

# Use of vouchers to support NRT costs in a public health smoking cessation clinic: A pilot evaluation

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## BACKGROUND

The health, social and economic burden associated with tobacco use has been well documented. Smoking is one of the leading causes of premature death in Canada, and in 2002 attributed to 16.6% of all deaths in Canada (21% for men; 12.2% for women).<sup>[1]</sup> In 2002, it also accounted for 10.3% of all acute care hospital days in Canada.<sup>[2]</sup>

Tobacco use is a modifiable health risk, and as such it is important to have effective interventions available for treatment. Research indicates that only 3 to 5% of smokers who make unaided quit attempts are successful at abstaining for 6 to 12 months.<sup>[3]</sup> Behavioural counselling and pharmacotherapy have been shown to improve long-term quit rates compared with no treatment or placebo<sup>[4-9]</sup>; with quit rates being highest when counselling and pharmacotherapy are combined<sup>[6,10]</sup>. In terms of behavioural counselling, the 2008 United States Department of Health and Human Services guideline panel on tobacco use and dependence, determined that there is a strong dose-response relationship between the length of person-to-person contact and successful treatment outcomes; the longer the session the more successful the outcomes.<sup>[11]</sup> Furthermore, the panel found that treatment sessions delivered four or more times is especially effective in increasing abstinence rates.<sup>[11]</sup> There is also good evidence to indicate that nicotine replacement therapy (NRT) doubles cessation rates. A systematic review by Silagy<sup>[4]</sup> concluded that NRT increase quit rates approximately one and a half to twofold regardless of clinical setting and/or use of adjunct treatments.

The prevalence of current smokers (daily or occasional) is significantly higher in the region served by the North Bay Parry Sound District Health Unit (NBPSDHU) compared to that for all of Ontario. According to the 2008 Canadian Community Health Survey, 21.5% of the population (aged 12 and over) in the NBPSDHU region are current daily smokers compared to 15.4% for Ontario. Furthermore, in contrast to Ontario, the percentage of current daily smokers for the NBPSDHU area has not significantly changed over the past 5 years.

With the aim of assisting smokers in the NBPSDHU region to quit smoking, the health unit piloted a part-time smoking cessation clinic. Specifically the purpose of the pilot was to examine: 1) the feasibility of providing clients with redeemable vouchers to support the cost of nicotine replacement therapy; and 2) to evaluate client satisfaction with the clinic, and counselling sessions.

## METHODS

### Setting and participants

The North Bay Parry Sound District Health Unit conducted a part-time smoking cessation clinic two half-days a week at the main office located in North Bay. Client intake for the pilot was open for approximately seven months from February 12, 2009 to September 3, 2009. All clients aged 18 years or older were eligible, and a physician referral was not required.

## Smoking Cessation Intervention

### *Intake Visit*

The first (intake) visit at the clinic comprised of a 60 minute one-on-one session with a certified smoking cessation specialist. During this session, rapport was established between the client and specialist, a consent form (Appendix 1) and medical history assessment (Appendix 2) were completed and an intake questionnaire (Appendix 3) assessing nicotine dependence and other behavioural and environmental factors associated with smoking addiction was also completed. Upon completion of the visit, clients were asked about readiness to quit smoking. Clients indicating that they were ready to set a quit date were booked into a follow-up counselling session. Clients, not ready to set a quit date were asked if they would like to be booked in for a follow-up visit, and if they required any additional information and resources.

### *Follow-up counseling sessions*

Follow-up counselling sessions consisted of a one-on-one session with the smoking cessation specialist lasting up to 45 minutes in duration. During this session, previously obtained medical information and recommendations from the previous visit, including NRT usage were reviewed. Smoking status and behavioural factors were also re-assessed (see Appendix 4) and relevant counselling and coping strategies provided. To support clients in their quit attempt, NRT (patch and, or gum) was also recommended (type and dose) and voucher(s) provided to support the cost of purchasing NRT.

### *Nicotine replacement therapy*

Each NRT voucher provided to the client was worth \$15.00, which, depending on the NRT brand covered approximately half the cost of one week's worth (7 days) of nicotine patches or chewing gum. The voucher (see Appendix 5) could be redeemed at any pharmacy participating in the pilot. Thirteen pharmacies located within the City of North Bay were contacted by letter (see Appendix 6) in advance of the pilot requesting their participation in the project. Of those sent a letter, four pharmacies (30.8%) agreed to participate. Pharmacy participation involved accepting vouchers issued to smoking cessation clients by the Health Unit, and talking with the client to answer questions about using NRT. To complete a purchase, the pharmacy would accept the voucher and collect the balance of the price from the customer. At the end of each month, a bill would be sent to the Health Unit from the pharmacy for the total amount of vouchers redeemed along with the vouchers.

### **Six Month Follow-up**

All participants, regardless of whether they attended a follow-up counselling session or not, were called 6 months after their intake visit by a research assistant and were asked to complete a brief telephone survey. The survey (see Appendix 6) collected information on smoking status, NRT use, convenience of the NRT voucher and satisfaction with counselling and clinic operations. Clients were called three times before they were considered lost to follow-up.

