

# Stop smoking products guidance

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**Status: Approved**

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## 1. Purpose

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Following this procedure will help the Trust:

- Provide nicotine replacement therapy (NRT) to relieve cravings and withdrawal symptoms in nicotine dependant inpatients
- To encourage the continuation of care between TEWV Trust and Stop Smoking Services (SSS)
- Provide information for staff to ensure that they are aware of the impact of smoking and stopping smoking on medication

## 2. Related documents

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The Medicines Overarching Framework defines compliance requirements for prescribing and initiating treatment safely which you must read, understand and be trained in before carrying out the procedures described in this document.

## 3. Guidance

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To comply with the Trust's Smoke Free Policy and the NICE guidelines for smoking cessation in secondary care (PH 48, Nov 2013); smokers will need to stop smoking whilst in Trust buildings and grounds during an inpatient admission.

During an in-patient admission a smoker has three options:

### 3.1 Option 1 - Patients but who do not intend to stop smoking (at discharge) but are suffering acute nicotine withdrawal

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- Patients suffering acute nicotine withdrawal can be prescribed NRT to help with withdrawal symptoms (which may include; agitation, headaches, moodiness, irritability, nervousness, fidgeting, anger and cigarette craving)
- All inpatients will be given the opportunity for stop smoking support while in the Trust's care.
- No NRT will be given on discharge to patients who do not intend to stop smoking
- The telephone number of the relevant NHS Stop Smoking Service (SSS) will be given on discharge and if contacted will arrange an appointment as soon as possible

### 3.2 Option 2 - Patients who are motivated to stop smoking and are suffering acute nicotine withdrawal

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- Patients will be offered NRT
- On discharge the patient will be given 7 days supply of NRT and advised on future support
- The SSS will be informed and referral arrangements confirmed
- The GP practice will be informed of NRT provided at discharge and referral arrangements to SSS

### 3.3 Option 3 - Patients abstaining from smoking but not suffering acute nicotine withdrawal

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- Support should be offered and withdrawal symptoms monitored
- If withdrawal symptoms occur NRT should be considered



Regardless of which option the patient chooses, every smoker should be offered NRT to manage their tobacco dependence within 30 minutes of arrival to an inpatient unit.

## 4. Smoking and medication

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- Tobacco smoke contains polycyclic aromatic hydrocarbons within the tar that increase the activity of certain hepatic enzymes (CYP1A2 in particular).
- Many commonly used medicines are substrates for CYP1A2: theophylline, fluvoxamine, caffeine, coumarins including warfarin and the antipsychotics clozapine and olanzapine
- Smokers taking a medication that is metabolised by this enzyme may require higher doses than non-smokers
- When people stop or reduce their smoking, there can be a decrease in enzyme activity with a corresponding increase in drug levels: hence they may require a reduction in the dosage of the interacting medication. Conversely if non-smokers restart smoking, a dose increase should be anticipated to maintain therapeutic levels.
- Not all possible drug-smoking interactions are clinically significant
- For patients taking clozapine who are intending to stop smoking, advice should be sought from the clozapine clinic staff or consultant psychiatrist who will formulate a plan, to ensure the patient's ongoing safety.
- For a full list of psychotropic drugs affected by smoking cessation see Appendix 1
- Information should be given to service users and carers regarding the likely need to increase the dose of their medication if they start smoking again



Not all possible drug-smoking interactions are clinically significant. Important factors that determine the clinical significance of an interaction in smokers are:

- The extent to which the medicine is metabolised by the enzyme CYP1A2
- The therapeutic index of the medicine metabolised (where there is little difference between therapeutic and toxic doses). For example higher levels of clozapine may have significant clinical adverse events.

