

CLINICAL GUIDELINES
FOR
THE MANAGEMENT OF NICOTINE DEPENDENT INPATIENTS
The Northern Territory Department of Health and Families

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The *Clinical Guidelines for the Management of Nicotine Dependent Inpatients* form a part of the *DHF Tobacco Smoking Cessation Support Framework Guidelines*. They have been developed to give clear direction in the management of nicotine dependent inpatients for DHF medical, nursing and allied health staff. These guidelines are to be used by medical and nursing staff in hospitals, and while there is an emphasis on inpatients, these guidelines can be used as a guide in other settings, for example in remote community health centres (clinics).

These Guidelines have a strong alignment to the clinical guidelines developed and tested in other jurisdictions, and unless otherwise stated, have been derived from the *North Coast Area Health Service, Clinical Guidelines of the Management of Nicotine Dependent Inpatients* and the Western Australian Department of Health *Clinical Guidelines and Procedures for the Management of Nicotine Dependent Inpatients*.

ASSESSMENT

All admissions to hospital should be asked about their smoking status as per the Hospital Admissions form. The information obtained from the patient is to be documented in their progress notes of their file. If the patient is a smoker, the admitting nurse is to complete the Smoking Assessment and Intervention Form (Attachment 1), followed by the Fagerstrom Test for Nicotine Dependence (Attachment 2) to determine the suitability for the patient to receive Nicotine Replacement Therapy. Include advice and treatment in patient care plans.

NICOTINE WITHDRAWAL

Patients who stop smoking cigarettes due to their hospital stay can experience symptoms of nicotine withdrawal. In addition to craving for tobacco, the symptoms of nicotine withdrawal (as defined by the DSM IV) include 4 or more of the following within 24 hours of cessation of, or reduction in, nicotine intake:

- anxiety
- irritability
- increased appetite
- restlessness
- frustration or anger
- insomnia
- difficulty in concentration
- depressed mood
- decreased heart rate

These symptoms of withdrawal must cause clinically significant distress that is not due to a general medical condition or is not better accounted for by another mental health issue. If a patient is in nicotine withdrawal, regular monitoring of the above signs and symptoms is needed to ensure the level of NRT and/or its delivery method meets their needs.

MANAGEMENT

The management of patients is outlined in the Flowchart – Summary for Inpatient Management of Nicotine Dependence (see Attachment 3).

PHARMACOTHERAPIES

Effective management of nicotine dependent inpatients will depend to a large extent on the timeliness of management of withdrawal symptoms with pharmacotherapies. The elimination half-life of nicotine is less than 2 hours, which means that many patients will seek to smoke unless withdrawal symptoms can be prevented via timely and regular provision of pharmacotherapies.

Pharmacotherapies fall into two basic groups: those with nicotine as an active ingredient, known as Nicotine Replacement Therapies (NRT), for example, transdermal nicotine patches; and those without nicotine, for example Bupropion (Zyban). Guidelines for the use of these pharmacotherapies are outlined below.

Nicotine Replacement Therapy

Both Medical Officers and Nurses can initiate the use of NRT for patients. Nurse initiated NRT must follow the Nurse Initiated Medication protocol for eligible patients and is subject to medical review by a Medical Officer within 24 hours of initiation. Nurses are required to advocate for review of the NRT regime to Medical Officers. Ongoing prescription of NRT is to be conducted by a Medical Officer. Both Medical Officers and Nurses share responsibility to review the patient for ongoing withdrawal symptoms and NRT medication.

NRT aims to replace some of the nicotine obtained from cigarettes, thus reducing withdrawal symptoms when stopping smoking.

Types of NRT include:

- Transdermal patches
- Gum
- Inhalers

Transdermal patches deliver nicotine at a slower, more constant rate over a longer period of time when compared to other methods of nicotine delivery. Nicotine gum and inhalers deliver a quicker dosage of nicotine but the duration is shorter. Gum and inhalers can also assist people with the behavioral and psychological aspects of nicotine withdrawal. i.e.: hand to mouth movements.

See Attachment 4 for more information on Nicotine Replacement Therapy.

Combination Therapy

Combination therapy is the provision of fast acting NRT products (such as gum or inhaler) to combine with the patch. It is appropriate if the patient is highly nicotine dependent or continues to experience withdrawal symptoms or has difficulty abstaining from smoking while on the nicotine patch.

Other Pharmacotherapies

Pharmacotherapies for smoking cessation that are not NRT may only be prescribed to patients by a medical officer. The two most effective forms of non-nicotine pharmacotherapies, Varenicline and Bupropion are summarized below. These are not currently available (as of 1 July 2009) through hospital pharmacies as they do not appear on the authorised DHF Formulary. However, treating medical officers can authorize treatment for suitable/ eligible patients through the non-formulary process. In most cases these medications will be initiated by the patients primary care practitioner. Contact Pharmacy for further information on the supply of these medications.

Varenicline

Varenicline (brand name Champix) was developed especially to help people stop smoking. It works by binding to nicotine receptors in the reward centres in the brain. In doing so, it reduces the severity of tobacco withdrawal symptoms while simultaneously reducing the rewarding effects of nicotine. In a clinical trial of generally healthy motivated smokers, after one year, more people had stopped smoking using Varenicline (23%) than those using bupropion (15%) or placebo (10%) (Jorenby, Hayes, Rigotti, 2006). Varenicline is a new medication, therefore its safety and efficacy is under review. While no adverse effects have been reported in its use amongst the general population to date (in a sample of 4000 people), possible psychiatric effects have been reported (Medicines and Healthcare products Regulatory Agency, 2007). Greater clinical trials with a larger number of people are needed to fully establish its safety.