### **Analysis**

Client smoking information and 6 month survey data were entered into Epi Info™ version 3.5.1 (Centers for Disease Control and Prevention, Atlanta, Georgia, USA). Client demographic and smoking outcomes collected through the counselling sessions were analyzed using SPSS (PASW version 18.0) and 6 month survey responses were analysed used Epi Info™ version 3.5.1.

## RESULTS

### Participants

A total of 28 persons enrolled at the North Bay Parry Sound District Health Unit's Smoking Cessation Clinic for the period of the pilot study; 24 (85.7%) of which were self-referred. The mean age of clients was 49.8 years, and 46.4% were men. All clients resided in the Nipissing District, with 22 (78.6%) from the City of North Bay, 3 (10.7%) from West Nipissing area, and 3 (10.7%) from East Nipissing area. Table 1 summarizes client demographic characteristics.

#### *Baseline smoking history*

The mean number of years smoking for all clients was 34.4 years with an average of 22.4 cigarettes smoked per day (see Table 2). All except for one client used tobacco only in cigarette form. On average clinic clients had a high dependence on nicotine with a mean Fagerstrom score of 6.2. Twenty-two (78.6%) of the 28 clients indicated previously quitting at least once for a period of 24 hours. Of those who had previously quit, the mean number of quit attempts was 4.0. Six (27.3%) of these 22 clients had abstained for 12 months or more. Most popular reasons for relapse were that the cravings to smoke became too strong (86.4%), and that smoking was needed to cope with pressure and stress (81.8%).

In terms of stage of change, 22 clients (78.6%) were in the preparation stage wanting to quit within the next month (see Table 2). All but one client indicated that quitting smoking was important to them (ranked 4 or 5 on likert scale), and 23 clients (82.1%) indicated that they were committed to quitting smoking (ranked 4 or 5 on likert scale). At the completion of the intake session, 25 (89.3%) of the 28 clients were ready to set a quit date. Of those, 100% were interested in using NRT to assist their quit attempt.

**Table 1: Demographic characteristics of persons enrolled in NBPSDHU pilot smoking cessation clinic**

Demographic	Clients who attended intake session only (n = 8)	Clients who attended at least one counselling visit (n = 20)	Total clients (n = 28)
Mean age $\pm$ SD, years	43.9 $\pm$ 13.1	52.2 $\pm$ 11.6	49.8 $\pm$ 12.4
Male gender, number (%)	5 (62.5)	8 (40.0)	13 (46.4)
Currently married, number (%)	4 (50.0)	9 (45.0)	14 (48.3)
Caucasian, number (%)	8 (100)	20 (100)	28 (100)
English language, number (%)	8 (100)	19 (95.0)	27 (96.4)
Employed or self-employed, number (%)	3 (37.5)	10 (50.0)	13 (46.4)
Highest level of education attained:			
No high school certificate, number (%)	3 (37.5)	5 (25.0)	8 (28.6)
Certificate below a bachelor degree, number (%)	4 (50.0)	13 (65.0)	17 (60.7)
Bachelor degree or higher, number (%)	1 (12.5)	2 (10.0)	3 (10.7)
Has a family doctor, number (%)	2 (25.0)	11 (55.0)	13 (46.4)

SD = standard deviation

**Table 2: Smoking history and characteristics of persons enrolled in NBPSDHU smoking cessation clinic**

Demographic	Clients who attended Counselling visit (n = 20)	Clients who attended intake session only (n = 8)	Total clients (n = 28)
Mean number of total years smoked $\pm$ SD	36.5 $\pm$ 11.4	29.4 $\pm$ 13.5	34.4 $\pm$ 12.2
Mean number of cigarettes per day $\pm$ SD	23.8 $\pm$ 13.3	18.7 $\pm$ 3.7	22.4 $\pm$ 11.6
Mean Fagerstrom Score	5.6 $\pm$ 5.1	-*	6.2 $\pm$ 4.8
Previous serious quit attempt, number (%)	15 (75.0)	7 (87.5)	22 (78.6)
Mean number of quit attempts $\pm$ SD	4.1 $\pm$ 3.3	2.7 $\pm$ 1.1	3.7 $\pm$ 2.9
Stage of change:			
Not thinking about quitting, number (%)	1 (5.0)	0 (-)	1 (3.6)
Thinking about quitting in next 6 months, number (%)	2 (10.0)	0 (-)	2 (7.1)
Want to quit in next month, number (%)	15 (75.0)	7 (87.5)	22 (78.6)
Quit for 6 months or less, number (%)	1 (5.0)	1 (12.5)	2 (7.1)
Quitting smoking is important, number (%)	19 (95.0)	8 (100)	27 (96.4)
Committed to quitting smoking, number (%)	17 (85.0)	6 (75.0)	23 (82.1)
Ready to set quit date, number (%)	17 (85.0)	8 (100)	25 (89.3)

SD = standard deviation

\*Mean cannot be calculated as only one person responded.

### Counselling visits

Of the 28 clients who attended an intake session, 20 (71.4%) clients returned for at least one follow-up counselling session. The mean number of counselling sessions completed by clients after the intake session was 2.8. Table 1 and 2 summarize demographic and smoking characteristics for those who attended at least one follow-up counselling session and those who did not.

