East London NHS
NHS Foundation Trust

Guidelines for the Prescribing, Issue and Administration of Smoking Cessation Pharmacotherapy on Inpatient Wards

Document Control Summary	
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3.0		
4.0		

Contact Details

The East London Stop Smoking Services can be contacted in the following ways:

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City & Hackney Stop Smoking Service

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Forensic Stop Smoking Service

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Authorisation of Named Nurses/Health Professionals to Work within the Guidelines

Guidelines for advice and recommendation of Smoking Cessation Pharmacotherapy by Smoking Cessation Advisers at the East London NHS Foundation Trust.

Named level 2/level 3 adviser (please delete as appropriate):

_____

Designation:

_____

The above named nurse/health professional is authorised to work within the confines of this Guideline.

Name Lead Consultant: _____

Name Lead Nurse: _____

Named Professional Lead: _____

I, the undersigned have **read and understood** the guidelines and agree to work within its confines.

Signature of named
nurse/health professional: _____

Date:

_____

One copy to be retained by named nurse/health professional

One copy to be retained by responsible manager

Guidelines for the Prescribing, Issue and Administration of Smoking Cessation Pharmacotherapy on Inpatient Wards

1.0 Introduction

1.1 From the 1st July 2008 it will be illegal to smoke in any enclosed or substantially enclosed part of the Mental Health establishment. This will include smoking by patients, visitors or members of staff, and will include *all* residential mental health units, regardless of whether they provide acute or long-term services.

1.2 The East London NHS Foundation Trust (ELFT) Smoke Free Policy [1] addresses the requirements set out by the Health Act 2006 and introduces a strategy to enable patients to comply with the law.

1.3 Pharmacotherapy plays a vital role in enabling patients to maintain abstinence from tobacco products. These guidelines have been developed in line with NICE guidance [2] and the following treatments may be used for the purposes of smoking cessation;

- Nicotine Replacement Therapy (nicotine patches, inhalators, nasal spray, lozenges and microtabs only. Nicotine gum will not be used on inpatient wards at ELFT).
- Varenicline (Champix®)
- Bupropion (Zyban®)

1.4 This guideline acts as a framework under which appropriately trained staff will operate the East London NHS Foundation Trust Smoking Cessation Initiative.

1.5 This scheme involves training of appropriate healthcare staff to provide educational support and advice to patients motivated to stop smoking.

1.6 Inpatients wanting to stop smoking can approach or be referred to the service and receive individually tailored smoking advice.

1.7 This may involve the recommendation of, and counselling about the most appropriate forms of smoking cessation pharmacotherapy.

2.0 Aim of guidelines

2.1 To ensure the safe and effective use of smoking cessation pharmacotherapy by smokers seen by appropriately trained staff at ELFT.

2.2 To establish how smoking cessation pharmacotherapy should be prescribed, issued and administered to patients on inpatient wards

3.0 Smoking Cessation Advisers

3.1 Smoking cessation services will operate under three tiers within the Trust.

3.2 **Level 1** advisers increase awareness of smoking cessation with patients and provide appropriate information about referral to level 2 advisors. All inpatient staff should have level 1 training.

3.3 **Level 2** advisers provide smoking cessation treatment services. In particular they offer 1-1 in depth support, advice and motivation. There is a high focus on treatment with nicotine replacement therapy (NRT).

- Advisers will be staff members trained by City & Hackney, Newham or Tower Hamlets Primary Care Trusts to offer level 2 smoking cessation advice.
- Advisers will meet criteria laid out in this guideline and will offer smoking cessation advice to inpatients in the East London NHS Foundation Trust.
- Advisers should attend a refresher course every 12 months following accreditation, in addition to other events organised in the year.

3.4 **Level 3** advisers offer intensive support and advice for highly dependent smokers. There is a high focus on treatment with NRT in addition to varenicline and bupropion. In most cases this service will be provided by the Primary Care Trust (PCT) smoking cessation service.

4.0 Access to Smoking Cessation Pharmacotherapy

4.1 All localities will have access to smoking cessation pharmacotherapy.

4.2 However, the mechanism by which it is accessed may be variable, depending on systems provided in conjunction with local smoking cessation services and individual patient circumstances.

4.3 Some localities within the Trust have chosen to advocate an approach that involves Trust staff, trained as level 2 advisers, assessing patients and recommending the most appropriate smoking cessation pharmacotherapy. These advisers would only be able to recommend treatment with NRT and would refer more complex cases to smoking cessation service level 3 advisers.

4.4 Other localities advocate an approach where all ward staff are trained as level 1 advisers, but receive a full time service from a smoking cessation service level 3 adviser. This adviser would assess all referrals and then recommend the most appropriate treatment for the patient's needs.

4.5 Trust staff may be trained as level 3 advisers by smoking cessation services.

4.6 In many cases, patient's first exposure to NRT may not be for the purposes of smoking cessation but to maintain plasma nicotine levels when the patient is unable to smoke.

4.7 Therefore, on admission, it is essential that patients' smoking status is confirmed by the admitting doctor. Patients who are smokers should be prescribed appropriate NRT to maintain nicotine plasma levels when they cannot smoke.

5.0 Effect of Smoking Cessation on Drug Metabolism

5.1 Staff should be aware that smoking cessation may alter the metabolism of a number of commonly used psychotropics. The following table summarises the effect of starting/stopping smoking on psychotropic metabolism.