Further, there are some contra-indications to its use, please refer to Attachment 5 for information on these.

Bupropion

Bupropion (brand name Zyban, Clorprax and Prexaton). The active ingredient in this medication is also present in certain anti-depressant medications. Bupropion affects some of the areas of the brain that are affected by nicotine, and it is thought to work by acting on systems which play a role in brain reward for nicotine and withdrawal. Using Bupropion can help to reduce withdrawal symptoms such as craving, irritability and anxiety (Richmond, 2003). Although Bupropion has been used as an anti-depressant, it is equally helpful to smokers with or without depression (Hughes, Stead & Lancaster, 2004 & Roddy, 2004).

Bupropion is not suitable for use by all individuals. Please refer to Attachment 5 for contraindications.

DRUG INTERACTIONS

Stopping smoking, with or without NRT products may alter the metabolism of some medicines. Therefore some medicines may require a change in dosage when patients start on an NRT program. This review can be discussed with your ward pharmacist or medical officer.

CLINICAL ROLES AND RESPONSIBILITIES

All clinicians will be responsible for supporting patients in complying with the DHF Smoke-free Policy.

Nurses Clinical Practice Guidelines

1. Conduct an initial assessment of the patients smoking status and readiness to quit (Smoking Assessment and Intervention Form) at time of admission and review effectiveness regularly throughout hospital stay.
2. Give all inpatients that smoke a DHF Smoke-free Policy Brochure for Patients.
3. Ask all patients who smoke to sign the *Patient Smoking Waiver Form* (Attachment 7). Involve the patient's legal guardian in the assessment and treatment plan if patient is under a Guardianship Order.
4. Be available to discuss concerns raised by patients that smoke.
5. Use an interpreter where necessary, to assist you in your explanation of the Smoke Free policy to the patient (and advise Medical Officer).
6. Aboriginal Health Workers and Aboriginal Liaison officers can also assist in conveying the information.
7. Advise Medical Officer if the client is not able to understand DHF Smoke Free Policy (or have the ability to sign forms) due to mental or intellectual disabilities.
8. Involve the patient's legal guardian in the assessment and treatment plan if patient under a Guardianship Order.
9. Follow *Flow Chart – Summary Management of Nicotine Dependent Inpatients (Nurse initiated)* (Attachment 3) and *NRT Product Guide* (Attachment 4).
10. Continue brief intervention on smoking cessation whenever the opportunity arises (See Attachment 6).
11. Suitable patients to receive nurse initiated NRT at time of admission.
12. Monitor patient withdrawal. Alert Medical Officer to contraindications.
13. Provide patient with a Quit Pack if they are amenable to this.
14. Provide all patients offered NRT the fact sheet *NRT Nicotine Replacement Therapy*.
15. Ensure Medical Officer reviews and authorizes medication chart within 24 hours, and re-charts ongoing order.
16. On discharge:
 - a. Include information in discharge summary regarding assessment and therapies used in RDH, effectiveness and associated side effects experienced.
 - b. Discuss with all smokers their intent to smoke after leaving hospital and offer information about smoking cessation, counselling and points of referral to community based cessation services such as:
 - i. The Quitline 137 848
 - ii. General Practitioner, Community Health Centre
 - iii. Quit Courses
 - Top End (AOD services) ph: **8922 6905**
 - Central Australia (ADSCA) ph: **8951 7580**
 - iv. Individual counselling
 - Amity Community Services ph: **1800 684 372**
 - v. Online cessation, e.g. <http://www.quit.org.au/> or <http://www.quitcoach.org.au/>

Patients Excluded From Nurse Initiated NRT

The list below outlines patient exclusions from nurse initiated NRT. Medical Officers may prescribe NRT to these patients if they deem this safe and appropriate.

Contraindicated (NRT should not be used)	Precaution
Non Smokers	Children under 18 years
Children under 12 years	Acute myocardial infarction, unstable or worsening angina, severe cardiac arrhythmias
Those with hypersensitivity to nicotine	Recent stroke (within 4 weeks)
Phenylketonurics (should not use lozenge)	Recent or planned coronary angioplasty, bypass frar or stenting (within 4 weeks)
Menthol hypersensitivity (should not use inhaler)	Active peripheral vascular disease
	Moderate to severe hepatic impairment
	Patches preferred for patients with oral disease
	Patients in ICU or CCU

* Recent is defined as within the last 4 weeks

Source: WA Health System Policy Clinical Guidelines and Procedures for the Management of Nicotine Dependent Inpatients

Contraindications for Pharmacotherapy

Please refer to Attachment 5.

Medical Officer Responsibilities

The Medical Officer's responsibility include the following:

1. Review and prescribe appropriate NRT within 24 hours of Nurse-Initiated NRT.
2. Assess all patients with contraindications to nurse initiated NRT and prescribe suitable NRT if appropriate.
3. Monitor patient withdrawal and adjust NRT medication accordingly.
4. Provide brief intervention on smoking cessation when the opportunity arises.
5. Include reference to NRT administered as part of the patient discharge plan.
6. Use an interpreter where necessary, to assist you in your explanation of the Smoke Free policy to the patient (and advise Medical staff).
7. Aboriginal Health Workers and Aboriginal Liaison officers can also assist in conveying the information.
8. Advise nursing staff if the client is not able to understand DHF Smoke Free Policy (or have the ability to sign forms) due to mental or intellectual disabilities.
9. Involve the patient's legal guardian in the assessment and treatment plan if patient under a Guardianship Order.
10. On discharge:
 - c. Include information in discharge summary regarding assessment and therapies used in RDH, effectiveness and associated side effects experienced.