### Use of NRT vouchers

NRT vouchers were provided to 17 (85%) of the 20 clients who had follow-up counselling sessions, with an average of 2.8 (range: 2 to 4) vouchers being provided per session. For 14 clients (70%) NRT vouchers were provided at each counselling session attended. Of the NRT vouchers provided to clients throughout the course of the pilot, 92% were redeemed at participating pharmacies and 8% were not redeemed.

### Six Month Follow-up

Fourteen (50.0%) of the 28 clients who attended the intake session completed the 6 month follow-up survey. Lost to follow-up was highest for those who only attended the intake session, with all eight not responding to the 6 month survey. For those who had attended at least one follow-up counselling session, 14 (70%) completed the 6 month follow-up.

### Smoking status

Ten (71.4%) of 14 clients surveyed reported having at least one serious quit attempt in the past 6 months.

Five clients (35.7%) reported not having smoked (even a puff) in the past seven days at the time of the survey. Three (60%) of these five clients had been smoke free for more than 2 weeks. All five clients reported using NRT, and all five found it very helpful in assisting them in becoming smoke-free.

### *Convenience of NRT vouchers*

All 14 surveyed clients reported that they had received a voucher to help cover the cost of NRT, and only two (85.7%) did not use the voucher. Eight (57.1%) of the clients responded that they would not have purchased NRT if the voucher was not provided. Cost of NRT was indicated to be the main reason (87.5%) why NRT would not have been purchased without a voucher. Less than 30% (4) of clients were able to go to their usual pharmacy to redeem the NRT voucher; despite this, 9 (64.3%) found the voucher convenient to use. For those who did not find it convenient, accessibility to participating pharmacies was identified as the primary reason.

### *Satisfaction with the Health Unit's Smoking Cessation Clinic*

Overall, clients were very satisfied with the quality of counseling provided at the clinic, advice received and the counsellor's ability to relate to their experiences (see Table 3). All clients were very satisfied with the length of the first (intake) counseling session and the ability to book appointments at convenient times. Furthermore, a majority of clients were very satisfied with the ease of booking appointments and the location of the clinic.

Overall, the Smoking Cessation Clinic met approximately 93% (13) of client's expectations, with almost 86% (12) of clients indicating that they had recommended the cessation clinic to other family members or friends.

**Table 3. Satisfaction with smoking cessation clinic**

Satisfaction with...	Very satisfied Number (%)	Somewhat satisfied Number (%)	Not at all satisfied Number (%)
Overall quality of counseling provided at the clinic	13 (92.9)	1 (7.1)	0 (-)
Length of the first counseling session	14 (100)	0 (-)	0 (-)
Counselor's advice provided during the session	13 (92.9)	1 (7.1)	0 (-)
Counselor's ability to relate to the participants experiences	13 (92.9)	1 (7.1)	0 (-)
Ability to book appointments at convenient times	14 (100)	0 (-)	0 (-)
Ease of booking appointments at the clinic	12 (85.7)	2 (14.3)	0 (-)
Location of the clinic	12 (85.7)	1 (7.1)	0 (-)

### **Discussion**

One of the purposes of the present pilot study was to assess the feasibility of offering vouchers to clients to support the cost of NRT. Voucher systems have been used successfully in other areas of public health to support the cost of treatment (e.g. lice medication and shampoo). Although dispensing medication and treatment directly to the client is more convenient for the client, it can pose resource, storage and liability issues to the dispenser. In the case of the NBPSDHU cessation clinic, NRT was not dispensed directly as funding was not available to cover the full cost of NRT, the infrastructure was not in place to support partial payment of NRT by clients, and there was a shortage of appropriately secured space available in which to store NRT supplies at the health unit. Liability associated with distributing pharmaceuticals was also a concern as the clinic's smoking cessation specialist was not a registered professional (i.e. nurse, doctor), and the health unit's medical directive for dispensing pharmaceuticals does not extend to non-registered professionals. Through partnering with pharmacies in the region, however, the health unit was able to implement a voucher system to support the cost of NRT for their clients, thus eliminating the potential issues associated with dispensing directly.

NRT vouchers were provided to 85% clients who had attended follow-up counselling sessions, with more than one voucher on average being provided per session. Of the vouchers provided to clients throughout the course of the pilot, 92% were redeemed at participating pharmacies. Clients using NRT to support their quit attempt reported that the vouchers were convenient to use, and that they would not have purchased NRT without the vouchers. Success of the vouchers, however, is largely dependent on the number of pharmacies willing to accept the vouchers, and the geographic location of those pharmacies in relation to the workplace or residence of clinic clients. Accessibility was not identified as an issue in the pilot possible because a majority of clients resided in the same city as the participating pharmacies. Satisfaction with the accessibility and convenience of using the vouchers may have been less if the residential distribution of the clientele had been more diverse.

In terms of satisfaction with the clinic, overall satisfaction with the counselling provided was high, as well as with clinic operations. Care must be taken with the interpretation of this outcome, however, as only those who attended a follow-up session completed a 6 month follow-up survey. Individuals who only attended the intake visit could not be reached for the 6 month follow-up; as such, it cannot be assumed that their satisfaction was similar to those who attended multiple sessions.

The purpose of the current study was not to evaluate the effectiveness of the intervention at aiding cessation; however, of the clients who had at least one follow-up counselling session and completed the six-month follow-up survey, almost 36% reported being smoke-free at six months. In addition, over 71% reported having at least one serious quit attempt in the past 6 months. A quit rate of 36% is in keeping with 12-35% quit rate range reported in the literature for systematic smoking cessation interventions.