Drug	Effect of smoking	Action on stopping smoking	Action on restarting smoking
Benzodiazepines[34]	Plasma levels reduced by 0-50% (depends on drug and smoking status)	Monitor closely. Consider reducing dose by up to 25% over 1 week.	Monitor closely, consider restarting 'normal' smoking dose.
Chlorpromazine[56,7]	Plasma levels reduced. Varied estimates of exact effect	Monitor closely, consider dose reduction.	Monitor closely, consider restarting 'normal' smoking dose.
Clozapine[89]	Reduces plasma levels by up to 50% (depends on number/type of cigarettes smoked)	Take plasma level before stopping. On stopping reduce dose gradually (over a week) until around 75% dose reached. Repeat plasma level 1 week after stopping. Consider further dose reductions.	Take plasma level before restarting. Increase dose to 'normal' smoking dose over 1 week. Repeat plasma level.
Fluphenazine[10]	Reduces plasma levels by up to 50% (depends on number/type of cigarettes smoked)	On stopping, reduce dose by 25%. Monitor carefully over following 4-8 weeks. Consider further dose reductions.	On restarting, increase dose to 'normal' smoking dose.
Fluvoxamine[11]	Drug metabolism is potently affected by smoking.	Monitor closely, consider dose reduction.	Monitor closely, consider restarting 'normal' smoking dose.
Haloperidol[1213]	Reduces plasma levels by around 20% (depends on number/type of cigarettes smoked)	Reduce dose by around 10%. Monitor carefully. Consider further dose reductions.	On restarting, increase dose to 'normal' smoking dose.
Lithium[14]	Smoking induces metabolism of caffeine, therefore theoretically smoking can reduce xanthine levels, which could reduce lithium excretion (↑ plasma level)	Take plasma level before stopping. Repeat plasma level one week after stopping and consider need for dose increase.	Take plasma level before restarting. Repeat plasma level one week after stopping and consider need for dose reduction.
Olanzapine[1516]	Reduces plasma levels by up to 50% (depends on number/type of cigarettes smoked). Half life can be 21% shorter in smokers[17]	Take plasma level before stopping. On stopping reduce dose by 25%. After one week, repeat plasma level. Consider further dose reductions.	Take plasma level before restarting. Increase dose to 'normal' smoking dose over 1 week. Repeat plasma level.
Tricyclic antidepressants[1819]	Plasma levels reduced by 25-50% (depends on drug and smoking status)	Monitor closely. Consider reducing dose by 10-25% over 1 week. Consider further dose reductions.	Monitor closely, consider restarting 'normal' smoking dose.
Carbamazepine[20]	'May' be affected by smoking but effects on these drugs usually clinically insignificant.	'Caution' advised. Monitor	'Caution' advised. Monitor
Duloxetine[21]			
Flupentixol[22]			
Mirtazapine[23]			
Zuclopenthixol[24,25]			

5.2 This effect is unrelated to nicotine and is caused by polycyclic aromatic hydrocarbons (PAHs) present in tobacco smoke. PAHs increase activity of the cytochrome P450 system that is responsible for the metabolism of a number of commonly used psychotropics.

5.3 Following smoking cessation, the patient is no longer exposed to PAHs and metabolism of these psychotropics decreases, resulting in increased plasma levels. Plasma levels will rise regardless of whether a patient is treated with NRT, bupropion or varenicline.

5.5 On prescribing smoking cessation pharmacotherapy, prescribers need to consider other prescribed medications and monitor for signs of increased plasma levels. In some cases it may be possible to check plasma levels (for example clozapine).

5.6 Extreme caution should be taken in those patients taking theophylline. Smoking cessation may cause plasma levels of this narrow therapeutic index drug to rise. Those taking theophylline should be supplied with NRT as appropriate but the advisor must inform the client's doctor.

6.0 Guidance for the Use of Nicotine Replacement Therapy

6.01 Nicotine replacement therapy is an effective aid to smoking cessation for those smoking more than 10 cigarettes a day. It is regarded as the pharmacological treatment of choice in the management of smoking cessation.

6.02 Only nicotine patches, inhalators, lozenges, nasal spray and sublingual tablets may be used on inpatient wards at ELFT. Nicotine gum will not be used.

6.1 Criteria for inclusion

6.1.1 Tobacco users identified as sufficiently motivated to quit i.e. willing to set a quit date and receive weekly support for the first four weeks.

6.1.2 For the purpose of maintaining nicotine plasma levels in those who are unable to smoke owing to clinical circumstances.

6.1.3 To reduce smoking levels to reduce healthcare risk to the patient (harm reduction)

6.2 Criteria for exclusion

6.2.1 Pregnant or breastfeeding women

6.2.2 Those who have experienced a cardiovascular event or hospitalisation for a cardiovascular complaint in the previous four weeks (e.g. stroke, myocardial

infarct, unstable angina, cardiac arrhythmia, coronary artery bypass graft and angioplasty)

6.2.3 Those smokers who need more intensive behavioural support

6.2.4 Those with uncontrolled hypertension

6.2.5 Those with a previous serious reaction to NRT or any ingredients contained in the product, e.g. glue in the patch

6.2.6 Those with a serious cardiovascular event/hospitalisation in the previous four weeks or uncontrolled hypertension

6.2.7 Those taking theophylline (see drug interactions)

6.2.8 Patches only:

- Those with a chronic generalised skin disease such as psoriasis, chronic dermatitis and urticaria.
- Those have had a previous reaction to the transdermal patch.
- Occasional smokers

6.3 Actions to be followed for clients in whom NRT is contraindicated

6.3.1 If the client meets an exclusion criterion, the advisor should not recommend the use of an NRT product as it is outside the guidelines.