- d. Discuss with all smokers their intent to smoke after leaving hospital and offer information about smoking cessation, counselling and points of referral to community based cessation services such as:
 - i. The Quitline 137 848
 - ii. General Practitioner, Community Health Centre
 - iii. Quit Courses
 - Top End (AOD services) ph: **8922 6905**
 - Central Australia (ADSCA) ph: **8951 7580**
 - iv. Individual counselling
 - Amity Community Services ph: **1800 684 372**
 - v. Online cessation, e.g. <http://www.quit.org.au/> or <http://www.quitcoach.org.au/>

All Departments should keep supplies of all forms and resources associated with the management of nicotine dependent inpatients. In particular *The Flowchart –Summary Management of Nicotine Dependent Inpatients* should be displayed on a clearly visible notice board and/or be readily available for staff use.

Pharmacist Responsibilities

Where available, the ward pharmacist will have a key role in overseeing NRT. They will be responsible for providing the ward with appropriate NRT and advising treating medical team of possible effects and cautions with regard to medication interactions and arranging discharge advice to patients where possible.

ENGAGING PATIENTS TO COMPLY WITH THE SMOKE FREE POLICY

Refer to the document Enforcement Procedures for Staff.

SPECIFIC PATIENT GROUPS OR SETTINGS

Heavily Nicotine Dependent Patients

It is recommended that moderate to heavily nicotine dependent patients be screened and/or monitored for depression. Patients with a depressed mood and a history of problematic drinking have been reported as more likely to be nicotine dependent and may have greater difficulty in stopping smoking whilst in hospital (North Coast Area Health Service, 2006). These patients may require combination therapy or two forms of NRT in order to prevent symptoms of nicotine withdrawal. Brief intervention counselling can also be particularly beneficial with this group (Quit, Victoria).

Culturally and Linguistically Diverse and Aboriginal Hospital Patients

One of the barriers to compliance with the DHF Smoke-free Policy amongst people from Culturally and Linguistically Diverse (CALD) and the Aboriginal and Torres Strait (ATSI) population may be communication issues. It is essential that all patients are able to understand the parameters of the policy. The fact that some people may not know what nicotine is, its actions in the body, and the physical effects of smoking, must be considered. Ascertaining a client's knowledge base and, in dialogue, building on that with culturally and linguistically appropriate quality information would be necessary. In addition, as with all inpatients, the administering of NRT requires full patient consent.

For patients from a CALD background, the Interpreting and Translating Service of the NT (ITSNT) is available to assist staff in communicating the policy to these patients. Information, including pamphlets in different languages should also be available to this population. Contact the ITSNT on **1800 676 254**.

For Indigenous clients, the Aboriginal Interpreter Service is available and should be used to assist in communication where English is not their first language. Aboriginal Liaison Officers and Aboriginal Health Workers based at hospitals can also be accessed to relay the smoke-free message to Aboriginal patients and clients. Culturally appropriate pamphlets outlining the DHF smoke free policy should also be made available to this population.

The Aboriginal Interpreter Service provides a 24 hours 7 days a week central booking service:

Darwin Tel: (08) **8999 8353**

Alice Springs Tel: (08) **8951 5576**

Pregnant Women

Smoking during pregnancy is associated with risks such as intra-uterine growth retardation, premature birth or stillbirth. Stopping smoking is the single most effective intervention for improving the health of both pregnant smoker and her baby (Johnson & Johnson, 2007).

Women presenting at antenatal care settings should be given information and support on stopping smoking during their pregnancy. When a woman has stopped smoking information and support on remaining abstinent would also be beneficial. Alcohol and Other Drugs Program can advise on relevant pamphlets.

Ideally smoking cessation during pregnancy should be achieved without NRT. However for women unable to quit on their own, NRT may be recommended to assist a quit attempt. The risk of using NRT to the fetus is lower than expected with tobacco smoking, due to lower maximal plasma nicotine concentration and no additional exposure to polycyclic hydrocarbons and carbon monoxide (Johnson & Johnson, 2007).

Intermittent dosing products (i.e. gum, inhalers) are preferred as these usually provide a lower daily dose of nicotine than patches (Glaxco Smith Kline, 2007). Women presenting in labor should be assessed for nicotine dependence as soon as possible within 24 hours

of admission. Following approval by the Medical officer, NRT may begin during labor (with the patient's consent) or after the birth.

If the patient expresses interest in quitting, conduct brief intervention, provide relevant information, such as the Quit booklet, and refer the patient and family members to Quit services.

The National Smoking and Pregnancy Project provides guidance for working with pregnant women who smoke tobacco products. Call 8922 6905 for information and resources for the national Smoking and Pregnancy project.

Breastfeeding and NRT

Nicotine from smoking and NRT is found in breast milk. However, the relatively small amount of nicotine the infant is exposed to from NRT is less hazardous than the second-hand smoke they would be exposed to from parental smoking. Nicotine patches should be prescribed with caution while breastfeeding¹. Intermittent dosing products (i.e. gum, inhalers) may be used while breastfeeding and women should be advised to breastfeed just before using the product to maximize time between NRT use and feeding (MIMS Australia, 2007).

