed to facilitating smoking cessation research and knowledge exchange among health care providers, researchers, and policy/ decision makers. CAN-ADAPTT aims to close the gap between research and practice by meeting the following objectives:

- Create a PBRN to inform smoking cessation research and practice across Canada
- Develop a practice-informed research agenda that bridges the gaps between clinical practice, research and theoretical frameworks
- Translate research evidence into a dynamic evidence-based guideline
- Disseminate findings and engage stakeholders to promote the adoption of the guideline
- Collaborate with others involved in tobacco use and dependence
- Evaluate the impacts of the PBRN

From 2008-2011, CAN-ADAPTT worked with stakeholders to develop a practice-informed Clinical Practice Guideline (CPG) for Smoking Cessation in Canada. CAN-ADAPTT's guideline development process reflects a dynamic opportunity to ensure that its guideline is practice-informed and addresses issues of applicability in the Canadian context.

CAN-ADAPTT, while building from recognized standards for guideline development (outlined in the AGREE Instrument<sup>6</sup>), also integrated unique approaches to guideline development, including:

1. Building from existing guidelines

CAN-ADAPTT subcontracted the Guidelines Advisory Committee (GAC) to independently identify and evaluate existing CPGs using the AGREE Instrument. The recommendations contained in the high quality guidelines (determined by AGREE scores) were used as the evidence base for the CAN-ADAPTT guideline development process. 2. Using a practice-informed approach and dynamic process

CAN-ADAPTT engaged stakeholders, health care providers from diverse practice settings, policy makers, health care managers and a broad range of researchers to provide input into the development of the guideline.

## SCOPE AND PURPOSE

This guideline is intended for use by Canadian health care providers in diverse clinical or treatment settings. This guideline is also intended for researchers and decision makers with an interest in understanding the key elements to a comprehensive smoking cessation system in Canada. The guideline contains sections on both clinical and population level approaches to smoking cessation interventions for persons who smoke or use tobacco. Sections of the guideline were also developed to address some of the questions regarding specific populations such as Aboriginal Peoples and Hospital Based Populations (see below for a complete list of topics).

This guideline is not intended to be prescriptive. It is designed to support rather than replace the clinical judgment of health care providers. Information contained in this guideline may be less applicable in certain situations or with specific populations. This guideline is intended to provide a foundation from which health care providers, researchers and decision makers (including health care managers) in Canada can adapt and tailor the information and recommendations to meet their own needs and settings.

The guideline is available in full text on the CAN-ADAPTT website (<u>www.can-adaptt.net</u>) in both English and French.



# FORMAT OF GUIDELINE

The guideline is organized into the following sections:

### **Clinical Approaches**

- Counselling & Psychosocial Approaches
- Pharmacotherapy (in progress using a different guideline development methodology)

### **Specific Populations**

- Aboriginal Peoples
- Hospital Based Populations
- Mental Health and/or Other Addiction(s)
- Pregnant & Breastfeeding Women
- Youth (Children & Adolescents)

Each section of the guideline is divided into the following sub-sections:

- 1. **Overview of Evidence** includes the recommendations and supporting evidence extracted from relevant pre-existing high quality CPGs, which have contributed to the CAN-ADAPTT summary statements.
- 2. Summary Statements are based on the best evidence identified, and are the important messages for health care providers to consider implementing in practice. Each Summary Statement includes the Grade of Recommendation and Level of Evidence supporting the Statement.
- 3. Clinical Considerations is information supporting the Summary Statements, such as how to best implement the Statements, important implications for specific practice settings and key considerations. Clinical Considerations were informed by the input of the Guideline Development Group and CAN-ADAPTT Network Members. It was not informed by a systematic review of the literature.
- 4. **Tools and Resources** provides a list of resources that health care providers can use to help implement the Summary Statements. The lists are not intended to be comprehensive; they are a starting point informed by the Guideline Development Group and CAN-ADAPTT Network Members.
- 5. **Research Gaps** describes any gaps in the evidence and recommendations for future research in the area. See the CAN-ADAPTT Research Agenda for more information<sup>7</sup>.



# CLARIFICATION AND LIMITATIONS

In this document, the term "tobacco" refers to manufactured, commercial tobacco products including, but not limited to, cigarettes, smokeless tobacco such as snuff, snus, and chewing tobacco, and cigars. Tobacco misuse does not refer to tobacco use for traditional or ceremonial purposes by Aboriginal Peoples.

Most research in the area of smoking cessation has examined cigarette use; it is important to note this limitation when using this guideline with smokeless tobacco users. More research is needed on smokeless tobacco products and the people who use smokeless tobacco to understand the impact of smoking cessation interventions.

The term patient/client is used throughout this guideline to reflect the diverse clinical settings where smoking cessation treatment is provided. The term health care provider is used throughout and is intended to reflect a broad range of providers in a range of different settings, including hospital, clinic, home care, acute, community, primary and long term care.

### Guideline Development Group (GDG)

The Guideline Development Group (GDG) was formed in 2009 by the CAN-ADAPTT Coordinating Team and the GDG Chair, Dr. Peter Selby. There are seven members of the GDG ranging from family physician to public health researcher to physician specialists (see page ii for a list of GDG members). Each GDG member was a Section Lead for one of the sections listed on page 3. GDG Members were identified by the Chair to include experts in each topic area while ensuring a multi-disciplinary and nationally representative committee. Each GDG member was contracted through CAMH for their participation on the GDG, which included a modest honorarium to support their attendance at meetings and compensation for travel and accommodation for in-person meetings. Each GDG member confirmed that they had not received funds from the Tobacco Industry. No conflicts of interest were identified by members of the GDG that could have compromised the summary statements contained within this document. The GDG recognizes that representation from all potential guideline target end users was not possible. The intent was to leverage the CAN-ADAPTT Network members that represented a greater number of professional groups involved in smoking cessation throughout the guideline development process to provide critical input into the drafting of the guideline.

# IDENTIFYING AND EVALUATING THE EVIDENCE

# IDENTIFYING EXISTING CLINICAL PRACTICE GUIDELINES

Prior to being engaged in the CAN-ADAPTT Project, the Guidelines Advisory Committee had conducted, in November 2006, a full review of CPGs in the area of smoking cessation published in the English language. At that time, nine guidelines met the basic predetermined quality criteria: they contained recommendations linked to the evidence, and included some indication that a systematic search of the literature had been conducted. [Appendix C]

In December 2008, a new systematic search was conducted for the CAN-ADAPTT Project, to identify CPGs published since the previous review. This search used the same terms as November 2006, such as smoking, tobacco, or nicotine. The search was conducted in Ovid MEDLINE, Ovid Embase, guideline repositories such as National Guideline Clearinghouse, renowned developers with a history of





developing high quality guidelines, as well as websites of national and international specialty societies. A general internet search was also conducted to ensure that no CPGs were missed. Five guidelines, which met the basic pre-determined quality criteria (as above), were found to be published after the initial search in 2006. [Appendix D]

# REVIEW AND APPRAISAL OF IDENTIFIED CLINICAL PRACTICE GUIDELINES

The 14 guidelines (combining those from 2006 and 2008) identified in both reviews were evaluated by four independent reviewers using the AGREE Instrument. The reviewers were practicing family physicians in Ontario who had each been formally trained in the application of the AGREE Instrument.

In addition to the AGREE Instrument, 8 additional questions were included as part of the appraisal. This step, called AGREE Plus was encouraged by the GAC in order to better understand the applicability of the guidelines to the Canadian context. It has been the experience of the GAC that the applicability section of the AGREE often misses important considerations for the guidelines' use once the guideline is put into practice. The following additional questions were provided by the CAN-ADAPTT Coordinating Team. Each reviewer responded to the questions/statements below using a 4-point Likert scale and/or comments, where appropriate.

- 1. The recommendations made in the guideline are appropriate for the intended users (i.e., you and your colleagues) to perform.
- 2. The recommendations made in the guideline are practical for the intended users (i.e., you and your colleagues) to perform.
- 3. The recommendations made in the guideline are consistent with patient treatment expectations.
- 4. The recommendations are compatible with existing attitudes and beliefs of the guideline's intended users (i.e., you and your colleagues).
- 5. The recommendations can be performed by the guideline's intended users (i.e., you and your colleagues) without the acquisition of new competencies (knowledge, skills, etc.).
- 6. What new competencies, if any, would be required?
- 7. Criteria can be extracted from the guideline that would permit the measurement of specific outcomes related to the recommendations.
- 8. Criteria can be extracted from the guideline that would permit the measurement of adherence to the recommendations.

CAN-ADAPTT considered only those guidelines that scored highly in multiple AGREE domains, particularly in the areas of Rigour of Development and Editorial Independence, as well as guidelines that were 'strongly recommended' by reviewers as being applicable to the Canadian context. The domains of Rigour of Development and Editorial Independence address the majority of the methodological questions that help to determine quality of the guideline development process. The GAC advised that guidelines which do not adequately address these items should not be considered to be a high quality clinical practice guideline and should not be included in the development of CAN-ADAPTT's guideline.

Six guidelines met our criteria and were selected for use in developing the dynamic CAN-ADAPTT CPG. [<u>Appendix E</u>] This process has been developed and was recommended by the Guidelines Advisory Committee (GAC).

CAN-ADAPTT extracted key recommendations from the highest scoring guidelines, and used these as the formal evidence base to inform the development of its guideline.

NOTE: CAN-ADAPTT did not review the primary literature to inform the development of its Summary Statements unless emerging evidence was identified by the Guideline Development Group.

### SUMMARY STATEMENTS AND CLINICAL CONSIDERATIONS DEVELOPMENT AND APPROVAL: A Practice-Informed Approach

The CAN-ADAPTT process of guideline development was informed by the ADAPTE process<sup>6</sup>. This methodology was unique in that evidence was extracted from existing high quality guidelines to develop summary statements. Evidence tables were created for each of the guideline sections (as listed on page 3). The existing CPGs identified for inclusion were reviewed and relevant recommendations extracted for each section along with the level of evidence/grade of recommendation attributed to it by the original guideline developer. The CAN-ADAPTT Coordinating Team developed draft summary statements from the existing recommendations for each theme and included it in the evidence tables. The Chair of the GDG reviewed the evidence tables and approved for distribution to the GDG.

The entire GDG reviewed the evidence tables and suggested revisions independently. The CAN-ADAPTT Coordinating Team collated the revisions



into one document and re-circulated revisions to each section to the respective GDG lead for review. The updated evidence tables were then prepared for the Annual General Meeting (AGM) of the CAN-ADAPTT Network held in Ottawa 2009. At the AGM, the GDG Section Leads were responsible for leading small group breakout sessions with Network members to review the evidence tables and invite input on the Summary Statements and Clinical Considerations for the CAN-ADAPTT Guideline. The feedback was captured by designated recorders in each group as well as in participant workbooks that were collected at the end of the day. Following the AGM, all of the feedback was collated by the CAN-ADAPTT Coordinating Team and re-circulated to the GDG Section Lead for review and presentation to the other GDG members at the next GDG meeting.