6.3.2 The advisor should contact their stop smoking service as the patient may still be able to use NRT but will need it to be prescribed by a ward doctor with advice from the stop smoking service.

6.3.3 If NRT is deemed not to be appropriate for the patient after consultation with the stop smoking service and ward doctor, the advisor should provide the behavioural support of the level 2 intervention only.

6.4 When can supply be made outside the terms of the Summary of Product Characteristics (SPC)?

6.4.1 NRT may be supplied outside the terms of the SPC to:

- Those with a history of cardiovascular disease, diabetes, thyroid disease, peptic ulcer disease who are not in the exclusion criteria mentioned.
- Continuing supplies beyond 12 weeks should be referred to the Stop Smoking Service contacts on Page 4.

6.5 Clients Covered under this guideline:

6.5.1 All inpatients within East London NHS Foundation Trust.

6.6 Inpatient referrals:

6.6.1 All in-patient staff should have level 1 training.

6.6.2 A member of their healthcare team will refer in-patients to an advisor.

6.6.3 The advisor will provide smoking cessation advice.

6.6.4 The patient will be assessed for suitability to receive NRT and from the patient's history and preferences, appropriate NRT will be recommended.

6.6.5 When NRT is recommended, the patient's medical team will be asked to prescribe the relevant NRT product on the patients prescription chart.

6.6.6 If there is any doubt about the patient's suitability to receive NRT, this should be discussed with the stop smoking service and ward doctor.

6.6.7 If NRT is supplied the advisor will counsel the patient on how to use it.

6.6.8 Before giving the NRT to the patients, the advisor will check that the NRT has been charted on the in-patient prescription chart.

6.6.9 Patients will receive NRT as inpatients and for up to 4 weeks post discharge.

6.6.10 Ward pharmacists should check for any interactions and subsequent changes in medicine levels as a result of stopping smoking

6.7 Management and Monitoring Mechanisms

6.7.1 This will be determined by the advisor but will normally follow these guidelines:

- Advisors will be working under the protocol of the specialist stop smoking services which they will have signed up to separately after their level 2 training, in addition to these guidelines.
- Advisors offer weekly support meetings. If this is not feasible, then longer intervals can be used or patients can be followed up via telephone calls.
- If they are successful in stopping smoking after week 4 (preferable with carbon monoxide validation) treatment is to be given for another four weeks before revalidation.
- If the smoker is unsuccessful in stopping at 4 weeks then discontinue treatment and make a fresh start when they are ready again.
- If the smoker is successfully stopped at eight weeks then another four weeks supply can be offered (revalidate at week 12).
- If the smoker is successful in abstaining then treatment should normally be gradually withdrawn after this point unless there is a strong likelihood of relapse without continuing treatment.
- NRT should be gradually withdrawn by 12 weeks unless there is a strong likelihood of relapse without continuing treatment.

- **Those requiring treatment after 12 weeks should be referred to the specialist stop smoking service**.

6.8 Advice

6.8.1 Advice to those who wish to start NRT should include product specific advice plus the following general advice on:

- Withdrawal symptoms.
- Possible changes in the body on stopping smoking, e.g. weight gain and how to manage these.
- The effects of smoking tobacco whilst using NRT – particularly in vulnerable groups, e.g. pregnant women, clients with cardiovascular disease.
- Follow up and obtaining further supplies of NRT.

6.8.2 Advice should also include written information on products supplied, self-help leaflets and where to obtain more information. The Smoke Free in East London Leaflet and Smoking and Medication Leaflet are available for service users and can be obtained on the intranet. Service users can also contact stop smoking advisers on the **NHS Smoking Helpline (0800 169 0 169).**

6.9 Informed Consent

6.9.1 Client information relating to the supply of NRT under these guidelines may be passed to other health service organisations, e.g. a client's GP or specialist clinics for purposes such as referral or audit.

6.9.2 The client's informed consent must be obtained before information can be passed to the doctor.

6.9.3 If there is no informed consent then the client is excluded from the scheme.

6.10 Side Effects and Adverse Reactions

6.10.1 These are usually transient but may include the following, some of which are consequences of stopping smoking:

6.10.2 Nausea, dizziness, headache, cold and flu like symptoms, palpitations, dyspepsia and other gastro-intestinal disturbances, hiccups, insomnia and vivid dreams, myalgia, chest pain, blood pressure changes, anxiety and irritability, somnolence and impaired concentration and dysmenorrhoea.

6.10.3 Any serious side effects should be discussed with the client's adviser in the first instance. In addition a doctor or pharmacist using the 'Yellow Card Reporting Scheme' should inform the Medicines and Healthcare Products Regulatory authority.

6.10.4 Advisers should seek appropriate advice about any suspected adverse drug reactions from the stop smoking services (contact details on page 3) and offer this advice to the patient. The adviser should also record details of the adverse drug reaction and complete a Datix incident form.

6.11 Choice of Nicotine Replacement Therapy

6.11.1 There are a total of five NRT products available to patients in ELFT to enable them to achieve smoking cessation. These products should be prescribed on a patient by patient basis according to the individual's needs. For example, nicotine inhalators may be more appropriate for the patient who misses the physical act of smoking, whilst a patch may be more appropriate for the patient who doesn't.

6.11.2 In many cases, combination therapy of two separate NRT products is most appropriate. For example a patch may be combined with either an oral or nasal nicotine product. This is standard clinical practice throughout the UK and is associated with a higher success rate in smoking cessation. This can only be recommended by level 2 smoking cessation advisers or above[30].