Pharmacotherapy for Patients with Mental Health Co-morbidity

Individuals with mental health issues who express a desire to quit smoking should receive the same help and encouragement offered to all patients. Clients can be given the Quit Victoria booklet "*Smoking and mental health*" as a handout or this may be used as a brief intervention tool. It is important for clinical staff to closely monitor withdrawal symptoms in patients with psychiatric co-morbidity, and offer combination NRT to patients who are having difficulty abstaining from smoking.

Smoking interacts with some medications by increasing metabolic rate, making medications pass through the system more quickly. When people stop smoking or significantly reduce their intake, their mental health medication may need to be changed (American Psychiatric Association, 2003). In these circumstances it is very important for people to work together with their doctor or pharmacist to monitor their medication.

Amongst hospitalized patients in a smoke-free psychiatric ward, one study showed a definite preference for the nicotine inhaler, which replicates the hand-to-mouth movements of smoking. If combination therapy is offered to people with psychiatric co-morbidity, it may be advisable to offer the patch plus inhaler (D'Mello, Bandlamundi & Colenda, 2001).

NRT and Cardiovascular Disease

NRT typically produces much lower peak arterial concentrations than smoking and so has less intense cardiovascular effects. Clinical trials of NRT in patients with underlying stable cardiovascular disease suggest that nicotine does not increase cardiovascular risk (Benowitz & Gourlay, 1997). The safety of NRT use in patients with cardiovascular disease is widely documented. NRT can be used safely by smokers with less severe CVD.

NRT may not be the preferable option for people with recent MI, unstable angina, severe arrhythmias or refractory angina. However, if it does assist the person to quit then this is less harmful than continued smoking (NSW Health, 2002).

NRT and Diabetes

Patients with diabetes mellitus should be advised to monitor their blood sugar levels more closely than usual when NRT is initiated as catecholamines released by nicotine can affect carbohydrate metabolism and vasoconstriction may delay/reduce insulin absorption (MIMS Australia, 2007)

NRT and Children and Adolescents

The levels of nicotine in NRT are not suitable for children under 12. Children are likely to be affected by nicotine and it can cause severe potentially fatal toxicity.

NRT should not be used for patients under 12 years of age.

Data is limited in relation to the value of NRT use in young people (aged from 12 to 18 years) where the demand for cessation products and the motivation to quit are low. Nevertheless NRT is safe in this group (WA Health System Policy, 2007).

NRT should only be used by adolescents in conjunction with counselling. Staff initiated brief intervention, along with referral to the Quit line (for support and list of counselling services) should be provided. Counselling is particularly needed in this age group because NRT is likely to be ineffective in the absence of counselling (MIMS Australia, 2007).

Patients under 18 years of age are excluded from Nurse-initiated NRT.

Elective Surgery and Preadmission Clinics

Patients who smoke in the weeks prior to surgery have increased risk of postoperative complications, wound infections and wound rupture compared with non-smokers (North Coast Area Health Service, 2006). Preadmission clinics are an ideal opportunity to prepare patients for their visit to a hospital that is Smoke Free.

At preadmission patients who are current, or recently quit, smokers should be identified. They should be informed they are coming into a smoke free hospital and encouraged to stop smoking as soon as possible to reduce risk of complications during and post admission. To record that they have been given, and understand, the information about the smoke free policy, Patients will be requested to sign the Patient Waiver form (Attachment 7). Staff are required to record the information provided and explained, to patients.

Patients respond better to a brief intervention that relates to their particular health issues e.g. wound healing, infection rates, post-operative complications and disease progression. Since the use of pharmacotherapy doubles a person's chance of success (Quit Victoria, 2007), patients should be advised to use pharmacotherapy in their quit attempt, and seek the advice of their GP, pharmacist, or anesthetist. They should be encouraged to make use of any of the counselling services available from the Quitline (13 7848).

Emergency Department (ED)

Patients attending Emergency Departments should be advised that the grounds of the hospital are smoke-free and can be advised where they can access a designated smoking area, if available. Where admitted patients who are smokers have a long wait before transfer to an inpatient bed, clinical staff in ED should take steps to manage the nicotine dependence of the patient. See Attachments 2, 3 and 4 for information on prescribing NRT.

Patients waiting in ED may be offered glucose or barley sugar if they are not diabetic or fasting (Berlin et al, 2005).

Emergency Departments should keep supplies of all forms and resources associated with the management of nicotine dependent inpatients. In particular *The Flowchart –Summary Management of Nicotine Dependent Inpatients* should be displayed on a clearly visible notice board and/or be readily available for staff use.

SUPPLY ON DISCHARGE

If a Medical Officer deems ongoing pharmacotherapy to be appropriate, patients should be discharged with one week supply given on prescription.

FORMS AND TOOLS

ATTACHMENT 1

Smoking Assessment And Intervention Form

Name: _____ Date: _____
HRN: _____ Ethnic group: _____
Address: _____
Date of Birth: _____

Do you identify as Aboriginal
 Torres Strait Islander
 Aboriginal and Torres Strait Islander
 Neither Aboriginal or Torres Strait Islander

ASK the 5As at the visit:

Do you currently smoke? No/Yes
If you are currently smoking, what is the number of cigarettes per day: _____
Does your partner or another member of the household smoke? No/Yes

ADVISE: benefits of quitting:

For Self	For Family
<input type="checkbox"/> Increase in Self esteem	<input type="checkbox"/> Risks of passive smoking decreased
<input type="checkbox"/> Breathe better, more energy	<input type="checkbox"/> Create healthier environment
<input type="checkbox"/> Save money	<input type="checkbox"/> Children less likely to be smokers
<input type="checkbox"/> Less risk of Cancer	
<input type="checkbox"/> Less risk of lung damage	
<input type="checkbox"/> Less risk of Cardiac/respiratory diseases	

ASSESS to quit or reduce smoking:

Not interested
 Thinking about it
 Preparing to quit
 Recently quit (reinforce)
 Relapse/slip up

ASSIST/ARRANGE: Education/Quit plan

Congratulate
 Encouragement given
 Give out quit booklet
 Discuss supports GP, Quitline (13 78 48) Counselling services (Amity ph: 89818030)
 NRT (conduct Fagerstrom test for nicotine dependence level)

Adapted from DHF Smoke-Free Family assessment and intervention Community Health Screening

ATTACHMENT 2

Fagerstrom Test for Nicotine Dependence

Use the following test to score a patient's level of nicotine dependence once they have been identified as a current or recent smoker

Please Tick (✓) One Box for Each Question		
How soon after waking do you smoke your first cigarette?	Within 5 Minutes 5-30 minutes 31-60 minutes 60+ minutes	<input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0
How many cigarettes a day do you smoke?	10 or less 11 to 20 21 to 30 31 or more	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
Total Score		
Score	1 – 2 = Very Low Dependence 4 = Moderate Dependence 3 = Low to Mod Dependence 5 + = High Dependence	

Use an appropriate level of NRT according to their level of dependence

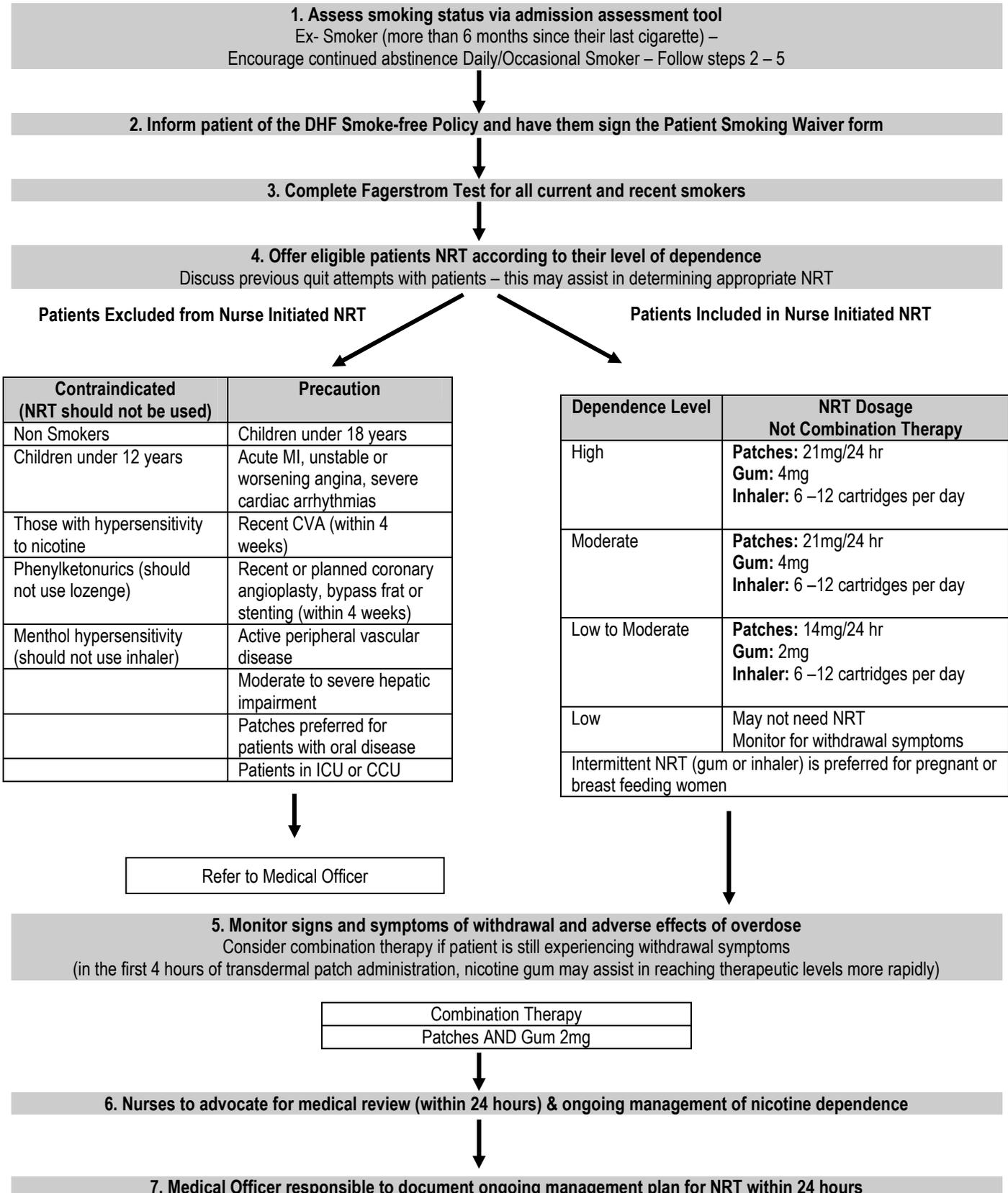
- Remember to consider contraindications and precautions – refer to medical practitioner if appropriate.
- Patients previous quit attempts may also provide assistance in determining which products may be suitable.
- Combination therapy is appropriate when the patient is highly nicotine dependent or continues to experience withdrawal symptoms or has difficulty abstaining from smoking while on the nicotine patch.
- In the first 4 hours of transdermal patch administration, nicotine gum may assist in reaching therapeutic levels more rapidly.