During this GDG meeting, each GDG Section Lead was charged with facilitating discussion and eliciting feedback from the other GDG members for their respective section including revision to the Summary Statements, identification of relevant evidence to include in the background section, articulation of key clinical considerations and in assigning a level of evidence/grade of recommendation to each Summary Statement. The GDG Section Leads were supported by the CAN-ADAPTT Coordinating Team who assisted in drafting the content for review and confirmation by the GDG Section Leads. Final revision and approval of all Summary Statements and the level of evidence/ grade of recommendation was accomplished at an inperson GDG meeting where members were required to discuss and vote on final summary statements. Overall, there were seven GDG Meetings from 2009 to 2010.

# GRADES OF RECOMMENDATION AND LEVELS OF EVIDENCE

Summary Statements were assigned Grades of Recommendation (GR) and Levels of Evidence (LoE) using a modified GRADE approach<sup>9</sup>. Given that this process built from existing clinical practice guidelines, traditional GRADE evidence tables were not used. The GDG utilized the Grading guide table, compiled by UptoDate<sup>10</sup> to help consider the level of evidence and grade of recommendation for its Summary Statements. The Guideline Development Group Members reviewed each Summary Statement and weighed the clarity of risk and benefit, quality of the supporting evidence, and implications of the Summary Statement and assigned a GR and LoE for each. Members of the Guideline Development Group voted on the wording of the Summary Statement and each GR and LoE.

Grades of Recommendation and Levels of Evidence can be found in <u>Appendix B.</u>

### **CAN-ADAPTT NETWORK PARTICIPATION**

### **Composition of Network**

The example of the AGM, as described above, demonstrates how the CAN-ADAPTT methodology also included engagement of the target end users; researchers, health care providers and manager/ decision makers in its process of guideline development. The feedback approach was iterative allowing for ongoing participation and reflection from the target end users. The impact or effectiveness of clinical practice guidelines is often limited by the lack of consideration given to implementation or the applicability of the CPGs to local context and provider needs<sup>11</sup>. It was the aim of CAN-ADAPTT to explore the value and contribute to emerging guideline methods integrating implementation considerations into guideline development<sup>12</sup>.

CAN-ADAPTT targeted a variety of groups and key stakeholders for membership in the Network and participation in the guideline development process though a number of strategies. These included connecting with professional associations/ organizations representing various related disciplines and practices, presenting and displaying at conferences, sending out email blasts, conducting workshops, and publishing articles in professional journals and newsletters, as well as other promotional materials. Recruiting health providers committed to smoking cessation was considered particularly important, as they are in a unique position to engage in the delivery of smoking cessation interventions and thus are likely to use a revised, up-to-date, evidencebased guideline on smoking cessation practices. Network members were recruited from across Canada, and almost all Canadian provinces and territories had participants. Between 2008 and March 2011, more than 800 individuals have joined CAN-ADAPTT's Network, and were invited to participate in the development of these guidelines.

### Methods of Participation

CAN-ADAPTT members were invited to contribute to the guideline development and implementation process in a number of ways, including:

- Providing direct feedback to CAN-ADAPTT team
- Participating in CAN-ADAPTT workshops
- Participating in Annual General Meeting(s)
- Providing feedback via the Guideline Discussion Board
- Applying for CAN-ADAPTT seed grants
- Contributing a tool or resource

CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

Provider, stakeholder and researcher input was collected via:

- Annual General Meetings (2 meetings held in November 1, 2009 and October 1, 2010 with 50-60 participants at each)
- Stakeholder meetings (n=118)
- Presentations/Workshops (n=39)
- Teleconferences/Webcasts (n=15)
- Online discussion board (posts, n=221)
- Member surveys (n=3)

The most significant and successful forum for soliciting members' comments, suggestions and recommendations regarding the guideline was at the Annual General Meetings.

### **GUIDELINE UPDATES**

An update of this guideline was not scheduled or required by our funder, Health Canada. Funding support of CAN-ADAPTT continues until March 2012. Dr. Peter Selby will seek funding opportunities to continue the work of CAN-ADAPTT including an update to the guideline.

# DISSEMINATION AND IMPLEMENTATION

Four regional coordinators representing Western Canada, Ontario, Quebec and Atlantic Canada provided information on the CAN-ADAPTT initiative, and collaborated with regional providers, researchers, policy makers and other stakeholders on guideline dissemination strategies. The guideline was disseminated to regional provider networks, at conferences and workshops, integrated into existing educational efforts, and summary articles were published in newsletters and journals.

CAN-ADAPTT members were encouraged to disseminate the guideline by e-mail, and to discuss the guideline with colleagues. Members have also been incorporating the guideline into training or educational sessions.

National and professional organizations have been promoting the guideline primarily through passive dissemination such as publishing articles in newsletters, and providing links to the CAN-ADAPTT Guideline on their websites.

The CAN-ADAPTT website provides a virtual networking space where CAN-ADAPTT members are invited to comment on the guideline, suggest smoking cessation tools and resources and identify additional research gaps. Any member can post to an existing subject thread or create a new discussion topic.

CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

### 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 <u>AGREE Instrument</u>. The recommendations contained in these high-quality CPGs have been used as the evidence base for the CAN-ADAPTT guideline development process.

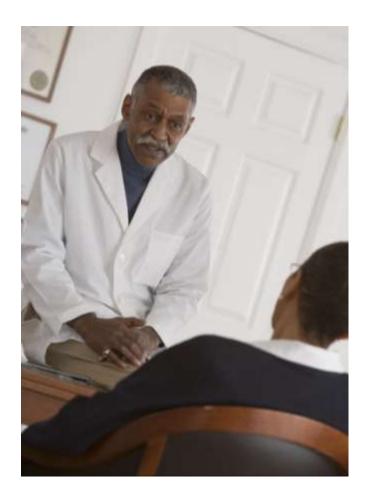
The strength of evidence classification for each of these existing CPGs can be found in <u>Appendix F</u>. Note that the grade of recommendation/strength of evidence summary table for CAN-ADAPTT's summary statements can be found in <u>Appendix B</u>.

### U.S. Department of Health and Human Services Public Health Service (2008)<sup>13</sup>

- All patients should be asked if they use tobacco and should have their tobacco use status documented on a regular basis. Evidence has shown that clinic screening systems, such as expanding the vital signs to include tobacco use status or the use of other reminder systems such as chart stickers or computer prompts, significantly increases rates of clinician intervention. (*Strength of Evidence = A*)
- Once a tobacco user is identified and advised to quit, the clinician should assess the patient's willingness to quit at this time. (*Strength of Evidence = C*) US: Tobacco dependence treatment is effective and should be delivered even if specialized assessments are not used or available. (*Strength of Evidence = A*) All physicians should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates. (*Strength of Evidence = A*)
- Minimal interventions lasting less than 3 minutes increase overall tobacco abstinence rates. Every tobacco user should be offered at least a minimal intervention, whether or not he or she is referred to an intensive intervention. (*Strength of Evidence = A*) There is a strong dose-response relation between the session length of person-toperson contact and successful treatment outcomes. Intensive interventions are more

# COUNSELLING AND PSYCHOSOCIAL APPROACHES

CAN-ADAPTT's Clinical Practice Guideline Development Group; Section Lead: Gerry Brosky, MD, CCFP





effective than less intensive interventions and should be used whenever possible. (*Strength of Evidence* = A) Person-to-person treatment delivered for four or more sessions appears especially effective in increasing abstinence rates. Therefore, if feasible, clinicians should strive to meet four or more times with individuals quitting tobacco use. (*Strength of Evidence* = A)

- Treatment delivered by a variety of clinician types increases abstinence rates. Therefore, all clinicians should provide smoking cessation interventions. (*Strength of Evidence* = *A*) Treatments delivered by multiple types of clinicians are more effective than interventions delivered by a single type of clinician. Therefore, the delivery of interventions by more than one type of clinician is encouraged. (*Strength of Evidence* = *C*)
- Proactive telephone counselling, group counselling, and individual counselling formats are effective and should be used in smoking cessation interventions. (*Strength of Evidence = A*) Smoking cessation interventions that are delivered in multiple formats increase abstinence rates and should be encouraged. (*Strength of Evidence = A*) Tailored materials, both print and Web-based, appear to be effective in helping people quit. Therefore, clinicians may choose to provide tailored self-help materials to their patients who want to quit. (*Strength of Evidence = B*)
- All patients who receive a tobacco dependence intervention should be assessed for abstinence at the completion of treatment and during subsequent contacts. (1) Abstinent patients should have their quitting success acknowledged, and the clinician should offer to assist the patient with problems associated with quitting. (2) Patients who have relapsed should be assessed to determine whether they are willing to make another quit attempt. (Strength of Evidence = C)
- Two types of counselling and behavioural therapies result in higher abstinence rates: (1) providing smokers with practical counselling (problem-solving skills/skills training), and (2) providing support and encouragement as part of treatment. These types of counselling elements should be included in smoking cessation interventions. (*Strength of Evidence* = *B*)
- The combination of counselling and medication is more effective for smoking cessation than either medication or counselling alone. Therefore, whenever feasible and appropriate, both counselling

and medication should be provided to patients trying to quit smoking. (*Strength of Evidence* = A) There is a strong relation between the number of sessions of counselling, when it is combined with medication, and the likelihood of successful smoking cessation. Therefore, to the extent possible, clinicians should provide multiple counselling sessions, in addition to medication, to their patients who are trying to quit smoking. (*Strength of Evidence* = A)

 Motivational intervention techniques appear to be effective in increasing a patient's likelihood of making a future quit attempt. Therefore, clinicians should use motivational techniques to encourage smokers who are not currently willing to quit to consider making a quit attempt in the future. (*Strength of Evidence = B*)