There were several limitations to this pilot including a relatively small sample size, and the inability to reach clients at 6 months who only attended the clinic once (upon intake). In terms of the sample size, the potential participant numbers were limited by lack of dedicated resources and by timeline. Specifically the clinic was funded to be offered only two days per week with one smoking cessation specialist, and needed to be completed (including the 6 month follow-up) within one year. During the pilot period, clinic availability was further limited due to reallocation of public health resources during the outbreak of the influenza pandemic H1N1 virus. The sample and pilot outcomes were also compromised by clients dropping out of the intervention following the intake visit and not completing a 6 month survey. Over 28% of clients did not return for a follow-up counselling visit, and none of these participants completed a 6 month follow-up survey. The response rate for those who did complete at least one follow-up counselling visit however was approximately 70%. It should be noted that towards the end of the intake period an effort was made to increase the sample size by extending client intake by an additional month.

## Conclusion

Results from the pilot study indicate that it is feasible for public health to recommend and support the cost of NRT through providing a redeemable voucher to the client. The number and accessibility of pharmacies participating in the voucher program is critical to the convenience of redeeming the voucher and subsequently the success of the system. Results from a survey conducted six months following intake into the cessation clinic showed a high level of client satisfaction with the operations of the clinic and the counselling received.

**Appendix 1:  
Smoking Cessation Clinic Consent Form**

**QUIT SMOKING CLINIC CONSENT FORM**

FOR CLINIC USE ONLY	
Client Name _____ (Surname) (First)	Client Record Number _____
DOB: _____ (YYYY/MM/DD)	

INFORMATION	DISCUSSED	
	YES	NO
<ul style="list-style-type: none"> <li>• The goal of Health Unit's Quit Smoking Clinic is to provide free counseling sessions and to offer nicotine replacement therapy (NRT) at a reduced cost to eligible clients.</li> <li>• Zyban and Champix are not offered by the Health Unit, to access, must see family physician only. NRT (gum or patch) discount voucher is available as determined by the Tobacco Specialist</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Participation in the program is voluntary. Client may withdraw from the program or choose not to participate in any activity, at anytime.</li> <li>• Client will be asked to complete health and smoking history in preparation of cessation planning.</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Participation is confidential. Health Unit staff will not discuss client situation with anyone without written permission from client.</li> <li>• All records are kept strictly confidential. Client may access all records concerning client on request.</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Meetings will take place every week depending on the need</li> <li>• Client is asked to cancel appointment 24 hours ahead if possible</li> <li>• First meeting will last 1 hour, subsequent meetings are ½ hour</li> <li>• Program typically is 8 weeks but may go longer depending on the need</li> <li>• Follow up phone calls at 6 and 12 months to determine status</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<ul style="list-style-type: none"> <li>• Client questions answered</li> <li>• Contact information given to client</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>

I am here for the services of the Quit Smoking Clinic and I agree to receive counselling and participate in the clinic program.

\_\_\_\_\_  
Client signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Health Unit staff signature

\_\_\_\_\_  
Date

**Appendix 2:  
Medical History Form**



**QUIT SMOKING CLINIC  
Client Medical History**

**CLIENT NAME:** \_\_\_\_\_ **CLIENT RECORD NUMBER:** \_\_\_\_\_  
**DOB:** \_\_\_\_\_

**A. MEDICAL HISTORY:**

1. Have you ever been told by a doctor that you had any of the following conditions?

	No	Yes	Don't know	Medications/Comments
Coronary Artery Disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stroke/TIA's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Heart attack or angina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
High blood pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Arrhythmia's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Leg ulcers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Poor circulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Peptic ulcer disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Jaw problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mouth or throat inflammation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Allergies or skin sensitivities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dentures or problems chewing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Asthma, emphysema, chronic bronchitis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hyperthyroidism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Liver or kidney disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Anxiety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bipolar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Personality disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Schizophrenia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ADHD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
History of cancer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pregnant or trying to conceive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Completed by Tobacco Clinic Specialist:

Signature/designation \_\_\_\_\_ Date (YYY/MM/DD) \_\_\_\_\_



**Appendix 3:  
Intake Questionnaire**

**QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE**

FOR CLINIC USE ONLY

Client Name: \_\_\_\_\_ Client Record Number: \_\_\_\_\_  
 DOB: \_\_\_\_\_

**Please fill in this history as best as you can. The Tobacco Specialist will go over this with you later. If you are not comfortable answering certain questions, you may leave them blank. The information you give is private and helps us know you better.**