Dependence Level	NRT Dosage	Combination Therapy
High	Patches: 21mg/24hr patch Inhaler: 6 –12 cartridges per day Gum: 4mg	Patches: 21mg/24hr patch and Gum: 2mg or Inhaler: as required
Moderate	Patches: 21mg/24hr patch Inhaler: 6 –12 cartridges per day Gum: 4mg	Patches: 21mg/24hr patch and Gum: 2mg or Inhaler: as required
Low to Moderate	Patches: 14mg/24hr patch Inhaler: 6 –12 cartridges Gum: 2mg	Patches: 14mg/24hr patch and Gum: 2mg or Inhaler: as required
Low	May not need NRT Monitor for withdrawal symptoms Gum: 2mg Inhaler: As required	

Reproduced from WA Department of Healthⁱⁱ

ATTACHMENT 3

FLOW CHART – SUMMARY MANAGEMENT OF NICOTINE DEPENDENT INPATIENTS (nurse-initiated)



Adapted from the Western Australian Department of Health Guidelines and Proceduresⁱⁱⁱ

ATTACHMENT 4

Prescribing Information for Nicotine Replacement Therapy

Transdermal patches	<ul style="list-style-type: none"> • 24-hour mg patches are available • Three strengths are available 7, 14 and 21 mg in the 24 hr patch. • Remove patch after 16 hours for pregnant women where the use of a patch is judged appropriate. • The advantages of patches are that they are very simple to use and people generally use them reliably as instructed. • They are applied to a clean, dry, hairless area of skin and removed at the end of the day (16 hours) or the next day (24 hours). • Skin irritation is the most common side effect. • There is no evidence that 'weaning' patches are necessary – people can stop from a full-strength patch straight away. However, some people may prefer to 'wean' themselves off. • Delay in uptake may take several hours to reach optimal therapeutic level. • It may be preferred to remove patches after 16hours as nicotine is a stimulant and may interfere with sleep.
Gum*	<ul style="list-style-type: none"> • Two strengths of NRT gum are available: 2 mg and 4 mg; people who are highly dependent should use 4 mg gum. • Not all of the nicotine from the gum is absorbed (the 2 mg gum yields only about 1 mg of nicotine, whereas the 4 mg gum yields about 2 mg). • People should aim to use between 10 and 15 pieces of gum a day. • Instructing them to use one piece of gum per hour is a convenient way to encourage the correct dosage. • Each piece should be chewed slowly to release the nicotine, and a hot peppery taste will be experienced. The gum should then be 'parked' between the cheek and gums so that the nicotine can be absorbed. After a few minutes, the gum can be chewed again, then parked and the process repeated, for 20–30 minutes.
Inhalers*	<ul style="list-style-type: none"> • The inhaler is a small plastic tube containing a replaceable nicotine cartridge. • This method may provide more behavioral replacement than the other products (some people miss the hand-to-mouth action of smoking when they quit), but there is no strong evidence supporting this. • The user should puff on the inhaler for 20 minutes each hour. After four 20-minute puffing sessions, the cartridge should be changed. • The average person should aim to use four to six cartridges a day. • In cold weather, it is advisable to keep the inhaler warm to help the nicotine vapor be released from the cartridge. • Inhalers should be used for at least 8 weeks.
<p>*Notes on oral products</p> <ul style="list-style-type: none"> • Nicotine absorption from oral NRT products, including the inhaler, is via the buccal mucosa (lining of the mouth). • While these products can be used on a regular (for example, hourly) basis, they can all be used more frequently or when urges to smoke are more intense or more frequent. • An initial unpleasant taste is common to all these products, and this can be a barrier to correct use. People can be reassured that they will become tolerant of this taste after a short period (usually a couple of days). • Incorrect use of oral products, for example, chewing gum too vigorously, usually results in more nicotine being swallowed. This is not hazardous but means that less nicotine is absorbed and may cause local irritation and hiccups. • Drinking fluids while using these oral products should be avoided. • Advise lactating mothers to use after breast feeding wherever possible. 	
<p>Combination therapy</p> <ul style="list-style-type: none"> • Combining NRT products increases abstinence rates. The patch is usually combined with one of the oral products (gum, inhaler). In this way, users will receive a steady supply of nicotine from the patch and can obtain a more rapid 'top up' of nicotine from the oral products. • Note: The highest quit rates are achieved when medications such as NRT are combined with support. 	

Adapted from the New Zealand Smoking Cessation Guidelines

ATTACHMENT 5
Contra Indications for Pharmacotherapy

Contra Indications for Nicotine Replacement Therapy

NRT	Contraindications
Patch	<ul style="list-style-type: none"> • Non tobacco users • Generalised chronic dermatological disorders, such as psoriasis, chronic dermatitis, or urticaria • Patients with known hypersensitivity to nicotine or any components of the patch • Recent myocardial infarction • Unstable or progressive angina pectoris • Severe cardiac arrhythmias • Acute phase stroke • Patients who weigh less than 45 kilograms • Lactation – with caution – gum and inhaler preferred. • Children under 12 years
Inhaler	<ul style="list-style-type: none"> • Non-tobacco users • Patients with known hypersensitivity to nicotine or menthol • Children under 12 years
Gum	<ul style="list-style-type: none"> • Non-tobacco users • Hypersensitivity to nicotine • Recent myocardial infarction • Unstable or progressive angina pectoris • Severe cardiac arrhythmias • Acute phase stroke • Children under 12 years