### New Zealand Ministry of Health (2007)<sup>14</sup>

- Ask about and document smoking status for *all* patients. For people who smoke or have recently stopped smoking, the smoking status should be checked and updated on a regular basis. Systems should be in place in *all* health care settings (medical centres, clinics, hospitals, etc.) to ensure that smoking status is accurately documented on a regular basis. (*Grade = A*)
- All doctors should provide brief advice to quit smoking at least once a year to *all* patients who smoke. (*Grade* = A) All other health care workers should also provide brief advice to quit smoking at least once a year to *all* patients who smoke. (*Grade* = B) Record the provision of brief advice in patient records. (*Grade* = C) Aim to see people for at least four cessation support sessions. (*Grade* = A)
- Health care workers providing evidencebased cessation support (that is, more than just brief advice) should seek appropriate training. (*Grade = C*) Health care workers trained as smoking cessation providers require dedicated time to provide cessation support. (*Grade = C*)
- Offer telephone counselling as an effective method of stopping smoking. People who smoke can be directed to Quitline (toll-free: 0800 778 778). (*Grade* = A) Providing face-to-face smoking cessation support either to individual patients or to groups of smokers is an effective method of stopping smoking. (*Grade* = A) Make self-help materials available, particularly those that are tailored to individuals, but such materials should not be the main focus of efforts to help people stop smoking. (*Grade* = √)

# Institute for Clinical Systems Improvement (ICSI) (2004)<sup>15</sup>

- Adults who have not used tobacco for at least 12 months and who have an easily visible mark on their chart to that effect should be asked about their tobacco use status yearly until abstinent for five years. Everyone without a tobacco use mark on the chart or those with a mark indicating use within the past six months should be asked at nearly every visit. (*Class = A, C, D, M, R*)
- Ask a tobacco user who is ready to quit to set his/her own quit date. (*Class* = *C*, *R*)
- All discussions with tobacco users should be documented. (*No Grade*)
- Consideration may also be given to making a referral to a tobacco cessation consultant or a center with programs in tobacco cessation. Other resources include local tobacco cessation classes, community support systems, and self-help brochures and materials from drug companies. (*Class = A*)
- Compliment and reinforce non-use in former tobacco users. (*Class* = *R*)
- The first 12 months after quitting (especially the first two weeks) is when one is at the highest risk for relapse. Follow-up options include a face-to-face, telephone, or mailed (postal or electronic)
- expression of support and willingness to help.
   (*Class* = M)
- A pre-contemplator (a user not ready to consider quitting within the next six months) benefits from non-confrontational messages about the importance of quitting and the awareness that provider help is available when ready.
   (No Class)
- A contemplator (who will consider quitting within the next 1-6 months) is accepting of supportive urging to quit and encouragement of a plan. (*Class* = *C*, *R*)

### *Registered Nurses Association of Ontario (RNAO)* (2007)<sup>16</sup>

- Nurses implement minimal tobacco use intervention using the "Ask, Advise, Assist, Arrange" protocol with all clients. (Strength of Evidence =A)
- Nurses introduce intensive smoking cessation intervention (more than 10 minutes duration) when their knowledge and time enables them to engage in more intensive counselling. (*Strength of Evidence =A*)
- Nurses recognize that tobacco users may relapse several times before achieving abstinence and need to re-engage clients in the smoking cessation process.
  - (Strength of Evidence = B) Nurses should be knowledgeable about
- community smoking cessation resources, for referral and follow-up. (Strength of Evidence = C)
- Nurses encourage persons who smoke, as well as those who do not, to make their homes smoke-free, to protect children, families and themselves from exposure to second-hand smoke. (*Strength of Evidence = A*)



# CAN-ADAPTT SUMMARY STATEMENTS

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 Counselling and Psychosocial Approaches.

### SUMMARY STATEMENT #1

ASK: Tobacco use status should be updated, for all patients/clients, by all health care providers on a regular basis.

### **GRADE\*: 1A**

### **SUMMARY STATEMENT #2**

ADVISE: Health care providers should clearly advise patients/clients to quit.

### **GRADE\*: 1C**

### **SUMMARY STATEMENT #3**

ASSESS: Health care providers should assess the willingness of patients/clients to begin treatment to achieve abstinence (quitting).

### GRADE\*: 1C

### **SUMMARY STATEMENT #4**

ASSIST: Every tobacco user who expresses the willingness to begin treatment to quit should be offered assistance.

### GRADE\*: 1A

a) Minimal interventions, of 1-3 minutes, are effective and should be offered to every tobacco user. However, there is a strong dose-response relationship between the session length and successful treatment, and so intensive interventions should be used whenever possible.

### **GRADE\*: 1A**

b) Counselling by a variety or combination of delivery formats (self-help, individual, group, helpline, web-based) is effective and should be used to assist patients/clients who express a willingness to quit.

### **GRADE\*: 1A**

c) Because multiple counselling sessions increase the chances of prolonged abstinence, health care providers should provide four or more counselling sessions where possible.

### **GRADE\*: 1A**

 d) Combining counselling and smoking cessation medication is more effective than either alone, therefore both should be provided to patients/clients trying to stop smoking where feasible.

### GRADE\*: 1A

e) Motivational interviewing is encouraged to support patients/clients willingness to engage in treatment now and in the future.

GRADE\*: 1B



### SUMMARY STATEMENT #4 (Cont'd)

 f) Two types of counselling and behavioural therapies yield significantly higher abstinence rates and should be included in smoking cessation treatment: 1) providing practical counselling on problem solving skills or skill training and 2) providing support as a part of treatment.

GRADE\*: 1B

### **SUMMARY STATEMENT #5**

ARRANGE: Health care providers:

a) should conduct regular follow-up to assess response, provide support and modify treatment as necessary.

### **GRADE\*: 1C**

b) are encouraged to refer patients/clients to relevant resources as part of the provision of treatment, where appropriate.

### **GRADE\*: 1A**

<sup>\*</sup> GRADE: See <u>Appendix B</u> for Grade of Recommendation and Level of Evidence Summary Table.

### CLINICAL CONSIDERATIONS



- Health care providers should be encouraged to ask about all forms of tobacco use including tobacco that is smoked (cigarettes, cigarillos, cigars, blunts, pipe, shisha, hookah, electronic cigarette) and smokeless (chewing tobacco, dipping tobacco, dissolvable tobacco, snus, snuff). This can be best asked by "Have you used **any form of tobacco** in the past six months?"
- A systematic approach to asking about tobacco use is best. Documenting tobacco status can involve medical questionnaires, stickers on client charts, electronic health records, chart reminders or through computer reminder systems.
- Encourage smoke-free homes, including skills to modify habits in order to minimize, avoid and/or counter triggers.
- Health care providers functioning within a team should be encouraged to discuss their smoking cessation strategy for their practice to ensure consistent application and to increase effectiveness.
- Evidence demonstrates that tobacco dependence treatment can be effective and should be considered even where specialized assessments are not used or available.
- Where appropriate, counselling can be delegated by arranging for referral, when barriers to the provision of counselling exist (i.e. limited time, resources, staff etc.). There are effective programs available to support health care providers and their patients/clients (see <u>Tools/Resources</u> <u>Section</u>).
- All health care providers should be encouraged to obtain training in cessation counselling.
- Education of health care providers and patients should have consistent messaging, align tools and services to serve both targets. This includes addressing collaboration across the continuum of care (i.e. clinical or community setting) and across disciplines.

# TOOLS/RESOURCES



RESOURCE	DETAILS
5A's Tools	<ul> <li><u>PREGNETS: The 5A's Tool</u></li> <li><u>Ontario Medical Association: Clinical Tobacco Intervention: Smoking Cessation</u> <u>Guideline Flow Sheet</u></li> <li><u>TRac (Tobacco Reduction and Cessation) Safety Sensitive Algorithm</u></li> </ul>
AlbertaQuits.ca	Comprehensive online quit smoking service with access to counselling, self- assessments, medication guide, international community, and forums
<u>Centre for Addiction and</u> <u>Mental Health (CAMH)</u> <u>Nicotine Dependence Clinic</u>	• This clinic offers service to smokers and tobacco users who want to quit or reduce their tobacco use. It also provides specialized treatment services for smokers who are pregnant and for people with other substance use issues, chronic mental illness and serious health concerns.
<u>Cost of smoking calculator</u> (Canadian Cancer Society)	Online tool to calculate the cost of smoking.
Decisional Balance Sheet	<ul> <li>A tool designed to facilitate a discussion between care providers and patients/clients about the pros and cons of substance use.</li> </ul>
Fagerström Test for Nicotine Dependence	A validated tool for assessing initial dosing of NRT patches.
<u>Motivational Interviewing</u> <u>Website</u>	These pages provide background information on the practice of Motivational Interviewing.
<u>On the Road to Quitting:</u> <u>Guide to becoming a non-</u> <u>smoker</u>	<ul> <li>This guide will help individuals prepare and take action to successfully stop smoking.</li> </ul>
One Step at a time Series (Canadian Cancer Society)	<ul> <li>For smokers who want to quit (<u>English</u> / <u>French</u>)</li> <li>For smokers who don't want to quit (<u>English</u> / <u>French</u>)</li> <li>If you want to help a smoker quit (<u>English</u> / <u>French</u>)</li> </ul>
<u>Ontario Tobacco Research</u> <u>Unit Online Course –</u> <u>Cessation Module</u>	<ul> <li>Free online course</li> <li>Cessation module deals with the complexities of quitting smoking, the roles that nicotine addiction and motivation play in the quitting process, and best practices for smoking cessation.</li> </ul>
Partnership to Assist with Cessation of Tobacco (PACT)	• Smoking cessation workshops provided free of charge to groups, facilities and health regions with funding from Saskatchewan Health.
Program Training and Consultation Centre (PTCC)	<ul> <li>Online information and training on brief tobacco interventions for health professionals Variety of minimal contact tobacco trainings available. Free of charge.</li> </ul>
<u>Q.U.I.T.: Quit Using and</u> Inhaling Tobacco	<ul> <li>Canadian Pharmacists Association resource.</li> <li>QU.I.T. is a continuing education program, available in both live and online formats, that trains pharmacists to expand their role in patient care and offer smoking cessation services in their pharmacy.</li> </ul>