## 5. Stop smoking products including NRT

### 5.1. Nicotine replacement therapy

Several different forms of NRT can be prescribed; the preparation chosen should be safe for the patient and most likely to succeed

All NRT should be used for 8-12 weeks but may be continued after this time



First line options are NRT patches, lozenges, inhalators and mouth spray

Treatment Choices	Administration	Dose
<b>Patch</b>	<p>Record administration on a Patch Chart to ensure site rotation. Apply on waking to dry non-hairy skin on the hip, trunk or upper arm. Avoid applying to broken, red or irritated skin.</p> <p>Skin sites should not be re-used for at least 7 days. Only one patch should be worn at a time.</p> <p>Exercise may increase absorption of nicotine and therefore side effects.</p> <p>Patients/staff should not try to alter the dose of the patch by cutting it up</p>	<p>Individuals who smoke more than 10 cigarettes a day should apply a high strength patch daily for 6-8 weeks, followed by a medium patch for two weeks, then the low strength patch for the final two weeks.</p> <p>Individuals who smoke fewer than 10 cigarettes a day can start with the medium strength patch for 6-8 weeks followed by a low strength patch for 2 weeks.</p>
<b>Lozenges</b>	<p>One lozenge should be placed in the mouth and allowed to dissolve – suck until taste becomes strong, then ‘park’ at side of the mouth. It should be moved from one side of the mouth to the other until completely dissolved (approximately 20-30 minutes).</p> <p>Do not chew or swallow whole. Use of coffee, acid drinks and soft drinks at the same time may decrease absorption of nicotine and should be avoided for 15 minutes prior to sucking lozenge.</p>	<p>One lozenge should be used every 1-2 hours when the urge to smoke occurs.</p> <p>Individuals smoking less than 20 cigarettes a day should use the lower strength lozenge and those who smoke more than 20 a day should use the higher strength lozenge</p> <p>Patients should not exceed 15 lozenges a day.</p>
<b>Mouth spray</b>	<p>The spray should be released into the mouth holding it as close to the mouth as possible and avoiding the lips.</p> <p>The patient should not inhale whilst spraying and avoid swallowing for a few</p>	<p>One-two sprays in the mouth when the urge to smoke occurs or to prevent cravings.</p> <p>Not more than 2 sprays per episode (up to 4 sprays every hour)</p>

	seconds after use.	Patients should not exceed 64 sprays daily
Inhalator (each cartridge)	<p>Insert cartridge into the device and draw in air through the mouthpiece.</p> <p>Each session can last for approximately five minutes.</p> <p>The amount of nicotine from one puff of the cartridge is less than a cigarette, so it may be necessary to inhale more often.</p>	<p>To be used when the urge to smoke occurs.</p> <p>The maximum of six 15 mg cartridges daily.</p> <p>A single 15 mg cartridge lasts approximately 40 minutes of use.</p> <p>Record when the inhalator is given to the patient.</p>



The detailed guidance on prescribing contained in the current edition of the British National Formulary (BNF) must be followed.

Prescribers must prescribe within their own competencies, comply with current legislation, Trust policies for prescribing and professional guidance.

## 5.2. Bupropion

**Bupropion** is contraindicated in bipolar affective disorder, epilepsy, CNS tumours, alcohol withdrawal, benzodiazepine withdrawal and eating disorders. It should not be prescribed with other drugs that can cause seizures. This includes tricyclic antidepressants and some antipsychotic medicines. **In view of the above bupropion is not approved for smoking cessation within TEWV. Treatment may however be continued if initiated prior to admission.**



Bupropion is not approved for use in TEWV Foundation Trust.

## 5.3. Varenicline

**Varenicline:** has been linked to depression, suicidal ideation and exacerbation of underlying psychiatric illness. Other side effects include sleep problems and anxiety. **Varenicline has not been approved for use within TEWV. Treatment may however be continued if initiated prior to admission.**



Varenicline is not approved for use in TEWV Foundation Trust.

Electronic cigarettes are not classified as a medicinal product and cannot be prescribed as an alternative to nicotine replacement therapy (NRT). They should only be used by staff and patients in line with the [Nicotine Management Policy](#)

## 6. Access to NRT during an inpatient admission

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To treat nicotine withdrawal symptoms effectively and provide the most comfort to the smoker, the patient should be offered NRT within 30 minutes of arrival on a ward. There are two ways of accessing NRT.