6.11.3 In some occasions 'Pre Loading' may also be necessary. This technique involves the patient using NRT in conjunction with their normal tobacco intake for a specified period of time, prior to smoking cessation. This technique can be more useful in more resistant patients and is associated with a higher success rate in smoking cessation. This can only be recommended by level 3 advisers[30].

6.12 Nicotine Patches

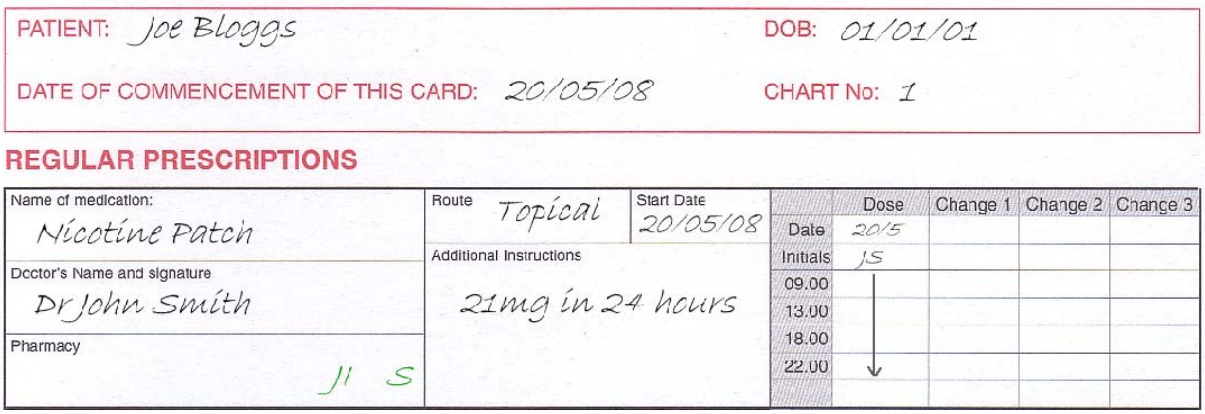
Patch Formulation	Dose	How To Administer	Notes
10mg/16hours	Initially 25mg patch daily for 8 weeks. If abstinence maintained, then 15mg patch daily for 2 weeks, then 10mg patch daily for 2 weeks, then stop	Apply on waking to dry, non-hairy skin on hip, chest or upper arm and remove **16 hours** later, usually before bedtime.	The 24 hour patch may be more appropriate for those patients who require a cigarette within 30 minutes of waking up in the morning.
15mg/16 hours			
25mg/16 hours			
7mg/24 hours	Initially 21mg patch daily for 3 to 6 weeks. If abstinence maintained, then 14mg patch for 2 weeks, then 7mg patch for 2 weeks. Review treatment if abstinence not achieved within 9 months.	Apply on waking to dry, non hairy skin on hip, chest or upper arm and remove **24 hours** later, usually before bedtime.	
14mg/24 hours			
21mg/24 hours			

6.12.1 Specific advice to client:

- The patch should be applied once a day, normally in the morning, to a clean, dry, non-hairy area of the skin.
- Apply to the skin, hold in place for 10-20 seconds.
- Patches should not be applied to broken or inflamed skin.
- Patches may cause skin irritation/redness. Therefore, patients should allow several days before replacing the patch on the previously used area. If skin irritation/redness is severe, then the product should be changed.
- Once the patch is spent it should be folded in half and disposed of carefully. Clients should not try to alter the dose by cutting it up.

6.12.2 Nicotine patches should be prescribed on the regular prescriptions section of the medication drug chart. The strength and duration of the patch (i.e. 16 or 24 hours) needs to be specified. Figure 1 is provided as an example of how to write such a prescription.

Figure 1: Example of How to Write a Prescription for a Nicotine Patch



6.13 Nicotine Sublingual tablets (Microtabs®)

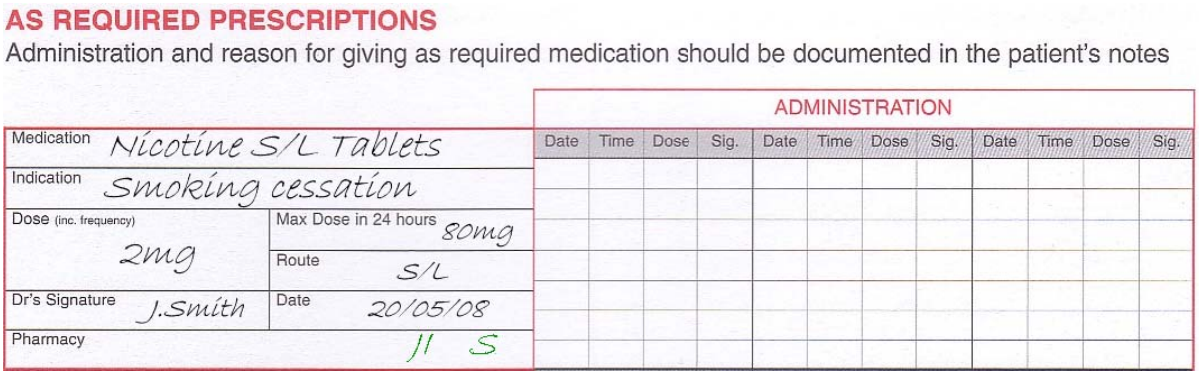
Formulation	Dose	How To Use	Notes
2mg sublingual tablets	For patients smoking ≤ 20 cigarettes daily; 2mg every hour, or increase to 4mg/hour in patients who fail to stop smoking or have significant withdrawal symptoms. For patients smoking ≥ 20 cigarettes daily; 4mg every hour, **maximum dose of 80mg daily.** Treatment should be continued for a t least 3 months followed by a gradual reduction in dose.	Sublingual tablet should be placed under the tongue and allowed to dissolve slowly, and should be moved around under the tongue to prevent irritation.	1 starter pack to be given to patient. Please see section 6.17

6.13.1 Specific advice to the client:

- Sublingual tablets may cause throat irritation, wind or hiccups. If any of these become intolerable, then therapy should be changed.
- Microtabs should be placed under the tongue and allowed to dissolve slowly, and should be moved around under the tongue to prevent irritation.