RESOURCE		DETAILS	
Smokers' Helpline Online	<ul> <li><u>Alberta</u></li> <li>1-866-332-2322 (English)</li> <li><u>Fax Referral form</u></li> </ul>	<ul> <li>British Columbia         <ul> <li>1-877-455-2233 (English, French + 121 other languages)</li> <li>QuitNow.ca                 <ul> <li>Fax Referral form</li> <li>Helping Women Quit Guide</li> </ul> </li> </ul> </li> </ul>	<ul> <li><u>Manitoba</u> <ul> <li>1-877-513-5333 (English, French)</li> <li><u>Fax Referral form</u></li> </ul> </li> </ul>
	<ul> <li><u>Newfoundland and</u> <u>Labrador</u></li> <li>1-800-363-5864 (English)</li> <li><u>CARE program</u> (Community Action and Referral Effort) and <u>fax referral</u> form</li> </ul>	<ul> <li><u>New Brunswick</u> <ul> <li>1-877-513-5333 (English, French)</li> <li><u>Fax Referral</u> program and form</li> <li><u>Personalized Quit</u> <u>Plan: Tear Off</u> <u>Pads</u></li> </ul> </li> </ul>	<ul> <li>Northwest Territories</li> <li>1-866-286-5099</li> </ul>
	<ul> <li><u>Nova Scotia</u> <ul> <li>1-877-513-5333 (English, French)</li> <li><u>Fax Referral form</u></li> </ul> </li> </ul>	<ul> <li>Nunavut</li> <li>1-866-368-7848</li> </ul>	<ul> <li><u>Ontario</u> <ul> <li>1-877-513-5333 (English, French, Interpreter service)             </li> <li><u>Fax Referral form</u></li> </ul> </li> </ul>
	<ul> <li><u>PEI</u> <ul> <li>1-877-513-5333 (English, French)</li> <li><u>Fax Referral form</u></li> </ul> </li> </ul>	<ul> <li><u>Quebec</u> <ul> <li>1-866-527-7383 (French, English)</li> </ul> </li> </ul>	<ul> <li><u>Saskatchewan</u></li> <li>1-877-513-5333 (English, French)</li> <li><u>Fax Referral form</u></li> </ul>
	<ul> <li>Yukon</li> <li>1-877-513-5333</li> </ul>		
Smoking Diary	<ul> <li>A tool for tracking ongoin reduce or quit smoking. their smoking behaviour.</li> </ul>	The tool is intended to enha	lients are attempting to ance patients' awareness of
Stages of Change Diagram	Diagram illustrating Prochaska and DiClemente's Stages of Change Model		
<u>TEACH (Training</u> <u>Enhancement in Applied</u> <u>Cessation Counselling and</u> <u>Health) Program</u>	<ul> <li>TEACH is geared toward training health care professionals providing counselling services to tobacco users. The program is designed to enhance knowledge and skills in the delivery of intensive tobacco cessation interventions, including detection and treatment of people with concurrent tobacco dependence and mental health and/or addictive disorders and motivational interviewing.</li> <li>Training program for health care professionals on tobacco cessation interventions</li> </ul>		
TRaC (Tobacco Reduction & Cessation) Training	Training to help build cap cessation treatment	pacity of health professional	ls in providing smoking

### RESEARCH GAPS



- When should the topic of smoking be raised if a patient/client is dealing with multiple stressors? When is the optimal time to advise someone to quit and how does a professional recognize this "optimal time"?
- Social network research and how this can be used in practice
- Research on the social impact of smoking withdrawal (what has been successful in assisting people to maintain their social network?)
- Effectiveness/efficacy of interventions and referrals to programs
- Effectiveness of alternative treatments (i.e. hypnosis, laser therapy)
- The frequency and timing of health professional interventions when it comes to the effectiveness of brief provider interventions, by more than one type of health care provider.



CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

### 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 <u>AGREE Instrument</u>. The recommendations contained in these high quality CPGs have been used as the evidence base for the CAN-ADAPTT guideline development process.

The strength of evidence classification for each of these existing CPGs can be found in <u>Appendix F</u>. Note that the grade of recommendation/strength of evidence summary table for CAN-ADAPTT's summary statements can be found in <u>Appendix B</u>.

### New Zealand Ministry of Health (2007)<sup>14</sup>

- Offer Ma<sup>-</sup>ori who smoke cessation support that incorporates known effective components (such as medication). (*Grade of Evidence* = √)
- Where available, offer culturally appropriate cessation services to Ma<sup>-</sup> ori. (*Grade of Evidence = C*)
- Health care workers should be familiar with the cessation support services for Ma<sup>-</sup> ori that are available in their area (such as local Aukati Kai Paipa providers) and nationally (such as Quitline) so they can refer appropriately.
   (Grade of Evidence = √)
- Health care workers providing cessation support to Ma<sup>-</sup>ori should seek training in how to deliver smoking cessation treatment to Ma<sup>-</sup> ori. (*Grade of Evidence* = √)

# SPECIFIC POPULATIONS: Aboriginal Peoples<sup>†</sup>

CAN-ADAPTT's Clinical Practice Guideline Development Group; Section Lead: Sheila Cote-Meek, BScN, MBA, PhD

<sup>&</sup>lt;sup>†</sup> Aboriginal peoples is used as an inclusive term which includes First Nations (both on and off reserve), Inuit, and Métis. This is not meant to take away from the diversity that exists among Aboriginal peoples



## BACKGROUND

It should be recognized by healthcare providers that tobacco has played an important part in traditional and spiritual practices in many Aboriginal communities. Traditionally tobacco was used by many First Nations for ceremonial and medicinal purposes and is still practiced across many First Nations.

However, it is well documented that mis-use/abuse of tobacco is of growing concern not only to the general Canadian population, but as well as to First Nations. For example, studies have demonstrated that smoking rates amongst First Nations peoples are more than double that of the general Canadian population. Furthermore, it has been documented that within First Nations populations, there are instances of smoking beginning as early as 6-8 years with an increase in uptake between the ages of 10-12, and peaking at 16 years of age. The relevance of targeting children/youth within this population is therefore evident.

Not only are rates of smoking higher in this population, but the poorer health status of First Nations people in Canada has also been well documented in the literature which together points to significantly higher rates of smoking related illnesses in this population.

There is limited evidence available demonstrating effective strategies for smoking cessation within Aboriginal populations. It should be noted that this does not suggest weak evidence of effective strategies within this population, but rather, a limited amount of research available (see <u>Research Gaps</u> section). However, generally those strategies which are effective for the general Canadian population should be considered effective within Aboriginal peoples. One recent Canadian study provides evidence that quitlines are an effective option for Aboriginal populations<sup>17</sup>.

Cultural adaptations should also be considered to tailor interventions for this population. Similarly, all interventions must consider the spiritual and traditional role within the culture and acknowledge other barriers to smoking cessation with the First Nations population such as the concurrent high rates of drug use and alcohol consumption.

## CAN-ADAPTT SUMMARY STATEMENTS

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 Aboriginal Peoples.

### **SUMMARY STATEMENT #1**

Tobacco misuse<sup> $\Delta$ </sup> status should be updated for all Aboriginal peoples by all health care providers on a regular basis.

### **GRADE\*: 1A**

### **SUMMARY STATEMENT #2**

All health care providers should offer assistance to Aboriginal peoples who misuse tobacco with specific emphasis on culturally appropriate methods.

**GRADE\*: 1C** 

### **SUMMARY STATEMENT #3**

All health care providers should be familiar with available cessation support services for Aboriginal peoples.

### **GRADE\*: 1C**

### **SUMMARY STATEMENT #4**

All individuals working with Aboriginal peoples should seek appropriate training in providing evidence-based smoking cessation support.

### **GRADE\*: 1C**

\* GRADE: See Appendix B for Grade of Recommendation and Level of Evidence Summary Table.

<sup>&</sup>lt;sup>A</sup> Tobacco misuse does not refer to tobacco use for traditional/ceremonial purposes.

# CLINICAL CONSIDERATIONS



- The Guideline Development group found that there was a significant gap in the research on Aboriginal peoples and tobacco misuse. Guidelines developed in New Zealand were utilized recognizing that these guidelines also require further research. Despite the lack of research there is evidence that there is a disproportionate burden of tobacco use amongst Aboriginal peoples. For example, youth uptake of tobacco is at a much earlier age than that of the general Canadian population (See <u>Youth Section</u>).
- It should be emphasized that providers should recognize and distinguish between use of traditional (ceremonial/sacred) tobacco and misuse of commercial tobacco. Therefore assessment and questions need to be conducted with care and respect for this difference.
- Health care practitioners should work with community members including health care providers, community health representatives, caregivers, elders and other leaders where possible, to deliver smoking cessation interventions for Aboriginal peoples. There are a growing number of materials and methods to assist with tobacco cessation and prevention that have been developed and/or adapted for Aboriginal peoples. (see <u>Tools/</u><u>Resources Section</u>).
- Efforts should also be made to identify, engage and understand the range of resources available to provide appropriate referrals and connectivity to the Aboriginal community. For example, local First Nations communities, urban Aboriginal programs, Friendship Centres etc. (see <u>Tools/Resources Section</u>).
- In general, interventions that have been proven to be effective in the general population are also likely to be effective for these population groups. However, the manner in which these interventions are delivered may need to be adapted for each group in order to be as acceptable, accessible and appropriate as possible. Therefore, tools and strategies that have been developed for other populations should be tailored appropriately with a full understanding of the context, barriers, and possible approaches when providing care to Aboriginal peoples within practice settings.
- Practitioners should recognize the heterogeneity of individuals and communities within the Aboriginal population and tailor interventions appropriately.





# TOOLS/RESOURCES



TITLE	DESCRIPTION
Cancer Care Ontario: Aboriginal Tobacco Program (ATP)  Program brochure Flu Shot and Tobacco Use Tobacco-Wise Fact Sheet Commercial Tobacco Fact Sheet Poster Series	<ul> <li>Materials developed by Cancer Care Ontario that tell you all about the dangers of commercial tobacco and the sacred meaning of tobacco.</li> </ul>
Inuit Tobacco-free Network (ITN)	<ul> <li>The Inuit Tobacco-free Network aims to keep Inuit health workers and their colleagues up-to-date on tobacco reduction resources, research and events.</li> </ul>
<ul> <li>Kicking the Addiction:</li> <li>Facilitators Guide: Helping People to Live Smoke- Free in First Nations Communities</li> <li>Choosing to Quit Z Card</li> </ul>	<ul> <li>Facilitator's guide introduces the "Stages of Change" Model and provides an overview of the 5A's (Ask, Advise, Assess, Assist and Arrange).</li> <li>Z card: A tool to help providers discuss benefits of quitting and quit tips with First Nations individuals.</li> <li>Available via Health Canada: 1(866) 318-1116 or tcp- plt.questions@hc-sc.gc.ca</li> </ul>
<ul> <li>National Association of Friendship Centres (NAFC)</li> <li>Locations: Alberta; British Columbia; Manitoba; Labrador; St. John's; Fort Smith; Rankin Inlet; Ontario; Quebec; Saskatchewan; Yukon</li> </ul>	• NAFC Acts as a central unifying body for the Friendship Centre Movement: to promote and advocate the concerns of Aboriginal Peoples and represents the needs of local Friendship Centres across the country to the federal government and to the public in general.
<ul> <li>National Indian &amp; Inuit Community Health Representatives Organization (NIICHRO)</li> <li>Tobacco Cessation Strategies During Pregnancy and Motherhood (\$25)</li> <li>Taking the Lead for Change (\$100)</li> <li>Protecting Our Families: The Non-Traditional Use of Tobacco (\$75)</li> </ul>	<ul> <li>Pregnancy Resource: Facilitators Guide only</li> <li>Taking the Lead for Change: Includes a training manual to assist CHRs with tobacco cessation programs and education as well as a video, activity book and flip chart.</li> <li>Protecting Our Families: Includes a manual, discussion guide for schools or community groups, video and audiocassettes</li> <li>All resources can be ordered via NIICHRO (450) 632-0892 or this order form</li> </ul>
<ul> <li>NECHI: Training, Research and Health Promotions Institute</li> <li>Integrated Tobacco Recovery for Urban Aboriginals Adults and Adolescents</li> <li>Tobacco: addiction &amp; recovery – a spiritual journey</li> </ul>	<ul> <li>The Nechi Training, Research and Health Promotions Institute offers specialized training to addictions counsellors working in Aboriginal communities</li> <li>Culturally appropriate self-help guides to smoking cessation</li> <li>Resources available via (780) 459-1884</li> </ul>
• Tobacco Interventions with Aboriginal Peoples	Training course for healthcare professionals who provide counselling services to people who use tobacco.
<ul> <li>Wabano Centre for Aboriginal Health:</li> <li>Culture as Treatment - "Mino-Babamadizin - A Good Healthy Journey</li> </ul>	<ul><li>An Aboriginal Children's Smoking Prevention Program</li><li>Resource available online</li></ul>