**A. GENERAL INFORMATION:**

Name:	
(Surname)	(First)
Home Telephone: ( )	Work Telephone: ( ) Cell: ( )
Address:	
Postal Code:	
Date of Birth: _____ YYYY/MM/DD	Sex: <input type="checkbox"/> Female <input type="checkbox"/> Male
Marital Status: <input type="checkbox"/> Single <input type="checkbox"/> Married or common law <input type="checkbox"/> Divorced/Separated <input type="checkbox"/> Widowed Household members:	Ethnic Background: <input type="checkbox"/> Caucasian/white <input type="checkbox"/> Black <input type="checkbox"/> Aboriginal <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Asian <input type="checkbox"/> Other
Work Status: <input type="checkbox"/> Working full-time <input type="checkbox"/> Working part-time <input type="checkbox"/> Self employed <input type="checkbox"/> Retired <input type="checkbox"/> Disabled <input type="checkbox"/> Unemployed <input type="checkbox"/> Housewife or househusband	If employed,  Job title: <hr/> Employer:
Please select the highest level of education you have completed:	
<input type="checkbox"/> Grade School <input type="checkbox"/> High School <input type="checkbox"/> College diploma <input type="checkbox"/> University degree <input type="checkbox"/> Graduate school <input type="checkbox"/> Doctoral	

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<b>QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE</b>	
Consumption of alcoholic beverages during the past 12 months:	
<input type="checkbox"/>	more than once a day
<input type="checkbox"/>	about every day
<input type="checkbox"/>	4 to 5 times a week
<input type="checkbox"/>	2 to 3 times a week
<input type="checkbox"/>	once a week
<input type="checkbox"/>	2 to 3 times a month
<input type="checkbox"/>	once a month
<input type="checkbox"/>	less than once a month
<input type="checkbox"/>	never
Consumption of alcoholic beverages on a typical day:	
<input type="checkbox"/>	1-2
<input type="checkbox"/>	3-5
<input type="checkbox"/>	6-10
<input type="checkbox"/>	More than 10
Have you ever used any of these substances?	
Marijuana:	
<input type="checkbox"/>	No
<input type="checkbox"/>	Past (over 1 year ago)
<input type="checkbox"/>	currently (within the last year)
Cocaine:	
<input type="checkbox"/>	No
<input type="checkbox"/>	Past (over 1 year ago)
<input type="checkbox"/>	currently (within the last year)
Opiates:	
<input type="checkbox"/>	No
<input type="checkbox"/>	Past (over 1 year ago)
<input type="checkbox"/>	currently (within the last year)
Stimulants:	
<input type="checkbox"/>	No
<input type="checkbox"/>	Past (over 1 year ago)
<input type="checkbox"/>	currently (within the last year)
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**QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE**

Name of your Physician/Nurse Practitioner: \_\_\_\_\_

Referral Source: \_\_\_\_\_ Referral Date: \_\_\_\_\_

Is your doctor/nurse practitioner aware that you are trying to quit?  Yes  No

**B. SMOKING HISTORY:**

- How old were you when you started smoking regularly? \_\_\_\_\_
- How many cigarettes do you smoke on an average day? \_\_\_\_\_
- What brand do you smoke now? \_\_\_\_\_
- How long have you been smoking at this level? \_\_\_\_\_
- Do you use tobacco in any other form than cigarettes?  No  Yes

If yes, please indicate the form and average daily amount used:

Form	Average Daily Amount (s)	
Pipes of tobacco	Amount of bowls	
Cigars	Amount of cigars	
Chewing tobacco	Amount of plugs	
Cigarillos	Amount of cigarillos	

- If you work, how much do you smoke during your workday? \_\_\_\_\_

**C. QUITTING HISTORY:**

7. Have you tried to quit before?  No  Yes

If yes, which methods have you <u>tried</u> ? (✓ all that apply)		Which methods were you most <u>successful</u> <u>with</u> ? (✓ all that apply)	
Cold turkey	<input type="checkbox"/>	Cold turkey	<input type="checkbox"/>
Cutting down gradually	<input type="checkbox"/>	Cutting down gradually	<input type="checkbox"/>
Self-help pamphlet	<input type="checkbox"/>	Self-help pamphlet	<input type="checkbox"/>
Individual counseling	<input type="checkbox"/>	Individual counseling	<input type="checkbox"/>
Support Group	<input type="checkbox"/>	Support Group	<input type="checkbox"/>
Acupuncture	<input type="checkbox"/>	Acupuncture	<input type="checkbox"/>
Hypnosis	<input type="checkbox"/>	Hypnosis	<input type="checkbox"/>
Laser	<input type="checkbox"/>	Laser	<input type="checkbox"/>
Nicotine Gum	<input type="checkbox"/>	Nicotine Gum	<input type="checkbox"/>
Nicotine Patch	<input type="checkbox"/>	Nicotine Patch	<input type="checkbox"/>
Champix	<input type="checkbox"/>	Champix	<input type="checkbox"/>
Zyban	<input type="checkbox"/>	Zyban	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	Other (specify)	<input type="checkbox"/>

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### QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE

8. How many times have you quit smoking and not smoked for more than 24 hours? \_\_\_\_\_
9. When was your last quit attempt?
- Never tried to quit (skip to section D)
  - Within the last month
  - Within the last year
  - Over a year ago
  - Over 5 years ago
10. Why did you stop at that time? \_\_\_\_\_
11. How long did you go without smoking that time?
- Less than 1 day
  - 1 day to 1 week
  - Less than 2 weeks but more than 1 week
  - Less than 1 month but over 2 weeks
  - Less than 3 months but over 1 month
  - Less than 1 year but over 3 months
12. Why did you start smoking again?
- Craving to smoke became too strong
  - Needed it to cope with pressure and stress
  - Began smoking at a party or other social situation
  - Began smoking while drinking alcohol
  - Other (please specify) \_\_\_\_\_
13. What is the **longest** you have gone without smoking? \_\_\_\_\_
14. Do you frequently wake-up during the night to smoke? \_\_\_\_\_