6.13.2 Nicotine sublingual tablets should be prescribed on the as required section of the drug chart. The maximum dose in 24 hours needs to be specified according to BNF criteria. Figure 2 is provided as an example of how to write such a prescription.

Figure 2: Example of How to Write a PRN Prescription for a Nicotine Sublingual Tablets



6.14 Nicotine Lozenges

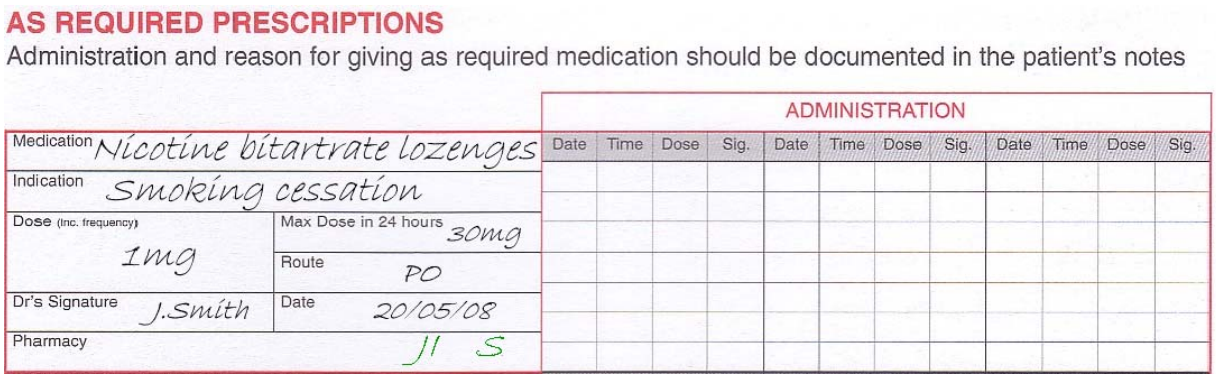
Formulation	Dose	How To Use	Notes
1mg per lozenge (as bitartrate)	For patients smoking ≤ 30 cigarettes daily; Suck one 1mg lozenge every 1-2 hours, when urge to smoke occurs. For patients smoking ≥ 30 cigarettes daily; Suck two 1mg lozenges every 1-2 hours, **maximum dose 30mg daily**. Withdraw gradually after 3 months.	Lozenge should be sucked until the taste is strong and moved around the mouth. Users should not **eat or drink** while lozenge is in the mouth as this may reduce absorption of nicotine.	1 starter pack to be given to patient. Please see section 6.17

6.14.1 Specific advice to the client:

- Lozenges may cause throat irritation, or hiccups. In rare cases it may cause mouth ulceration and increased salivation. If any of these become intolerable, then therapy should be changed.
- Lozenge should be sucked until the taste is strong and moved around the mouth.

6.14.2 Nicotine lozenges should be prescribed on the as required section of the drug chart. The maximum dose in 24 hours needs to be specified according to BNF criteria. Figure 2 is provided as an example of how to write such a prescription.

Figure 3: Example of How to Write a PRN Prescription for a Nicotine Lozenges



AS REQUIRED PRESCRIPTIONS

Administration and reason for giving as required medication should be documented in the patient's notes

Medication	Nicotine bitartrate lozenges		
Indication	Smoking cessation		
Dose (Inc. frequency)	1mg	Max Dose in 24 hours	30mg
		Route	PO
Dr's Signature	J.Smith	Date	20/05/08
Pharmacy			JI S

ADMINISTRATION											
Date	Time	Dose	Sig.	Date	Time	Dose	Sig.	Date	Time	Dose	Sig.

6.15 Nicotine Inhalator

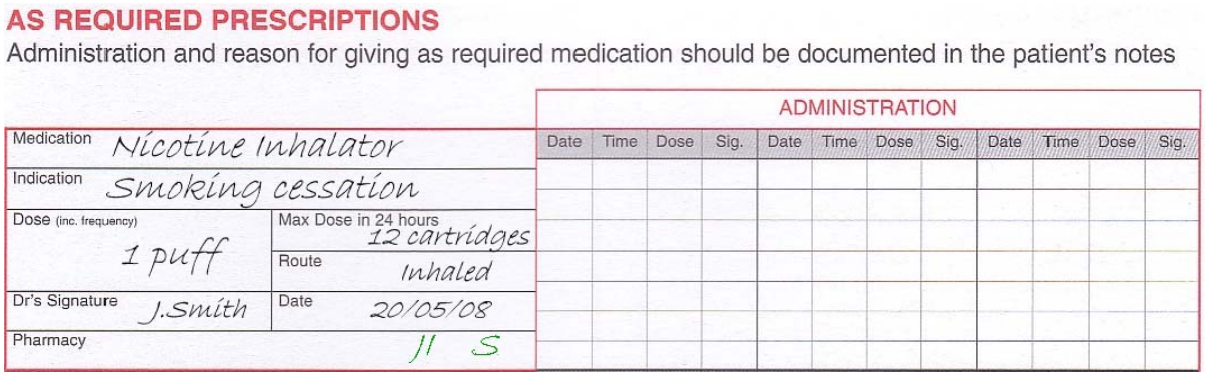
Formulation	Dose	How To Use	Notes
10mg nicotine impregnated cartridge	Inhale when urge to smoke occurs, using 6 to a **maximum of 12 cartridges daily** for up to 8 weeks. Reduce number of cartridges used by half over the next 2 weeks, then	Inhale for 20 minutes per cartridge throughout the day (each cartridge can be used for up to 3 inhalation sessions)	May initially cause irritation of the throat. This is transient. 1 starter pack to be given to patient. Please see section 6.17