## RESEARCH GAPS



- Methods to integrate traditional practices and spirituality into tobacco use interventions
- Identify and evaluate programs in the Aboriginal population to determine which interventions are effective
- Research effective dissemination practices
- Gather surveillance data at the local/regional levels and with off-reserve, non-status and Métis



CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

## 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 <u>AGREE Instrument</u>. The recommendations contained in these high-quality CPGs have been used as the evidence base for the CAN-ADAPTT guideline development process.

The strength of evidence classification for each of these existing CPGs can be found in <u>Appendix F</u>. Note that the grade of recommendation/strength of evidence summary table for CAN-ADAPTT's summary statements can be found in <u>Appendix B</u>.

### U.S. Department of Health and Human Services Public Health Service (2008)<sup>13</sup>

• 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)<sup>16</sup>

- 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.

# SPECIFIC POPULATIONS: Hospital-Based Populations

CAN-ADAPTT's Clinical Practice Guideline Development Group; Section Lead: Robert Reid Ph.D., MBA



 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)<sup>14</sup>

- 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)
- 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*)



# 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 <sup>18</sup>.

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<sup>19</sup>. 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<sup>19</sup>.

Furthermore, with the prevalence of hospital smokefree 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<sup>20</sup> and has been implemented in nearly 70 sites across Canada to date<sup>21</sup>.

## CAN-ADAPTT SUMMARY STATEMENTS

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 posthospitalization to promote long term cessation.

**GRADE\*: 1B** 

\* GRADE: See <u>Appendix B</u> for Grade of Recommendation and Level of Evidence Summary Table

# CLINICAL CONSIDERATIONS



### 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 <u>Ottawa</u> <u>Model</u>.
- 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 postdischarge, existing evidence suggests at least one month <sup>19</sup>, 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.

### **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 <u>Centre for Addiction and Mental Health</u>
- 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.



# TOOLS/RESOURCES



TITLE	DESCRIPTION	RESOURCE
Ottawa Model for Smoking Cessation	<ul> <li>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.</li> <li>Three Centres of Excellence for Clinical Smoking Cessation established:         <ul> <li>New Brunswick's Horizon Health Network in Eastern Canada;</li> <li>Vancouver Coastal Health in British Columbia, and;</li> <li>The University of Ottawa Heart Institute in Ontario Training available in Ottawa)</li> </ul> </li> </ul>	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/Prev ention/tobacco/ssbs.htm
Stop smoking for Safer Surgery	<ul> <li>Ontario's Anaesthesiologists' Stop Smoking for Safer Surgery is a province-wide patient awareness campaign about the benefits of stopping smoking prior to surgery.</li> </ul>	http://www.ontarioanesthesiologists. ca/stop-smoking-safe-surgery/

# **RESEARCH GAPS**



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

CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

### OVERVIEW OF EVIDENCE

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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 <u>AGREE Instrument</u>. The recommendations contained in these high-quality CPGs have been used as the evidence base for the CAN-ADAPTT guideline development process.

The strength of evidence classification for each of these existing CPGs can be found in <u>Appendix F</u>. Note that the grade of recommendation/strength of evidence summary table for CAN-ADAPTT's summary statements can be found in <u>Appendix B</u>.

### New Zealand Ministry of Health (2007)<sup>14</sup>

- Provide brief advice to stop smoking to all users of mental health services who smoke. (*Grade = A*) Offer smoking cessation interventions that incorporate known effective components (such as those identified in the previous sections) to people with mental health disorders who smoke. (*Grade =* √) People with mental health disorders who stop smoking while taking medications for their illness should be monitored to determine if dosage reductions in their medication are necessary. (*Grade = A*)
- Provide brief advice to stop smoking to all users of addiction services who smoke. (*Grade* = A) Offer smoking cessation interventions that incorporate known effective components (such as those identified in the previous sections) to people who smoke tobacco and who use addiction services. (*Grade* =  $\sqrt{$ )

#### U.S. Department of Health and Human Services Public Health Service (2008)<sup>13</sup>

• Psychiatric comorbidity and substance use are variables associated with lower abstinence rates, but treatment can be effective despite the presence of risk factors for relapse. All smokers with psychiatric disorders, including substance use disorders, should be offered tobacco dependence treatment, and clinicians must overcome their reluctance to treat this

## SPECIFIC POPULATIONS: Mental Health and/or Other Addiction(s)

CAN-ADAPTT's Clinical Practice Guideline Development Group;

Section Leads: Charl Els, MBChB, FCPsych, MmedPsych (cum laude), ABAM, MROCC; and Peter Selby, CCFP, FCFP, MHSc, Dip ABAM

Acknowledgments:

Pamela Kaduri, MD Mmed(psych): Reviewed and advised on background and clinical considerations, following confirmation of the summary statements by the Guideline Development Group.



population. Clinicians should closely monitor the level or effects of psychiatric medications in smokers making a quit attempt. (*no Grade assigned*)

### BACKGROUND

#### PREVALENCE

People with mental illness are two to four times more likely to smoke, are heavier smokers, smoke more numbers of cigarettes per day, and have lower quit rates compared to smokers from the general population<sup>22,23</sup>.

Prevalence of smoking among those diagnosed with mental disorders has been well documented. Smoking rates, differing by diagnoses, vary between 40 to 90%, compared to 17% in the general Canadian population<sup>24</sup>. Studies have shown smoking rates amongst people suffering from the following disorders: bipolar disorder 51 to 70%; major depressive disorder 40 to 60%; anxiety disorders 8 to 66%<sup>25</sup> Smoking prevalence for persons with schizophrenia has been found to be considerably high, ranging from 45 to 88%<sup>25</sup>. The burden in morbidity and mortality due to high smoking rates among the mentally ill and addicted clients is alarming; this population suffers disproportionately from smoking related disabilities and this causes great financial burden to the heath care system. It appears that the mentally ill and addicted population are more likely to suffer from various physical problems such as cardiovascular, lung diseases, and diabetes<sup>26</sup>, and tend to die much earlier than the general population<sup>27</sup>.

Similarly, smoking prevalence within substance abuse/addicted populations is also high; people reporting substance abuse problems have higher smoking prevalence than the general population, with nearly 50% having nicotine dependence<sup>28</sup>. Rates ranging from 11 to 48% have been found for those who abuse alcohol, cannabis, cocaine, amphetamines and opioids<sup>28</sup>.

There are various factors contributing to higher smoking rates among people with mental illness and/or addictions including social, environmental and biological factors. Self medication theory, shared genetic vulnerability and pathophysiological mechanisms may provide some explanations for high rates of comorbidity. Nicotine triggers release of various neurotransmitters involved in some psychiatric disorders and are associated with the reinforcement effects of some addictive substances<sup>29</sup>. Consequently, people with mental illness may smoke for various reasons including to self medicate the effects of their illness<sup>29</sup>.

The high smoking rates among those with mental illness and/or other addictions translate into more widespread health consequences and deaths due to smoking among this group<sup>30</sup>. People with mental health and addictive disorders who smoke also face enormous economic and social challenges. Studies have also shown that up to 27% of their disability and social may be spent on tobacco products<sup>31</sup>.





### NEED FOR EFFECTIVE AND SPECIALIZED TREATMENT

Smokers experience negative nicotine withdrawal symptoms when they stop smoking. These withdrawal symptoms are more pronounced in smokers who suffer from mental illness or have other addictions when they stop smoking. Some studies, for example, have found that nicotine withdrawal can mimic or worsen psychiatric disorders, although other studies have not confirmed this<sup>22</sup>. Smoking cessation may also aggravate medication side-effects<sup>33</sup>. This means that clients on some psychotropic medications must be reviewed by health care professionals when quitting smoking, as they may need adjustment in their medication dosages in order to avoid drug toxicities due to increased drug levels in the blood<sup>29</sup>. Thus close monitoring of the amount smoked, cessation treatment, medication side effects and psychiatric symptoms becomes important when addressing tobacco dependence treatment in populations with psychiatric disorders.

Historically, the culture of tobacco use has been ingrained in the mental health and addictions fields with cigarettes having been used as reinforcement for compliant behaviour and enhancing social activity among individuals with mental illness<sup>34</sup>. This common practice in most mental health institutions and residential programs poses great challenges in addressing tobacco use problems in such settings. However, studies have shown that mentally ill clients are interested in quitting smoking<sup>35</sup>, and are able to quit with successful rates<sup>36</sup>. This means that tobacco use interventions should be an integral part of the comprehensive mental health care delivery system.

### CAN-ADAPTT SUMMARY STATEMENTS

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### **SUMMARY STATEMENT #1**

Health care providers should screen persons with mental illness and/or addictions for tobacco use.

### **GRADE\*: 1A**

### **SUMMARY STATEMENT #2**

Health care providers should offer counselling and pharmacotherapy treatment to persons who smoke and have a mental illness and/or addiction to other substances.

### **GRADE\*: 1A**

### **SUMMARY STATEMENT #3**

While reducing smoking or abstaining (quitting), health care providers should monitor the patients'/clients' psychiatric condition(s) (mental health status and/or other addiction(s)). Medication dosage should be monitored and adjusted as necessary.

#### **GRADE\*: 1A**

\* GRADE: See <u>Appendix B</u> for Grade of Recommendation and Level of Evidence Summary Table.

#### CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

### CLINICAL CONSIDERATIONS



#### SCREEN

- An equally accurate term for 'screening' may be 'case finding' given the prevalence of tobacco use among persons with mental health diagnosis and/or addiction(s).
- The term 'addictions' refers to those addicted to substances other than nicotine.
- Asking about tobacco use should be an integral part of a routine medical, mental health and addiction screening in both ambulatory and inpatient settings.
- Due to the high prevalence of concurrent mental illness and addiction, all patients/clients should be screened for underlying, non-debilitating, undiagnosed mental health challenges.
- Conducting regular, brief screenings for mood changes is encouraged since it may affect quitting and can be part of withdrawal, grief over loss of identity as a smoker, or emergence of a depressive disorder.

#### **OFFER PHARMACOTHERAPY/COUNSELLING**

- It should be noted that no pharmacotherapy has been contraindicated in persons with mental illness unless medically contraindicated.
- Pharmacotherapy and counselling approaches yield greater success rates than providing either pharmacotherapy or counselling approach alone.
- Recently there have been advisories from Health Canada regarding the need for vigilance for neuropsychiatric side effects when quitting smoking especially when assisted by bupropion SR<sup>37</sup> or varenicline<sup>38</sup>.
- Recognize that involuntary abstinence from tobacco that occurs when smoker patients are admitted to smoke free facilities requires management with an agonist at sufficient doses.
- The withdrawal/anxiety experienced by persons abstaining from smoking should be recognized and addressed, especially in acute care facilities.
- Health care providers who work with patients with mental health and/or addiction should not promote smoking, provide cigarettes or smoke with clients.

• Employers of health care professionals who smoke should offer smoking cessation treatment to their employees.

#### MONITOR

- Consider that persons with mental illness and/or addiction(s) who smoke might need higher doses of nicotine replacement therapy.
- Pharmacotherapy use may be required for a longer duration for persons with mental illness and/ or addiction(s).
- Flexibility in the quit date can be tailored to individual needs.
- Assess for interactions with medications used for treating comorbid conditions.
- Since caffeine levels can rise significantly when quitting smoking, caffeine intake needs to be monitored.
- Dose adjustments usually downwards may be needed if client is on psychotropics (especially clozapine and olanzepine) that are affected by smoking cessation.
- Clients' psychiatric symptoms throughout the quitting process should be monitored.
- Clients should be encouraged to live in smoke free settings in the community.

#### **FOLLOW-UP**

- Clients should be followed by a health care provider during the quitting process.
- Referral to appropriate healthcare services (community, program referral, other team members) for management/treatment and follow-up can be considered when one is unable to offer the service.
- In-patient staff should be aware of community resources to support cessation and address nicotine dependence especially on discharge into community settings.

#### **RESOURCES FOR HEALTHCARE PROVIDERS**

• Treatment facilities staff should increase their understanding of mental health/addiction and nicotine dependence to effectively offer cessation and to address stigma attached to mental illness and/or addiction.



#### **ADDITIONAL CONSIDERATIONS**

- Given the culture of mental health and addictions treatment facilities where staff often smoked and thereby, clients' smoking behaviour was sustained, these facilities must address smoking in their policies. For example, by becoming smoke-free indoors and where possible on the facility's grounds.
- All healthcare providers and staff in a practice setting or treatment facilities should be offered smoking cessation treatment.
- Financial resources for this "longer and stronger" counselling and/or pharmacotherapy are necessary. Persons with mental illness and/or addictions, due to a likelihood of lower disposable income and proportionally higher spending on tobacco, may especially benefit from subsidized pharmacotherapy, in sufficient dose and duration.
- Limit out-of-pocket costs to smokers with mental illness and/or addictions to improve outcomes.

### TOOLS/RESOURCES



TITLE	DESCRIPTION
Canadian Mental Health Association	Provides resources for various mental health conditions
Canadian Psychiatry Association	<ul> <li>This national professional association provides clinical practice guidelines on various mental health conditions and other resources.</li> </ul>
Nicotine Dependence Clinic (Centre for Addiction and Mental Health)	<ul> <li>This clinic offers service to smokers and tobacco users who want to quit or reduce their tobacco use. It also provides specialized treatment services for smokers with other substance use issues, chronic mental illness and serious health concerns.</li> <li>No referral is required</li> </ul>
<u>TEACH Program</u>	<ul> <li>Tobacco Interventions for patients with mental health and/or addictive disorders</li> <li>Offers a specialized course about the detection and treatment of concurrent tobacco dependence and mental health and/or addictive disorders.</li> </ul>
Here to Help	• A partnership of seven leading mental health and addictions non-profit agencies working to help people prevent and manage mental health and substance use problems. Work is funded by the BC Mental Health and Addiction Services.

### **RESEARCH GAPS**



- NRT to assist with reducing to quit, high dose off label use and combination NRT in this population.
- Safety and efficacy of varenicline in this patient population.
- Efficacy of free pharmacotherapy for smoking cessation in psychiatric patients including those currently taking psychiatric medication.
- Monitoring for consequences of long-term use of smoking cessation medication.
- Whether approaches or interventions should be tailored to different levels of mental health and addiction services (e.g. crisis, first psychosis, etc.).
- Establish the efficacy and safety of concurrent or sequential quitting of tobacco use in addiction treatment settings.

CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

### OVERVIEW OF EVIDENCE

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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 <u>AGREE Instrument</u>. The recommendations contained in these high quality CPGs have been used as the evidence base for the CAN-ADAPTT guideline development process.

The strength of evidence classification for each of these existing CPGs can be found in <u>Appendix F</u>. Note that the grade of recommendation/strength of evidence summary table for CAN-ADAPTT's summary statements can be found in <u>Appendix B</u>.

#### U.S. Department of Health and Human Services Public Health Service (2008)<sup>13</sup>

- Because of the serious risks of smoking to the pregnant smoker and the fetus, whenever possible pregnant smokers should be offered person-to-person psychosocial interventions that exceed minimal advice to quit. (*Strength of Evidence = A*)
- Although abstinence early in pregnancy will produce the greatest benefits to the fetus and expectant mother, quitting at any point in pregnancy can yield benefits. Therefore, clinicians should offer effective tobacco dependence interventions to pregnant smokers at the first prenatal visit as well as throughout the course of pregnancy. (Strength of Evidence = B)

### New Zealand Ministry of Health (2007)<sup>14</sup>

- Offer all pregnant and breastfeeding women who smoke multi-session behavioural smoking cessation interventions from a specialist/dedicated cessation service. (*Grade=A*)
- All health care workers should briefly advise pregnant and breastfeeding women who smoke to stop smoking. (*Grade = A*)
- NRT can be used in pregnancy and during breastfeeding following a risk-benefit assessment. If NRT is used, oral NRT products (for example, gum, inhalers, microtabs and lozenges) are preferable to nicotine patches. (*Grade=C*)

# SPECIFIC POPULATIONS: Pregnant & Breastfeeding Women

CAN-ADAPTT's Clinical Practice Guideline Development Group; Section Lead: Alice Ordean, MD, CCFP, MHSc



### Registered Nurses Association of Ontario (2007)<sup>16</sup>

 Nurses implement, wherever possible, intensive intervention with women who are pregnant and postpartum. (*Strength of Evidence = A*)

### CAN-ADAPTT SUMMARY STATEMENTS

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 Pregnant and Breastfeeding Women.

### SUMMARY STATEMENT #1

Smoking cessation should be encouraged for all pregnant, breastfeeding and postpartum women.

#### **GRADE\*: 1A**

#### **SUMMARY STATEMENT #2**

During pregnancy and breastfeeding, counselling is recommended as first line treatment for smoking cessation.

### **GRADE\*: 1A**

### **SUMMARY STATEMENT #3**

If counselling is found ineffective, intermittent dosing nicotine replacement therapies (such as lozenges, gum) are preferred over continuous dosing of the patch after a riskbenefit analysis.

#### GRADE\*: 1C

#### **SUMMARY STATEMENT #4**

Partners, friends and family members should also be offered smoking cessation interventions.

### **GRADE\*: 2B**

#### **SUMMARY STATEMENT #5**

A smoke-free home environment should be encouraged for pregnant and breastfeeding women to avoid exposure to second-hand smoke.

#### **GRADE\*: 1B**

\* GRADE: See <u>Appendix B</u> for Grade of Recommendation and Level of Evidence Summary Table.

### CLINICAL CONSIDERATIONS



- There is limited evidence on harms associated with the use of NRT during pregnancy. Two prospective studies found no adverse maternal or fetal effects from the use of nicotine patch during pregnancy; however, one recent study demonstrated potential association between NRT and congenital defects. This data cannot support or exclude an association between first trimester NRT use and an increased risk of congenital defects due to several methodological issues. Therefore, until further information is available, the risks and benefits of smoking versus the use of NRT during pregnancy must be considered when counselling about smoking cessation options.
- There is some evidence from RCTs that NRT may be efficacious in pregnancy in terms of decreasing tobacco use and improving pregnancy outcomes. No safety concerns were identified in these trials. Therefore, benefits of NRT seem to outweigh potential risks; NRT should be considered when counselling has been ineffective.
- Despite preliminary evidence that continued smoking and relapse are more likely among

pregnant women who have a smoking partner, there is limited data regarding the benefits of partner involvement in smoking cessation interventions for pregnant smokers. In non-pregnant populations, interventions to increase support did not find increased quitting rates.

- Evidence from a recent systematic review and meta-analysis demonstrated negative perinatal outcomes (e.g. trend towards lower birth weight, smaller head circumference and congenital anomalies) associated with secondhand smoke exposure. Therefore, pregnant and breastfeeding women should avoid this environmental risk.
- Challenges in identification due to stigma associated with smoking during pregnancy.
- Smoking cessation interventions should be considered for the full spectrum of care from preconception visit to 1 year postpartum.
- Smoking cessation counselling and care of pregnant smokers may be conducted by physicians, allied healthcare professionals (e.g. social worker, pharmacist, community health representatives), midwives, doulas, prenatal advisors, postpartum supports, family home visitors, and others.
- Nicotine replacement therapy (NRT) can be considered as a second line option for individuals who cannot quit after counselling interventions.
- Depression during pregnancy is a common occurrence and the use of Zyban (bupropion) may be appropriate to treat both smoking and depression. There is limited evidence on the effectiveness of bupropion for smoking cessation during pregnancy. In addition, there is no evidence of harm related to the use of bupropion during pregnancy and therefore, it may be considered for use as an alternative to NRT for a subpopulation of pregnant smokers (see Table 1 below).
- Including partners, friends, and/or family in a pregnant smoker's quit attempt is essential to increase the likelihood of successful smoking cessation interventions.
- A smoke-free home environment should be encouraged for partners, friends, family members of pregnant and breastfeeding women to ensure safety from second-hand smoke/environmental tobacco smoke.