Contra indications for Varenicline and Bupropion

Pharmacotherapy	Contraindications
Varenicline	<ul style="list-style-type: none"> • Hypersensitivity to Varenicline • People with unstable intercurrent medical illnesses • People with current or past history of mental illness • Pregnant women or those currently breastfeeding • People under 18 years of age <p style="font-size: small;">Source: Pfizer Australia Pty Ltd Champix Product Information</p>
Bupropion	<ul style="list-style-type: none"> • Hypersensitivity to Bupropion • Past or current seizures • Have a brain tumour (any tumours of central nervous system) • Are usually heavy drinkers and suddenly stop or plan to stop drinking alcohol • Suddenly stop or plan to stop using benzodiazepines • Have ever had the eating disorder bulimia or anorexia nervosa • Have taken a type of medicine called monoamine oxidase inhibitors (MAOI) within the last 14 days • Have severe liver disease • Are pregnant, trying to become pregnant or are breast feeding • Individuals under the age of 18 years <p style="font-size: small;">Adapted from Quit Victoria Educator Training 2007</p>

Adapted from Quit Victoria Educator Training 2007

ATTACHMENT 6

Brief Intervention – The 5As Framework

The 5As is an international smoking cessation intervention framework that recognizes time is a limited commodity in health settings. It can be used by health professionals to raise the smoking issue and encourage and support patients who smoke to quit. The 5As helps to provide health practitioners with the knowledge, skills and confidence needed to provide brief effective smoking cessation advice to their patients and to explore a systems approach to smoking cessation intervention in the health setting.

The 5As is referred to by the US Public Health Service Report, *A clinical practice guideline for treating tobacco use and dependence*, and has formed the basis of the 2004 Australian GP Smoking Cessation Guidelines. When used progressively, in as little as 3 minutes, the 5As can be effective in encouraging and supporting smoking cessation.

The 5As are to:

1. Ask – identify all tobacco users at every visit

Action	Strategies for implementation
Implement a system that ensures that every patients smoking status is documented	<ul style="list-style-type: none"> • Smoking Assessment and Intervention Form

2. Assess the patient's willingness and confidence to quit and note the stage they are at with their smoking and quitting,

Action	Strategies for implementation
<p>Assess every tobacco user's willingness to make a quit attempt at the time</p> <p>Work with Aboriginal Liaison Officers, interpreters and Aboriginal Health Workers as required</p>	<p>Assess patient's willingness to quit: <i>"Are you willing to give quitting a try?"</i></p> <p>If patient is willing to make a quit attempt at the time provide assistance:</p> <ul style="list-style-type: none"> • Give out booklet "Quit because you can" and Quit line no-137848 • Referral to RDH quit smoking program, counselling at Amity • Provide brief intervention if opportunity presents-refer to Assist (point 4 below). <p>If patient is unwilling to quit at this time, help motivate them by:</p> <ul style="list-style-type: none"> • Identifying reasons to quit in a supportive manner • Build patient's confidence about quitting

3. Advise-strongly urge all tobacco smokers to quit

Action	Strategies for implementation
In a clear, strong, and personalised manner, urge every tobacco user to quit.	<p>Advise all patients: <i>"Quitting tobacco is the most important thing you can do to protect your health"</i></p> <ul style="list-style-type: none"> • Link tobacco use to current symptoms and health concerns, and/or its social and economic costs, and /or the impact of tobacco use on children and others in the household. As examples: <i>"Continuing to smoke makes your asthma worse, and quitting may dramatically improve your health"; "Quitting may reduce the number</i>

of ear infections your child has.”

4. Assist the patient with quitting according to which stage they are at with their smoking

Action	Strategies for Implementation
Help the patient with a quit plan	<ul style="list-style-type: none"> • Set a quit date-ideally within the next two weeks • Identify reasons for quitting and benefits of doing so • Review past quit attempts-what helped, what led to relapse • Anticipate challenges to the quit attempt, particularly during the critical first few weeks-discuss nicotine withdrawal and options (see below) • Work out strategies to deal with these challenges ie: 4 D's: Delay, Deep Breathe, Drink Water, Do something else • Tell family, friends and coworkers about quitting and request understanding and support • Remove tobacco products from your environment. When patient gets back home, make it a smoke free area
Recommend the use of approved medication, except when contra-indicated for population groups (ie: children under 12) or health conditions (see attachment 5)	<p>The following NRT medications have been found useful in assisting smokers to quit</p> <ul style="list-style-type: none"> • Nicotine gum • Patches • Inhaler <p>Other pharmacotherapies include Bupropian & Varenicline</p> <p>Refer to Attachment 4 for guidelines for use with specific populations and precautions</p>
Provide self help materials, including information on quit line, quit booklet, quit smoking programs and one to one counselling	<ul style="list-style-type: none"> • Quit line no-13 78 48 • Quit booklet “You can Quit” • Quit program- Building 4, RDH • Counselling-Amity community services • Further resources can be ordered on line from Quit Vic or Quit SA http://www.quit.org.au/ http://www.quitsa.org.au/ • Ensure these are displayed and accessible in all ward and clinic areas

5. Ask again

Action	Strategies for implementation
Ask again at each subsequent visit if patient still smoking.	<p>Ask smokers if they have reconsidered quitting or check progress of patients who have quit or are trying to quit. If an attempt to quit has not been made, the 5As are used again.</p> <p>Monitor effectiveness of smoking cessation strategies in place and alter plan if required.</p>

Adapted from Helping Smokers Quit – A Guide for Clinicians US Department of Health and Human Services PHS Clinical Practice Guidelines Treating Tobacco Use and Dependence: 2008 Update

The model is particularly useful as it enables the health professional to do a very brief intervention, and combine that with referral to another service such as the Quitline for more extended support to the smoker, OR to do more intensive support themselves if time allows.