1. Prescription by a medical or non-medical prescriber
2. Homely Remedies Policy (see Appendix 2)



There are two ways of accessing NRT in the trust. The first one is by a prescription written by a prescriber. The second is via the Homely Remedies policy – (see Appendix 2)



The detailed guidance on prescribing contained in the current edition of the British National Formulary (BNF) must be followed.

Prescribers must prescribe within their own competencies, comply with current legislation, Trust policies for prescribing and professional guidance.

## 7. Document control

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Date of approval:	22 November 2018	
Next review date:	1 December 2021	
This document replaces:	PHARM-0000-v6.1	
Lead:	Name	Title
	Christopher Williams	Chief Pharmacist
Members of working party:	Name	Title
	Claire Humphries	Medicines Information Pharmacist
This document has been agreed and accepted by: (Director)	Name	Title
	Ruth Hill	Chief Operating Officer
This document was approved and ratified by:	Name of committee/group	Date
	Drugs and Therapeutic	22 November 2018
An equality analysis was completed on this document on:	General pharmacy EA statement (dated 18 <sup>th</sup> May 2017)	
Amendment details:		
Version 6.1 (26/7/18)	26/7/18 – page 12 – homely remedy for NRT can be used for up to 7 days in prisons.	
Version 7 (22/11/18)	Full review – no changes	

## 8. List of appendices

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Appendix 1: Smoking and the effect on medicines including clozapine

Appendix 2: The provision of NRT as a Homely Remedy

Appendix 3: The administration of NRT as a Homely Remedy



## Appendix 1: Smoking and the effect on medicines including clozapine

### Drugs Most Affected when Stopping Smoking

Plasma level of these drugs:-	Psychotropic drugs
<b><i>Is likely to rise, therefore...</i></b> a dose reduction may be required. The patient must be monitored for adverse effects and plasma drug levels should be monitored if appropriate	chlorpromazine, fluphenazine, haloperidol, <b>olanzapine</b> , duloxetine, fluvoxamine, <b><u>clozapine</u></b> – see below
<b><i>May possibly rise, but...</i></b> this is not generally found to be clinically significant. If adverse effects occur, consider decreasing dose.	flupentixol, zuclopenthixol, trifluoperazine, mirtazapine, tricyclic antidepressants, lamotrigine, valproate, most benzodiazepines, zolpidem, propranolol
<b><i>Is unlikely to rise, so...</i></b> no interaction is expected. However, data are often limited so patients should be monitored for adverse effects.	amisulpride, aripiprazole, quetiapine, risperidone, citalopram, escitalopram, fluoxetine, paroxetine, sertraline, moclobemide, reboxetine, venlafaxine, carbamazepine, chlordiazepoxide. (Note – lithium levels may reduce)

**NB: This guidance relates only to the effects of smoking cessation on psychotropic drugs. However it is essential to consider the potential effects on all medication prescribed.**



**The MHRA advised in October 2009 that the most important medicines to consider in those who smoke, or are trying to quit, include THEOPHYLLINE, OLANZAPINE, CLOZAPINE, CAFFEINE and WARFARIN.**

**Warfarin** is partly metabolised via CYP1A2. An interaction with smoking is not clinically relevant in most patients. If a patient taking warfarin **stops smoking**, their INR might increase so monitor the INR more closely. It may take up to a week after stopping smoking to see the full effect on the INR.

Smoking is associated with poor glycaemic control in patients with diabetes. Smokers may require higher doses of **insulin** but the mechanism of any interaction is unclear.

If a patient with insulin-dependent diabetes **stops smoking**, their dose of insulin may need to be **reduced**. Advise the patient to be alert for signs of hypoglycaemia and to test their blood glucose more frequently.