6.15.1 Specific advice to the client:

- Inhalator may cause throat irritation, cough and rhinitis. If any of these become intolerable, then therapy should be changed.
- Air should be drawn into the mouth through the mouthpiece. Clients should be warned that the inhalator requires more effort to inhale than a cigarette and that less nicotine is delivered per inhalation. Therefore the client may need to inhale for longer than with a cigarette.
- The inhalator is best used at room temperature as nicotine delivery is affected by temperature. Used cartridges will contain residual nicotine and should be disposed of safely. Advise the client to dispose of used cartridges in a safe manner.

6.15.2 Nicotine inhalators should be prescribed on the as required section of the drug chart. The maximum dose in 24 hours needs to be specified according to BNF criteria. Figure 2 is provided as an example of how to write such a prescription.

Figure 4: Example of How to Write a PRN Prescription for a Nicotine Inhalator



6.16 Nicotine Nasal Spray

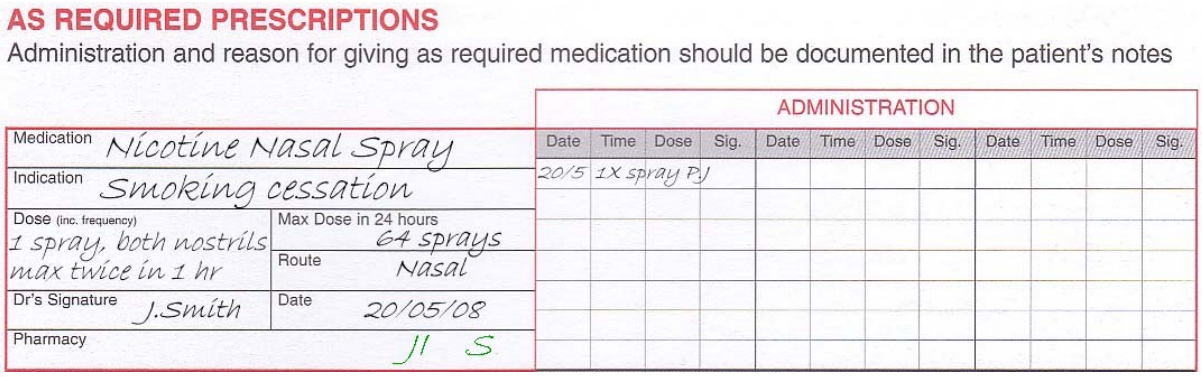
Formulation	Dose	How To Use	Notes
10mg/ml spray delivering 0.5mg of nicotine per spray.	Spray once into both nostrils when urge to smoke occurs. This should be repeated up to a maximum of twice in one hour. **Total daily dose should not exceed 64 sprays (32mg).** The patient should use the spray as required subject to the maximum dose above, to relieve craving, for 8 weeks. After this period usage should be gradually cut down over four weeks so that usage is zero by the end of this period.	Insert the spray tip into one nostril, pointing the top towards the back of the nose. Press firmly and quickly. Repeat this process for the other nostril.	May initially cause nasal irritation. However, this is transient.

6.16.1 Specific advice to the client:

- Nasal irritation, sneezing, running nose, watering eyes and cough occur in nearly all patients using this nicotine preparation for the first two days. However, these side effects are transient and are likely to decrease with continued use.
- On first use of the nasal spray, the device will need to be primed. This is done by pressing the nozzle up to 8 times until a fine spray appears. The device is then ready for use.

6.16.2 Nicotine nasal spray should be prescribed on the as required section of the drug chart. The maximum dose in 24 hours needs to be specified according to BNF criteria. Figure 2 is provided as an example of how to write such a prescription.

Figure 5: Example of How to Write a PRN Prescription for a Nicotine Nasal Spray



AS REQUIRED PRESCRIPTIONS

Administration and reason for giving as required medication should be documented in the patient's notes

		ADMINISTRATION											
Medication: Nicotine Nasal Spray		Date	Time	Dose	Sig.	Date	Time	Dose	Sig.	Date	Time	Dose	Sig.
Indication: Smoking cessation		20/5	1X spray PJ										
Dose (inc. frequency): 1 spray, both nostrils max twice in 1 hr	Max Dose in 24 hours: 64 sprays												
	Route: Nasal												
Dr's Signature: J.Smith	Date: 20/05/08												
Pharmacy: JI S													

6.17 Supply of Nicotine Replacement Therapy:

6.17.1 The following NRT treatments will be kept in pharmacy and may be ordered in the normal manner. These treatments may also be kept as stock in treatment rooms on inpatient wards within ELFT.