### Table 1 - Negative Effects Associated with Cigarette Smoking During Pregnancy and Breastfeeding

Cigarette smoking during pregnancy and breastfeeding is associated with numerous negative effects on mother, fetus, infant and adolescent.<sup>39</sup>

<b>PREGNANCY</b> COMPLICATIONS	<ul> <li>Subfertility (female and male)</li> <li>Ectopic pregnancy (outside the uterus)</li> <li>Spontaneous abortion (miscarriage)</li> <li>Preterm labour</li> <li>Premature rupture of membranes</li> <li>Placental problems (previa &amp; abruption)</li> <li>Growth restriction</li> </ul>
NEONATAL EFFECTS	<ul> <li>Low birth weight (on average ~200 grams smaller)</li> <li>Increased perinatal mortality</li> <li>Increased admission to the neonatal intensive care unit (NICU)</li> <li>Sudden infant death syndrome (SIDS)</li> <li>Decreased volume of breast milk and duration of breastfeeding</li> </ul>
LONG-TERM EFFECTS	<ul> <li>Childhood respiratory illnesses (asthma, pneumonia, bronchitis)</li> <li>Other childhood medical problems (ear infections)</li> <li>Learning problems (reading, mathematics, general ability)</li> <li>Behavioral problems</li> <li>Attention deficit hyperactivity disorder (ADHD)</li> </ul>



### TOOLS/RESOURCES



TITLE	DESCRIPTION	RESOURCE
Couples and Smoking: What you need to know when you are pregnant	<ul> <li>This is a self-help booklet for pregnant women who smoke. In this booklet you will learn how routines, habits, and ways of interacting with your partner influence smoking. Understanding how smoking is influenced by others and everyday routines is an important first step in changing smoking behaviours. If you decide to reduce or stop smoking, you can use this booklet along with other resources to support you in reaching your goals.</li> </ul>	Self-help booklet
<u>Helping Women Quit</u>	• A guide giving background on tobacco cessation for women, and step by step instructions to helping women quit smoking. It tells you what questions to ask to identify a cessation approach for each woman, and it points you to resources to address her needs.	Guide – Alcohol, Drug and Education Service, BC
PREGNETS	<ul> <li>Website with the mission to improve the health of mothers, fetuses, babies and children.</li> <li>Goals: To eliminate smoking in pregnant and postpartum women by increasing the capacity to quit and stay quit using a woman centred model of care.</li> </ul>	Online resource, discussion board
<u>TEACH training course:</u> <u>Helping Pregnant</u> <u>Smokers Stop Smoking:</u> <u>An Interactive Case</u> <u>Based Course</u>	• This specialty course manual will allow clinicians to increase their knowledge about tobacco use, screening, assessment, and interventions with pregnant and postnatal women. The price of this manual reflects only the development and labor costs associated with its production.	Course manual and in-person training
<u>Motherisk</u>	• Connected to Sick Children's Hospital in Toronto, Motherisk provides online information on the risks of using substances (including tobacco) while pregnant. It also offers telephone counselling for women, and consultation for service providers.	Website, telephone counselling 1-877-327-4636
<u>The Right TimeThe</u> <u>Right ReasonsDads</u> <u>talk about Reducing and</u> <u>Quitting Smoking.</u>	• This booklet is based on fathers' experiences of reducing and quitting smoking. The quotes in the booklet are from expectant and new dads who smoke or have recently reduced or quit and offer their thoughts and ideas. This booklet is for men who identify with the challenges around being an expectant or new dad who smokes.	Self-help booklet

### **RESEARCH GAPS**



- Relationship between smoking and infertility
- Use of bupropion and varenicline as a smoking cessation aid – need more research on the effectiveness and safety
- Need more evidence of risk/benefit analysis of various smoking cessation aids

CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

### 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 <u>AGREE Instrument</u>. The recommendations contained in these high quality CPGs have been used as the evidence base for the CAN-ADAPTT guideline development process.

The strength of evidence classification for each of these existing CPGs can be found in <u>Appendix F</u>. Note that the grade of recommendation/strength of evidence summary table for CAN-ADAPTT's summary statements can be found in <u>Appendix B</u>.

### U.S. Department of Health and Human Services Public Health Service (2008)<sup>13</sup>

- Clinicians should ask pediatric and adolescent patients about tobacco use and provide a strong message regarding the importance of totally abstaining from tobacco use. (*Strength* of Evidence = C)
- Counselling has been shown to be effective in treatment of adolescent smokers. Therefore, adolescent smokers should be provided with counselling interventions to aid them in quitting smoking. (*Strength of Evidence = B*)
- Secondhand smoke is harmful to children. Cessation counselling delivered in pediatric settings has been shown to be effective in increasing abstinence among parents who smoke. Therefore, to protect children from secondhand smoke, clinicians should ask parents about tobacco use and offer them cessation advice and assistance. (*Strength of Evidence = B*)

### Institute for Clinical Systems Improvement (2004)<sup>40</sup>

• (*Birth to 10 years*): Smoke exposure (in home, at day care, etc.) should be established at nearly every visit. Tobacco use status of all patients (and in the case of infants and children, the use status of everyone in the home) should be established. (*Class of Evidence = D, M, R, X*)

## SPECIFIC POPULATIONS: Youth (Children and Adolescents)

CAN-ADAPTT's Clinical Practice Guideline Development Group; Section Lead: Jennifer O'Loughlin, PhD, CRC, CAHS fellow



CAN \* ADAPTT CANADIAN SMOKING CESSATION GUIDELINE

- (10 years and above): Patient's tobacco use and second hand smoke exposure should be established at nearly every visit. (*Class of Evidence = D, M, R, X*)
- Adolescents should have usage re-assessed at nearly every visit, regardless of whether there is a chart notation of non-use. (*Class of Evidence = A, C, D, M, R*)
- (10 years and above): "Pre-contemplators" benefit from non-confrontational messages about the importance of quitting and the awareness that provider help is available when ready. (*Class of Evidence = R*)
- (10 years and above): "Contemplators" should receive support and respectful urging to quit. A patient in "preparation" should set a quit date, receive self-help information and be encouraged to accept follow-up after the quit date. (Class of Evidence = A, M, R)
- (10 years and above): If a patient's parent, sibling or friend uses tobacco, patients should be assisted in developing refusal skills and given educational materials. (Class of Evidence = A)

### New Zealand Ministry of Health (2007)<sup>14</sup>

- Offer smoking cessation interventions that incorporate known effective components (such as those identified in the previous sections) to young people who smoke. (*Grade* = √)
- NRT can be used by young people (12-18 year olds) who are dependent on nicotine (that is, NRT is not recommended for use by occasional smokers) if it is believed that NRT may aid the quit attempt. (*Grade = C*)

### BACKGROUND

Youth have their own social network of individuals whom they trust and who exert influence over them. Healthcare practitioners may or may not be part of these networks. Cooperative efforts to provide nonsmoking messages between adults other than healthcare practitioners might increase effectiveness. Community mobilization in tobacco use prevention provides a model for shared efforts between parties.

Tobacco use habits among youth evolve during adolescence and the timing and trajectory of smoking and addiction differ between youth depending on factors such as access to tobacco, genetic predisposition, family and peer influence etc. There are no guidelines as to what constitutes "smoking" in youth so consensus is needed as to when a youth is considered to be a smoker (the recommendation is that first puff be viewed as a risk factor for continued smoking).

There is as yet, no widely accepted, standardized youth-specific definition of nicotine dependence for use by clinicians. Similarly there are no validated screening tools, which would help practitioners identify when a youth is dependent. What is needed is a tool that helps clinicians identify youth at risk of sustained smoking and nicotine dependence before these outcomes are established (i.e., before it is too late), since successful intervention among dependent youth is challenging. Research is needed to better understand what clinicians should ask about in identifying youth at risk for sustained smoking. Work is ongoing to develop a prognostic tool for identifying adolescents at risk of becoming daily smokers, who may benefit from counselling aimed at preventing sustained smoking<sup>4</sup>

Regarding the effectiveness of treatments for youth, more research needs to be done. There are few RCTs testing cessation interventions for youth. Among 16 trials reviewed recently, three school-based programs and one in a clinic setting provided evidence of effectiveness. An intervention that combined NRT and behavioural counselling also showed promise.

There is little evidence to date on whether or not to recommend NRT to youth and this issue requires further research. As indicated in the UK and New Zealand guidelines, however, measures for treating smoking cessation in adults may be suitable for youth.

### CAN-ADAPTT SUMMARY STATEMENTS

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 Youth (Children and Adolescents).

#### **SUMMARY STATEMENT #1**

Health care providers, who work with youth (children and adolescents) should obtain information about tobacco use (cigarettes, cigarillos, waterpipe, etc.) on a regular basis.

#### **GRADE\*: 1A**

#### **SUMMARY STATEMENT #2**

Health care providers are encouraged to provide counselling that supports abstinence from tobacco and/or cessation to youth (children and adolescents) that use tobacco.

#### **GRADE\*: 2C**

#### **SUMMARY STATEMENT #3**

Health care providers in pediatric health care settings should counsel parents/guardians about the potential harmful effects of secondhand smoke on the health of their children.

### GRADE\*: 2C<sup>43</sup>

GRADE: See <u>Appendix B</u> for Grade of Recommendation and Level of Evidence Summary Table.

### CLINICAL CONSIDERATIONS



- Youth, unlike adults who are usually established in their pattern of tobacco use, are more likely to be in the process of acquiring the smoking habit with its concomitant nicotine dependence. In addition to not beginning to smoke, prevention of transition from intermittent to regular smoking may be key in helping youth stop smoking. The following recommendations are relevant to inquiry about youth smoking.
  - Ask questions to ascertain use of tobacco products in multiple ways; use language and terminology that youth are familiar with.
  - Be aware of the natural history of tobacco use onset since there are important milestones from "first puff" to nicotine dependence that may signal transition to regular or daily smoking. Smoking onset trajectories should be closely monitored, since intermittent smoking can quickly become regular smoking. Ask, for example about "puffing" or "trying" in addition to regular or daily use (which indicate sustained smoking).
  - Use direct inquiry or a validated prognostic or screening tool to identify those at high risk of sustained smoking. Identify those with additional health risks (e.g. Asthma).
  - Any child or adolescent who consumes tobacco products should be advised to stop. The effectiveness of the 5 As has not been established in youth. However, asking and advising "are generally considered to be the entry points for providing effective individual intervention"<sup>13</sup>.
- Types of Smoking Cessation Treatments.
  - Community-based (i.e., non-clinical) tobacco control programs for youth may be an important resource for referral purposes
  - There are few studies that evaluate if brief counselling by health professionals is effective in youth.
  - Motivational interviewing techniques can be adapted for youth<sup>13</sup>.
  - To date, there is little empirical evidence that either NRT<sup>14</sup> or bupropion SR use<sup>13</sup> are effective in young smokers. However they have been shown to be safe.
  - The New Zealand guidelines recommend interventions for youth that are effective in adults (i.e., interventions that incorporate multi-session support)<sup>14</sup>.