## Clozapine and Smoking

- Stopping smoking can be dangerous for someone taking clozapine, a 50% increase in stable clozapine levels can occur on smoking cessation, with cases so extreme, significant adverse drug reactions are seen.
- In a smoker, taking a constant dose of clozapine, on average the plasma levels are 48% lower than non-smokers on the same dose.
- The number of cigarettes smoked a day appears to affect plasma clozapine. Above 10 cigarettes the levels do not alter, dropping to below 10 there is a dose-dependent relationship.
- If stopping smoking suddenly, significant plasma changes occur within 3-5 days.
- If starting smoking suddenly, significant plasma changes can occur within 3-5 days.
- Smoking cannabis has the same effect on clozapine plasma levels, but NRT, electronic cigarettes, chewing tobacco or snuff have no effect.
- If a patient is also taking valproate and clozapine the enzyme induction may be additive and so the effect may be more marked when stopping smoking.



For people taking clozapine and are stopping smoking, advice should be sought from the clozapine clinic staff or consultant psychiatrist who will formulate a plan, to ensure the patient's on-going safety.

## Pathway for Patients taking Clozapine who Stop Smoking

1. Assess patient clinically
2. Record current clozapine dosage in clinical notes
3. Record other medications and dosage in clinical notes
4. Assess compliance with clozapine treatment
5. Take trough serum clozapine level on admission and record results in clinical notes
- 6. Note plasma levels of above 350 µg/l suggest therapeutic response**
7. Confirm the number of cigarettes smoked
8. Clinically monitor for side effects of higher serum levels such as sedation, hypersalivation, hypotension, seizures and other neurological effects, akathisia and prolonged QTc interval

**Known to be taking clozapine regularly and smokes more than 10 cigarettes a day**

Note serum levels of clozapine will start to rise 24 hours after smoking cessation.

Depending upon plasma level result, suggest reducing dose of clozapine gradually over a week, until around 75% of original dose (i.e. reduce by 25%).

**Known to be taken clozapine regularly and an occasional smoker or smokes less than 10 a day**

Note serum levels of clozapine will start to rise 24 hours after smoking cessation.

Depending upon plasma level result, consider a reduction of clozapine dose gradually over a week until around 75% of original dose (i.e. reduce by 25%)

**Repeat plasma levels one week after stopping.  
Monitor for side effects**

**Adjust dose as appropriate**

**Action to be taken if patient re-starts smoking**

1. Take plasma level before re-starting smoking (if possible)
2. Increase dose to previous smoking dose over one week.
3. Repeat plasma level.
4. Adjust dose as appropriate

## Appendix 2: The Provision of NRT as a Homely Remedy

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### What is a Homely Remedy?

A homely remedy is a product that can be obtained, without a prescription, for the immediate relief of a minor, self-limiting ailment for a short period of time.

### Which NRT products are available as Homely Remedies?

Only 25 mg and 15 mg 16 hour NRT patches and 15 mg inhalators are available as Homely Remedies. Other NRT Preparations can be prescribed by registered prescribers.

### How long can NRT be given as a Homely Remedy?

NRT can be given for 72 hours or until a registered prescriber can write a prescription. In the prison environment, this can be given for up to 7 days.

### Which products should be chosen?

Nicotine patches are a pro-longed release formulation and are applied for 16 hours and the patch removed overnight. Inhalators can be used whenever the urge to smoke occurs or to prevent cravings. The choice of NRT preparation depends largely on patient preference. Patients with a high level of nicotine dependence may benefit from using a combination of patches and inhalators.

Patches and inhalators are licensed for adults and children over 12 years old.

### When should NRT be administered as a Homely Remedy?

If a patient is admitted who smokes cigarettes and a registered prescriber is unavailable to write a prescription for NRT then qualified nursing staff can administer either a patch and/or an inhalator to prevent nicotine cravings and treat nicotine withdrawal.