The 5As can link into the patient's consultation, for example when:

- welcoming the patient, you can ask and assess their smoking status and motivation to quit and record this as part of their health record
- discussing their health issues, you can ask whether your patient smokes and link your advice to their overall health
- offering options, you can assess their confidence and willingness to quit and encourage/ assist them to quit. depending on what point they are at with their smoking
- you're following up with them again at their next visit, you can ask them again how they're going

Why assist patients to quit smoking?

The research tells us that:

- health professionals are a respected source of preventative information and giving just brief advice (less than 3 mins) can help 2% of smokers to quit; this can have quite an impact at the population level if all health professionals were involved
- patients also had a positive attitude about their health professional providing them with smoking cessation advice.
- Cessation of tobacco smoking will reduce premature death and disease and with associated economic and social burden.

The 5As framework incorporates, to whatever degree is relevant or possible within time limits, health effects of smoking and benefits of quitting, smoking behavior, the stages of change model (shown below), quitting strategies and medications and motivational interviewing techniques.

Quit Victoria provides brief intervention training focusing on the 5As framework helping health professionals to further support their patients or clients with their smoking cessation efforts. The stages of change model (below) is also discussed as part of the framework.

Stages of change model

Quitting is a lot more than just suddenly stopping smoking or one single event. The stages of change model highlights the number of stages a smoker could present in their readiness to quit. The stages of change model is built within the 5As framework so that health professionals can assess a smoker's motivation to quit and support them accordingly.

Provided by Quit Victoria

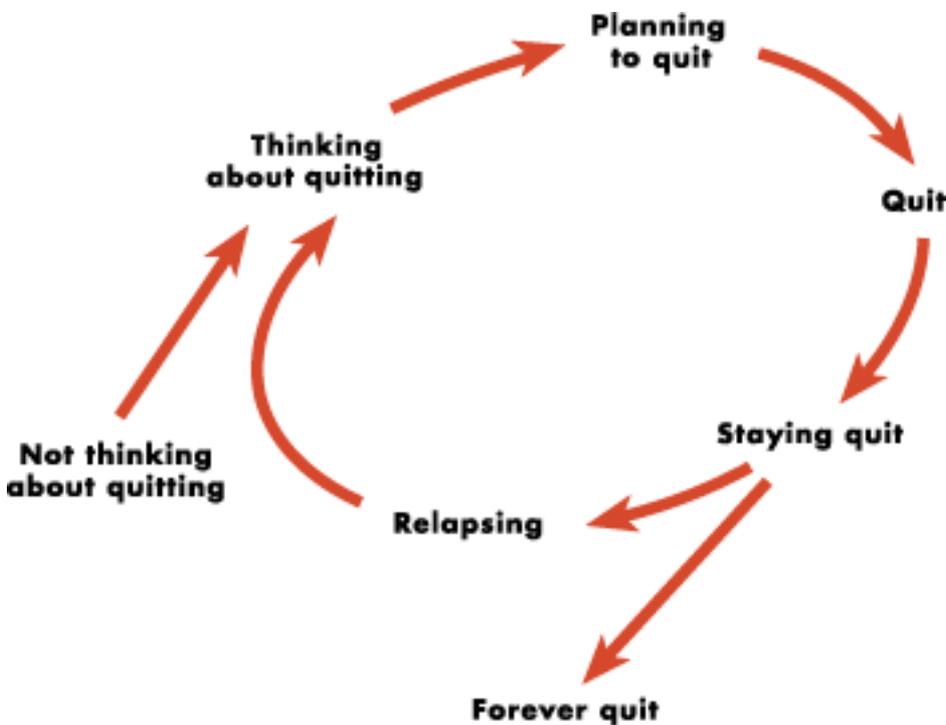


Figure 1: Stages of Change Model

Provided by Quit Victor

ATTACHMENT 7

PATIENT SMOKING WAIVER FORM

HRN:	_____
Surname:	_____
First Name:	_____
D.O.B:	____/____/____
Dr:	_____
Ward:	_____

I, _____ **have been informed of the following**

- This hospital has a Smoke Free Policy in place;
- All kinds of smoking are banned on all hospital property, including buildings, ground, car parks, walkways, entrances and vehicles, except in designated smoking areas;
- I have been told that Nicotine Replacement Therapy (NRT) is available in this hospital;
- I have been advised against smoking while receiving care from this hospital;
- I understand that staff are not to assist me to leave the hospital building to smoke;
- I agree not to hold the Hospital responsible if my condition gets worse, changes, or if some harm comes to me as a result of me leaving the hospital building to smoke;
- I understand that this waiver remains valid for the duration of my admission to the health service;
- I understand the Smoke Free Policy as it applies to me.

Signature: _____

Date: ____/____/____

(Have guardian to sign consent as appropriate).

I witnessed this patient's signature and have assessed that the patient understands the Smoke Free Policy, in particular the points above:

Witness name: _____

Witness signature: _____

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