#### **D. SMOKING PATTERN (Fagerstrom)**

15. How soon after you wake up do you smoke your first cigarette?
- Within 5 minutes
  - 6-30 minutes
  - 31-60 minutes
  - After 60 minutes
16. Do you find it hard not to smoke in places where it is not allowed, like a church, at the movies, school, bar, restaurant or hospital?
- No  Yes
17. Which cigarette would you hate the most to give up?
- The first one in the morning
  - Any other one

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**QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE**

18. Please check (✓) how many cigarettes you smoke each day?

- 10 or less       11-20       21-30       31 or more

19. Do you smoke more in the first few hours after waking up than you do during the rest of the day?

- No       Yes

20. Do you smoke if you are ill and in bed most of the day?

- No       Yes

21. Cigarette evaluation scale:

Refers to the last cigarette of the day:	Not at all					Very much	
	1	2	3	4	5	6	7
Was it satisfying?							
Did it taste good?							
Did it make you dizzy?							
Did it calm you down?							
Did it help you concentrate?							
Did it make you feel more awake?							
Did it reduce your hunger for food?							
Did it make sick to your stomach?							
Did it make you feel less irritable?							
Did you enjoy the sensations of smoke in your throat and chest?							
Did it immediately reduce your craving for a cigarette?							

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**QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE**

**E. WHY I SMOKE – (Why Test)**

22. Please read each statement, then check (✓) the box that matches how you feel about smoking.

		Not at all			Very much	
		1	2	3	4	5
A	I smoke to keep myself from slowing down					
B	Handling a cigarette is part of the enjoyment of smoking it					
C	Smoking is pleasant and relaxing					
D	I light up a cigarette when I feel angry about something					
E	When I'm out of cigarettes, it's near-torture until I can get them					
F	I smoke automatically, without ever being aware of it					
G	I smoke when other people around me are smoking					
H	I smoke to perk myself up					
I	Part of enjoying smoking is preparing to light up					
J	I get pleasure from smoking					
K	When I feel uncomfortable or upset, I light up a cigarette					
L	I'm very much aware of it when I'm not smoking a cigarette					
M	I often light up a cigarette while one is still burning in the ashtray					
N	I smoke cigarettes with friends when I'm having a good time					
O	When I smoke, part of my enjoyment is watching the smoke as I exhale it					
P	I want a cigarette most often when I am comfortable and relaxed					
Q	I smoke when I'm "blue" and want to take my mind off what's bothering me					
R	I get a real craving for a cigarette when I haven't had one in a while					
S	I've found a cigarette in my mouth and haven't remembered that it was there					
T	I always smoke when I'm out with friends at a party, bar, etc					
U	I smoke cigarettes to get a lift					

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**F. REASONS TO STOP SMOKING**

23. Below are some common reasons people may give for wanting to quit smoking. Please check the box that applies to you.

<b>I want to stop smoking because:</b>		<b>Very Important</b>	<b>Important</b>	<b>Not Important</b>
<b>1</b>	It's costing me too much money to keep smoking			
	If I didn't smoke, I could spend my money on other things.			
	I want to get non-smokers' rates for my life insurance plan.			
<b>2</b>	I no longer want to smell like cigarette smoke			
	I am tired of feeling like an outcast because I smoke			
	Having yellow-stains on my fingers and teeth bothers me			
	Thinking of myself as a smoker bothers me			
<b>3</b>	People are concerned about my smoking			
	I am concerned about the effect that my secondhand smoke is having on others			
	I work in a smoke-free environment			
	Someone important to me asked me to quit			
	I want to set a better example for my children			
<b>4</b>	Most of my friends have quit smoking			
	Images of smoking-related diseases such as lung cancer, bother me greatly			
	I am bothered by physical symptoms, which I think are caused by smoking			
	I want to improve my physical fitness			
	I worry about getting a serious illness caused by my smoking			
	I think smoking is causing me not to feel well lately			
	I want to have more energy			
<b>5</b>	I knew someone who died from a smoking-related illness.			
	Other reason(s)			

**G. YOUR FEELINGS AND PLANS ABOUT STOPPING SMOKING**

24. Check the box which best describes "you"

- I am not thinking about quitting, certainly not in the next 6 months.
- I'm thinking about quitting in the next 6 months.
- I want to quit within the next month and I want to know more about how to do it.
- I have quit smoking for 6 months or less.
- I have quit smoking for over 6 months.