Preparation	Strength	Pack size	Instructions
Patches	10mg/16hours 15mg/16 hours 25mg/16 hours	7 patches	Apply on waking to dry, non-hairy skin on hip, chest or upper arm and remove **16 hours** later, usually before bedtime.
	7mg/24 hours 14mg/24 hours 21mg/24 hours		Apply on waking to dry, non hairy skin on hip, chest or upper arm and remove **24 hours** later, usually before bedtime.
Microtabs	2mg per sublingual tablet	30 tablets	For patients smoking ≤ 20 cigarettes daily; 2mg every hour, or increase to 4mg/hour in patients who fail to stop smoking or have significant withdrawal symptoms. For patients smoking ≥ 20 cigarettes daily; 4mg every hour, **maximum dose of 80mg daily.**
Inhalator	10mg cartridge	6 cartridge pack	Inhale when urge to smoke occurs, using 6 to a **maximum of 12 cartridges daily** for up to 8 weeks.
Lozenges (Nicotinell brand)	1mg per lozenge (as bitartrate)	12 lozenges	For patients smoking ≤ 30 cigarettes daily; Suck one 1mg lozenge every 1-2 hours, when urge to smoke occurs. For patients smoking ≥ 30 cigarettes daily; Suck two 1mg lozenges every 1-2 hours, **maximum dose 30mg daily**.
Nasal Spray	10mg/ml spray	200 sprays(100 doses) per device	Spray once into both nostrils when urge to smoke occurs. This should be repeated up to a maximum of twice in one hour. **Total daily dose should not exceed 64 sprays (32mg).**

6.17.2 For PRN nicotine replacement therapy preparations (i.e. nicotine inhalators, sublingual tablets and lozenges), 'starter packs' will be stocked. Starter packs contain up to the maximum daily dose of the nicotine treatment per box.

6.18 Administration/Supply of Nicotine Replacement Therapy

6.18.1 Nicotine patches should be applied during the morning medication round to dry, non hairy skin on the hip, chest or upper arm.

6.18.2 If the patient is prescribed a 16 hour patch then this should be removed before bedtime. If the patient is prescribed a 24 hour patch, then this should be removed the following morning before the new patch is applied.

6.18.3 This administration should then be documented in the normal manner on the regular side of the drug chart.

6.18.4 When patients are prescribed as required inhalators, lozenges or sublingual tablets, one complete 'starter pack' should be given to the patient. Starter packs contain up to the maximum daily dose of nicotine replacement therapy per box.

6.18.5 As these preparations are legally classified as 'Pharmacy' medicines, they do not need to be labelled by pharmacy with the patient's name and already contain instructions on how to use them. (They will, however, carry pharmacy address labels to distinguish them from patient's own drugs). Patients are permitted to keep these starter packs on their person and to use nicotine replacement therapy when required.

6.18.6 As it will be impossible to record each and every time the patients uses this medication, nursing staff should instead record when they supply the patient with a starter pack of nicotine replacement therapy. Figure 3 provides an example of how this should be documented on the drug chart.

Figure 3: Example of How to Record PRN Prescription for a Nicotine Inhalator

AS REQUIRED PRESCRIPTIONS

Administration and reason for giving as required medication should be documented in the patient's notes

				ADMINISTRATION											
Medication: Nicotine Inhalator				Date	Time	Dose	Sig.	Date	Time	Dose	Sig.	Date	Time	Dose	Sig.
Indication: Smoking cessation				20/5	6X cartridges PJ										
Dose (inc. frequency): 1 puff	Max Dose in 24 hours: 12 cartridges														
	Route: Inhaled														
Dr's Signature: J.Smith	Date: 20/05/08														
Pharmacy: JI S															

6.18.7 Further supplies of as required nicotine replacement therapy may be given to the patient as long as the total quantity received during the day does not exceed the maximum dose stated on the prescription.

7.0 Guidance for the Use of Bupropion

7.01 The NICE advocate the use of bupropion as a treatment option in those patients who require smoking cessation therapy [2].

7.02 It should only be prescribed in combination with a programme of behavioural support.

7.03 The use of bupropion should be restricted to specialists in the smoking cessation area and preferably be prescribed in conjunction with the smoking cessation service.

7.04 Bupropion should only be prescribed as part of an abstinent-contingent treatment in which the smoker makes a commitment to stop smoking on or before a particular date.

7.05 When prescribed, these treatments should be prescribed exclusively and not in combination with any other form of smoking cessation pharmacotherapy.

7.1 Criteria for inclusion

7.1.1 Tobacco users identified as sufficiently motivated to quit i.e. willing to set a quit date and receive weekly support for the first four weeks.

7.2 Criteria for Exclusion

7.2.1 Bupropion is not recommended for those under 18 years of age and is contraindicated in those who are pregnant or breastfeeding.

7.2.2 Bupropion is contraindicated in those with a history of **bipolar disorder**.

7.2.3 Bupropion should not be prescribed if the patient is already being treated with varenicline or NRT.

7.2.4 The Committee on Safety of Medicines (CSM) has issued a reminder that bupropion is contraindicated in patients with a **history of seizures or of eating disorders, a CNS tumour, or who are experiencing acute symptoms of alcohol or benzodiazepine withdrawal.** [26]

7.2.5 Bupropion should not be prescribed to patients with other risk factors for seizures unless the potential benefit of smoking cessation clearly outweighs the risk.

7.2.6 Factors that increase the risk of seizures include concomitant administration of drugs that can lower seizure threshold e.g. antidepressants, antimalarials, antipsychotics, quinolones, sedating antihistamines, systemic corticosteroids, theophyliine, tramadol, alcohol abuse, history of head trauma and the use of stimulants and anorectics.