### When should NRT not be used?

It is safer to use licensed nicotine-containing products than to smoke. Any risks associated with NRT are substantially outweighed by the well-established dangers of continued smoking. The effects of cigarette smoking in conjunction with NRT are similar to those of cigarette smoking alone. Excessive use of NRT by those who have not been in the habit of inhaling tobacco smoke could possibly lead to nausea, faintness or headaches

*Pregnancy:* NRT can be used by pregnant smokers. Ideally, smoking cessation in pregnancy should be achieved without NRT. NRT is recommended as the risk to the unborn baby is far lower compared to continuing to smoke. Those prescribing or supplying NRT should ensure that the potential risks and benefits are understood by the mother.

### Homely remedies in-patient pathway

#### Step 1 – Identification of smokers

Ask every patient if they currently smoke tobacco  
Record smoking status in PARIS

#### Step 2 – Advise and offer support

To comply with the Trust's Smoke Free Policy and NICE guidelines for smoking cessation in secondary care smokers will need to abstain from smoking whilst in Trust buildings and in the grounds during an in-patient admission.

Establish whether the smoker would like NRT to manage their nicotine cravings and their withdrawal symptoms.

**Step 3 – Act on smoker’s response**

Ask smoker how many cigarettes a day do they smoke? Past use of NRT. Patient’s choice of NRT product. Known allergies to NRT products. Current medical conditions.

**Light smoker** – Smokes 1-10 cigarettes a day

Choose 15 mg 16 hour patch **or** an inhalator

**Moderate smoker** – Smokes 11-20 cigarettes and Heavy Smokers who smokes more than 20 cigarettes a day

Choose 25 mg patch **and/or** an inhalator

Choose one product for light smokers or a combination of two products for moderate to heavy smokers.

**Patch**

Dose	Correct Use	Side effects (>1/10)
Nicorette: 15mg, 25mg Invisi Patches (16 hour patches)	1] Take the adhesive stickers off patch, 2] Hold patch in palm of hand; apply one patch to non-hairy, dry skin on upper arm, hip or chest. 3] Hold down for 20 seconds. 4] Alternate sites and try not to use the same site for a few days. 5] Remove old patch before applying new patch. 6] Do not apply to broken or inflamed skin	Site reactions are common in the first 2-3 weeks, including rash, itching, burning, tingling, numbness, swelling, pain, and urticaria. They resolve quickly following removal of the patch. Sleep disturbance (e.g. insomnia and abnormal dreams) may occur with 24 hr patch
On the first day of using the patch, it takes approximately 9 hours to reach the highest level in the blood.		

**Inhalator**

Dose	Correct Use	Side effects (>1/10)
Nicorette 15mg Inhalator Maximum: 6 a day	Each cartridge can be used for approximately eight 5-minute sessions, with each cartridge lasting approximately 40 minutes of intense use. The amount of nicotine from a puff is less than that from a cigarette. To compensate for less nicotine delivery from a puff it is necessary to inhale more often than when smoking a cigarette	Headache, coughing, mouth and throat, tongue irritation
When used like a cigarette the inhalator on average delivers 1mg in 80 puffs (e.g. 8 puffs per minute for 10 minutes). When used in this way this results in, a degree of nicotine substitution of about 50% compared to hourly smoking		

**How is the administration of Homely Remedies recorded?**

They are recorded using a Homely Remedy Administration form, see Appendix 3

### Appendix 3: The Administration of NRT as a Homely Remedy

Patient name and date of birth:	Ward:
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#### Nicotine Patch issued

	16 Hour 15mg Smokes less than 10 cigarettes per day			16 Hour 25mg Smokes more than 10 cigarettes per day		
Date						
Time						
Given by						

#### Nicotine Inhalator issued, maximum 6 cartridges x 15 mg in 24 hours

Date									
Time									
Given by									
Date									
Time									
Given by									

Date referred to prescriber:	Date Individualised assessment completed:	Signature of prescriber:

IN PATIENT PERMISSION AS HOMELY REMEDIES IF PRESCRIBER IS UNAVAILABLE