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**QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE**

25. **Importance:** Circle the number that best measures how important it is for you to stop smoking. (1 being **not at all** and 5 being **very important**)

1	2	3	4	5
---	---	---	---	---

26. **Commitment:** Circle the number that best measures how committed you are to stop smoking. (1 being **not very committed** and 5 being **very committed**)

1	2	3	4	5
---	---	---	---	---

27. **Confidence:** Rate how confident you are not to smoke in these situations: (1 being **not at all confident** and 5 being **extremely confident**)

1	2	3	4	5	With friends at a party
1	2	3	4	5	When I first get up in the morning
1	2	3	4	5	When I am very anxious and stressed
1	2	3	4	5	Over coffee while talking and relaxing
1	2	3	4	5	When I feel I need a lift
1	2	3	4	5	When I am very angry about something or someone
1	2	3	4	5	With my spouse or a close friend who is smoking
1	2	3	4	5	When I realize I haven't smoked for a while

28. What benefits do you get from smoking? \_\_\_\_\_

29. What harm or negative effects has smoking caused you? \_\_\_\_\_

30. Why do you want to stop smoking? \_\_\_\_\_

31. What about quitting smoking would be hard for you? \_\_\_\_\_

32. Are you ready to set a date to quit smoking?  No  Yes

**H. OTHER INFORMATION**

33. Are you concerned that your weight will be affected as you quit smoking?

No  Yes

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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**QUIT SMOKING CLINIC INTAKE QUESTIONNAIRE**

34. What physical activity do you do regularly?

- |                          |             |                          |            |
|--------------------------|-------------|--------------------------|------------|
| <input type="checkbox"/> | Walking     | <input type="checkbox"/> | Jogging    |
| <input type="checkbox"/> | Biking      | <input type="checkbox"/> | House work |
| <input type="checkbox"/> | Swimming    | <input type="checkbox"/> | Gardening  |
| <input type="checkbox"/> | Other _____ |                          |            |

35. Select the quit smoking method(s) you are interested in?

- Self-help pamphlets & resources
- Individual counseling
- Nicotine gum
- Nicotine patch
- Champix
- Zyban
- Other (specify) \_\_\_\_\_

36. How did you hear about the Health Unit's Quit Smoking Clinic?

- |                          |                              |                          |                   |
|--------------------------|------------------------------|--------------------------|-------------------|
| <input type="checkbox"/> | Doctor                       | <input type="checkbox"/> | Smoker's Helpline |
| <input type="checkbox"/> | Newspaper Ad                 | <input type="checkbox"/> | Pharmacist        |
| <input type="checkbox"/> | Cable TV                     | <input type="checkbox"/> | Pamphlet          |
| <input type="checkbox"/> | Website                      | <input type="checkbox"/> | Your Workplace    |
| <input type="checkbox"/> | Other (please specify) _____ |                          |                   |

\_\_\_\_\_  
Client Signature

\_\_\_\_\_  
Date

Reviewed by:

\_\_\_\_\_  
Health Unit Staff Signature

\_\_\_\_\_  
Date

(Adapted from the Peel Public Health, Halton Regional Health Department, Toronto Public Health and the University of Massachusetts Medical School Quit Smoking Programs.)

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## Appendix 4:

### Follow-up Counselling Session Questionnaire



North Bay Parry Sound District  
**Health Unit**

#### QUIT SMOKING CLINIC COUNSELLING RECORDING FORM

FOR CLINIC USE ONLY

Client Name: \_\_\_\_\_ Client Record Number: \_\_\_\_\_  
DOB: \_\_\_\_\_  
(YYYY/MM/DD)

Date of visit: \_\_\_\_\_ Visit Number: \_\_\_\_ Quit Date: \_\_\_\_\_  
Medical history reviewed? Yes No  
Contraindications for NRT use? Yes No If yes, specify: \_\_\_\_\_  
Subsequent visits: Medical condition changed? Not applicable No Yes, specify: \_\_\_\_\_  
NRT method used: \_\_\_\_\_ Dosage: \_\_\_\_\_ Start date: \_\_\_\_\_

	Rank	General Assessment		
Importance of quitting				
Commitment to quitting				
Confidence Levels				
Exposure to environmental tobacco smoke? If exposed, where? _____	no exposure	exposed	not discussed with family/friends	
Support system	family/friends	work	external	not discussed
Comments:				
Enablers	family/friends	work	external	not discussed
Comments:				
<b>Smoking Withdrawal Symptoms</b> (rank 1 to 5, 1 minor, 2 moderate, 3 severe)				
Craving		Restlessness		Headache
Irritability		Hunger		Dizziness
Drowsiness		Fatigue		Stomach and Bowel Problems
Impatience		Anxiety		Difficulty Sleeping
Feeling Sad or "blue"		Difficulty Concentrating		Sweating
Increase eating		Not Applicable		Other: _____
Safe use/side effects/contraindications reviewed using NRT Counselling Sheet (WIF-TOB-001-05-A)				
Cessation aid chosen and dosage		Yes	No	
		Voucher given?	Yes	No
		If yes, voucher number: _____		
Continuing with Program?	Yes	No	Next appointment booked?	Yes
			If no, reason: _____	
Resources given?	Yes	No	See Progress notes	
Specify: _____				

Completed by:

\_\_\_\_\_  
Signature/designation

\_\_\_\_\_  
Date (YYYY//MM/DD)

REVISED October 29, 2008-10-29  
WIF-TOB-001-04-A

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## Appendix 5:

### Nicotine Replacement Therapy Voucher

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## NICOTINE REPLACEMENT THERAPY VOUCHER #001

This voucher is redeemable for **\$15.00** off the purchase of any **nicotine patches or nicotine chewing pieces (gum)** at the following North Bay Pharmacies:

- Zellers Pharmacy, 1899 Algonquin Ave.
- Medical Pharmacy, 133 Main St. W
- Dean's Pharmasave, 1221 Algonquin Ave.
- Robinson's Pharmasave, 2547 Trout Lake Rd.