7.3 Prescribing of Bupropion

Drug	Tablet Strengths	Dose and Instructions
Bupropion (Zyban®)	150mg MR	Start 1-2 weeks before target stop date. Initially 150mg OD for 6 days, then 150mg BD for a treatment period of 7-9 weeks. Maximum dose of 150mg OD in the elderly.

7.3.1 Bupropion must be prescribed on the regular prescriptions section of the inpatient medication chart. Treatment needs to be initiated a minimum of 1 week before the target stop date and the dose needs to be titrated over this first week.

7.3.2 The initial prescription for bupropion should not be for more than 3-4 weeks after which it should only be prescribed to those who continue to attempt to quit. Refer to the British National Formulary [27] for full dosing schedule.

7.4 Side Effects and Adverse Drug Reactions

7.4.1 These may include the following, some of which are consequences of stopping smoking:

7.4.2 Dry mouth, gastro-intestinal disturbances, insomnia (reduced by avoiding dose at bed time), tremor, impaired concentration, headache, dizziness, depression, agitation, anxiety, fever, rash, pruritis and sweating.

7.4.3 Although uncommon, bupropion can cause hypertension, tachycardia and chest pains. **It is recommended that blood pressure is monitored before and during treatment in all patients.**

7.4.3 Any serious side effects should be discussed with the client's adviser in the first instance. In addition a doctor or pharmacist using the 'Yellow Card Reporting Scheme' should inform the Medicines and Healthcare Products Regulatory authority.

7.4.4 Advisers should seek appropriate advice about any suspected adverse drug reactions from the stop smoking services (contact details on page 3) and offer this advice to the patient. The adviser should also record details of the adverse drug reaction and an incident form (IR1) completed.

7.5 Supply of Bupropion

7.5.1 All strengths of this treatment will be available from pharmacy. It should be ordered through the pharmacy service via the normal procedure.

7.6 Administration of Bupropion

7.6.1 Both preparations should be administered in an identical fashion to all other prescribed medicines on the drug chart.

8.0 Guidance for the Use of Varenicline

8.01 The NICE advocate the use of varenicline as a treatment option in those patients who require smoking cessation therapy [2].

8.02 It should only be prescribed in combination with a programme of behavioural support.

8.02 The use of varenicline should be restricted to specialists in the smoking cessation area and preferably be prescribed in conjunction with the smoking cessation service.

8.04 Varenicline should only be prescribed as part of an abstinent-contingent treatment in which the smoker makes a commitment to stop smoking on or before a particular date.

8.05 When prescribed, these treatments should be prescribed exclusively and not in combination with any other form of smoking cessation pharmacotherapy.

8.1 Criteria for inclusion

8.1.1 Tobacco users identified as sufficiently motivated to quit i.e. willing to set a quit date and receive weekly support for the first four weeks.

8.2 Criteria for Exclusion

8.2.1 Varenicline is not recommended for use in those under 18 years of age and is contraindicated in those who are pregnant.

8.2.2 Varenicline should not be prescribed if the patient is already being treated with bupropion or NRT.

8.3 Prescribing of Varenicline

Drug	Tablet Strengths	Dose and Instructions
Varenicline (Champix®)	500mcg, 1mg	Start 1-2 weeks before target stop date. Initially 500mcg OD for 3 days then increased to 500mcg BD for 4 days, then 1mg BD for 11 weeks (maintenance dose may be decreased to 500mcg if not tolerated) Treatment can be repeated in those who remain abstinent to reduce risk of relapse.

8.3.1 Varenicline must be prescribed on the regular prescriptions section of the inpatient medication chart. Treatment needs to be initiated a minimum of 1 week before the target stop date and the dose needs to be titrated over this first week.

8.3.2 The initial prescription for varenicline should not be for more than 3-4 weeks after which it should only be prescribed to those who continue to attempt to quit. See the British National Formulary [28] for the full dosing schedule.

8.4 Side Effects and Adverse Drug Reactions

8.4.1 These may include the following, some of which are consequences of stopping smoking:

8.4.2 Gastro-intestinal disturbances, appetite changes, dry mouth, taste disturbance, headache, drowsiness, dizziness, sleep disorders and abnormal dreams.

8.4.3 The Medicines Healthcare and Regulatory Agency (MHRA) have issued new advice regarding the use of varenicline in patients with underlying psychiatric illness, including depression. Varenicline has been associated with symptoms of **depression** and **suicidal ideation** in small numbers of patients. Patients on varenicline who develop suicidal thoughts should **discontinue** this treatment immediately[29].

8.4.4 Any serious side effects should be discussed with the client's adviser in the first instance. In addition a doctor or pharmacist using the 'Yellow Card Reporting Scheme' should inform the Medicines and Healthcare Products Regulatory authority.

8.4.5 Advisers should seek appropriate advice about any suspected adverse drug reactions from the stop smoking services (contact details on page 3) and offer this advice to the patient. The adviser should also record details of the adverse drug reaction and an incident form (IR1) completed.

8.5 Supply of Varenicline

8.5.1 All strengths of this treatment will be available from pharmacy. This treatment should be ordered through the pharmacy service via the normal procedure.

8.6 Administration of Varenicline

8.6.1 Both preparations should be administered in an identical fashion to all other prescribed medicines on the drug chart.

9.0 Smoking Cessation Therapy on Discharge

9.01 Where a patient wants to continue smoking cessation they should be discharged with up to four weeks supply of smoking cessation pharmacotherapy along with their regular prescription.

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