• To date, there is little empirical evidence that advising parents about the potential harmful effects of their smoking or of secondhand smoke on their child(ren), is effective. However, counselling parents in pediatric settings or "...during child hospitalizations may increase parents' interest in stopping smoking, parents' quit attempts and parents' quit rates..."<sup>13</sup>.





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### TOOLS/RESOURCES

TITLE	DESCRIPTION	RESOURCE
BLAST program	• BLAST (Building Leadership for Action in Schools Today) is a youth leadership tobacco prevention program developed by the Lung Association of Alberta & NWT. It challenges youth to think critically about the tobacco industry and its products, and the social and health effects from tobacco.	Program to empower youth to become leaders and advocates in their schools and communities
Leave the Pack Behind	<ul> <li>LTPB delivers smoking cessation and prevention support to post-secondary students who smoke or are at risk of starting to smoke.</li> </ul>	Resources for smokers, friends of smokers and health professionals.
<u>MyLastDip.com</u>	• A free, best-practices Web-based treatment program designed to help young smokeless tobacco users quit.	Web-based treatment program
Quit4Life	Health-Canada sponsored website with profiles and activities to support youth in smoking cessation.	Interactive and personalized 4 week web program.
<u>Stupid.ca</u>	<ul> <li>An anti-tobacco movement created for youth, by youth, funded by Ontario's Ministry of Health Promotion.</li> </ul>	Educational resource for Youth.
<u>Talk with your children</u> about smoking	<ul> <li>A pamphlet suggesting how to approach the discussion about smoking with children</li> </ul>	Educational pamphlet

### **RESEARCH GAPS**



- Evaluate the effectiveness of using the 5A's in paediatric clinics to treat both adolescents and parents. With youth, at what points should clinicians intervene and how often?
- Explore the safety and effectiveness of medications in adolescents, including bupropion SR, NRT, varenicline, and a nicotine vaccine
- Investigate the effectiveness of counselling interventions to motivate youth to stop using tobacco
- Investigate the effectiveness of child-focused versus family-focused or peer-focused interventions as well as interventions accessed via the Internet, quitlines, and school-based programs

- Research strategies for increasing the efficacy, appeal, and reach of counselling treatments for adolescent smokers
- Evaluate interventions that prevent sustained smoking in youth
- What should clinicians ask about in identifying youth at risk for sustained smoking?
- To what extent should other addictions be addressed?
- How to develop best practices that acknowledge the range of specific situations encountered by youth

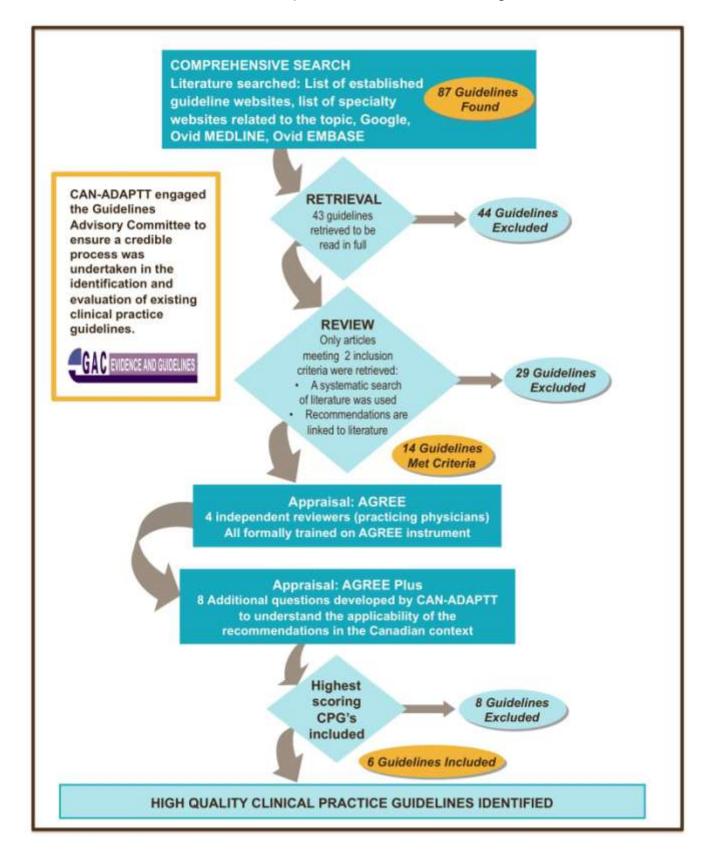
### APPENDICES





APPENDICES

### APPENDIX A – Guideline Development Process Flow Diagram



# APPENDIX B – Grade of Recommendation & Level of Evidence Summary Table for CAN-ADAPTT Summary Statements\*\*

GR/LOE*	CLARITY OF RISK/BENEFIT	QUALITY OF SUPPORTING EVIDENCE	IMPLICATIONS
1A Strong Recommendation <i>High Quality Evidence</i>	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 recommenda- tion unless a clear and compelling rationale for an alternative approach is present.
1B Strong Recommendation <i>Moderate Quality</i> <i>Evidence</i>	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 recommenda- tion 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 <i>Moderate Quality</i> <i>Evidence</i>	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.



### APPENDIX C – Clinical Practice Guidelines Identified in November 2006

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### APPENDIX D – Clinical Practice Guidelines Identified in December 2008

- U.S. Department of Health and Human Services Public Health Service. (2008, May). Clinical practice guideline: Treating tobacco use and dependence: 2008 update.
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# APPENDIX E – Clinical Practice Guidelines Used as Evidence Base for Guideline Development

- Institute for Clinical Systems Improvement (ICSI). (2004, June). Health care guideline: Tobacco use prevention and cessation for adults and mature adolescents.
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# APPENDIX F – Strength of Evidence Classification Tables for Clinical Practice Guidelines Used as Evidence Base for CAN-ADAPTT's Guideline Development

The following strength of evidence classification tables are for each of the existing CPGs used as the evidence base for CAN-ADAPTT's guideline development. Note that the grade of recommendation/strength of evidence table for CAN-ADAPTT's summary statements can be found in <u>Appendix B</u>.

### U.S. Department of Health and Human Services Public Health Service (2008)

STRENGTH-OF-EVIDENCE CLASSIFICATION	CRITERIA
Strength of Evidence = A	Multiple well-designed randomized clinical trials, directly relevant to the recommendation, yielded a consistent pattern of findings.
Strength of Evidence = B	Some evidence from randomized clinical trials supported the recommendation, but the scientific support was not optimal. For instance, few randomized trials existed, the trials that did exist were somewhat inconsistent, or the trials were not directly relevant to the recommendation.
Strength of Evidence = C	Reserved for important clinical situations in which the Panel achieved consensus on the recommendation in the absence of relevant randomized controlled trials.

### Registered Nurses Association of Ontario (RNAO) (2007)

STRENGTH-OF-EVIDENCE CLASSIFICATION	CRITERIA
Strength of Evidence = A	Requires at least two randomized controlled trials as part of the body of literature of overall quality and consistency addressing the specific recommendations.
Strength of Evidence = B	Requires availability of well conducted clinical studies, but no randomized controlled trials on the topic of recommendations.
Strength of Evidence = C	Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates absence of directly applicable studies of good quality.

### New Zealand Ministry of Health (2007)

GRADES OF RECOMMENDATIONS	CRITERIA
Grade of Recommendation = A	The recommendation is supported by GOOD (strong) evidence.
Grade of Recommendation = B	The recommendation is supported by FAIR (reasonable) evidence, but there may be minimal inconsistency or uncertainty.
Grade of Recommendation = C	The recommendation is supported by EXPERT opinion (published) only.
Grade of Recommendation = I	There is INSUFFICIENT evidence to make a recommendation.
Grade of Recommendation = $$	GOOD PRACTICE POINT (in the opinion of the guideline development group).

### Institute for Clinical Systems Improvement (ICSI) (2004)

### EVIDENCE GRADING SYSTEM

Classes of Research Reports

### A. PRIMARY REPORTS OF NEW DATA COLLECTION:

CLASS A	Randomized, controlled trial
CLASS B	Cohort study
CLASS C	<ul> <li>Non-randomized trial with concurrent or historical controls</li> <li>Case-control study</li> <li>Study of sensitivity and specificity of a diagnostic test</li> <li>Population-based descriptive study</li> </ul>
CLASS D	<ul> <li>Cross-sectional study</li> <li>Case series</li> <li>Case report</li> </ul>
B. REPORTS THAT SYNTHESIZE OR REFLECT UPON COLLECTIONS OF PRIMARY REPORTS:	
CLASS M	<ul> <li>Meta-analysis</li> <li>Systematic review</li> </ul>

	Cost-effectiveness analysis
CLASS R	<ul> <li>Consensus statement</li> <li>Consensus report</li> <li>Narrative review</li> </ul>
CLASS X	Medical opinion

### APPENDIX G – List of Committees

#### Executive Committee

The Executive Committee was responsible for overseeing the execution of the CAN-ADAPTT Project which included providing direction to the Coordinating Centre staff with respect to methodology, work plan and objectives for the development of the guideline, recruitment and management of the CAN-ADAPTT Network and the Evaluation Framework.

Peter Selby, MBBS, CCFP, FCFP, MHSc, Dip ABAM Tupper Bean, MBA, MHSc Charl Els, MBChB, FCPsych, MMedPsych (cum laude), ABAM, MROCC Roberta Ferrence, PhD John Garcia, PhD Paul McDonald, PhD, FRSPH Cameron Norman, PhD Michele Tremblay, MD Laurie Zawertailo, PhD

#### **Evaluation** Committee

The Evaluation of CAN-ADAPTT was subcontracted to an independent group, Ontario Tobacco Research Unit (OTRU). The Evaluation Committee provided opportunity for OTRU to gain valuable input into the Evaluation framework and methodology of CAN-ADAPTT which included understanding the value, quality and usability of the CAN-ADAPTT clinical practice guideline.

Peter Selby, MBBS, CCFP, FCFP, MHSc, Dip ABAM Alexey Babayan, PhD Rosa Dragonetti, MSc John Garcia, PhD Katie Hunter, MSc Cameron Norman, PhD Jess Rogers, BA Robert Schwartz, PhD Emily Taylor, BSc, MA



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Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment

Centre for Addiction and Mental Health 175 College Street Toronto, Ontario, M5T 1P7



For more information or to join the network, please visit: www.can-adaptt.net

Or write to us: can\_adaptt@camh.net