Health Unit Signature: \_\_\_\_\_



TO THE RETAILER: The North Bay Parry Sound District Health Unit will reimburse you the face value of this coupon provided it is redeemed by a consumer at the time of the purchase specified. Other applications may constitute fraud. Reproduction of this voucher is expressly prohibited

ONLY VALID AT SELECTED LOCATIONS LISTED ABOVE.

**EXPIRY DATE: December 31, 2009**

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## Appendix 6: Letter to Pharmacy



Main Office  
681 Commercial Street,  
North Bay, ON P1B 4E7  
Tel/Tél: (705) 474-1400  
Fax/Télé: (705) 474-8252  
Toll Free: 1-800-563-2808

70 Joseph Street, Unit 302  
Parry Sound, ON P2A 2G5  
Tel/Tél: (705) 748-5901  
Fax/Télé: (705) 748-2711

August 12, 2009

Dear Pharmacy Manager:

The North Bay Parry Sound District Health Unit is currently offering a smoking cessation counseling clinic two half-days a week at the North Bay Health Unit office, 681 Commercial St. To support clients who are ready to quit smoking, the Health Unit will cover a portion of the cost of the client's choice of nicotine replacement therapy (patch or gum). The Health Unit's smoking cessation specialist would issue vouchers to clients who have set a quit date that would pay for approximately half the cost of NRT at participating pharmacies.

This letter is an invitation to you to become a participating pharmacy in this project. Participation would involve accepting vouchers issued to smoking cessation clients by the Health Unit, talking with the customer to answer questions about using the NRT and billing the Health Unit once a month for the amount of vouchers redeemed. To complete a purchase, the pharmacy would accept the Health Unit voucher and collect the balance of the price from the customer. At the end of each month, the pharmacies would send a bill to the Health Unit for the total amount of vouchers redeemed along with the vouchers.

We sincerely hope you will join us in this effort to reduce the health consequences of tobacco use. If you are interested in becoming a participating pharmacy or want more information about this project, please contact Melanie Simms at [REDACTED].

Sincerely,

Melanie Simms, Smoking Cessation Specialist  
Tobacco Control Unit  
North Bay Parry Sound District Health Unit

[www.healthunit.biz](http://www.healthunit.biz)

## Appendix 7:

### 6 month follow-up telephone survey

#### Section 1: Smoking Status

1.0 Have you smoked (even a puff) in the last 7 days?  Yes  No

If 'Yes', skip to 1C.

1A) For how many days have you been smoke free? \_\_\_\_\_

1A-i) Date of last cigarette, if known: \_\_\_\_\_

1A-ii) Did you use nicotine replacement therapy (NRT), for example nicotine patches or gum, to assist with becoming smoke free?  Yes  No

1B) How helpful was NRT in assisting you to become smoke-free?  Very  Somewhat  Not at all

1C) Over the past 6 months how many times have you stopped smoking for at least 24 hours because you were trying to quit (0 to 100)? \_\_\_\_\_

If '0' quit attempts, skip to section 2.0.

#### Section 2: Nicotine Replacement Vouchers

2.0 At the Health Unit's Smoking Cessation Clinic were you ever provided with a voucher to help cover the cost of nicotine patches or gum?  Yes  No  Unsure

If 'No' or 'Unsure' skip to section 3.0.

2A) Did you ever use the voucher to purchase either nicotine patches or gum?  Yes  No

2A-i) What was the main reason why you didn't use the voucher?

2A-ii) Would you still have purchased NRT even if you were not provided with the voucher?  
 Yes  No

If 'Yes', skip to 2B.

2A-iii) What would be the main reason why you wouldn't have purchased NRT without the voucher?

2B) Were you able to go to your usual pharmacy to use the voucher?  Yes  No  Unsure

2C) Overall, was it convenient or inconvenient for you to use the voucher to purchase NRT?  
 Convenient  Inconvenient  N/A

If 'Convenient' or 'N/A' skip to section 3.0.

2C-i) Can you tell me one thing that would make the vouchers more convenient to use?

#### Section 3: Satisfaction with the Health Unit's Smoking Cessation Clinic

3.0) We now would like to ask you about your satisfaction with the Health Unit's Smoking Cessation Clinic. Were you very satisfied, somewhat satisfied, or not at all satisfied with the following:

3A) The overall quality of counselling provided to you at the clinic.  Very  Somewhat  Not at all

3B) The length of the first counselling session.  Very  Somewhat  Not at all

3C) The counsellor's advice provided during the sessions.  Very  Somewhat  Not at all

3D) The counsellor's ability to relate to your experiences.  Very  Somewhat  Not at all

3E) The ability to book appointments at convenient times.  Very  Somewhat  Not at all

3F) The ease of booking appointments at the clinic.  Very  Somewhat  Not at all

3G) The location of the clinic.  Very  Somewhat  Not at all

4.0) Overall, did the Health Unit's Smoking Cessation Clinic meet your expectations?  Yes  No  Unsure

If 'Yes' skip to 5.0.

4A) What was the main service or component of the Health Unit's Smoking Cessation Clinic you were least satisfied with?

5.0) Have you recommended the cessation clinic to your family members or friends?  Yes  No

## References

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