

Dosing guidelines

Tobacco dependence	Initial dosing guidance
Low level dependence <10 cigarettes per day	<ul style="list-style-type: none"> ■ 3–12 mg/ml vape; or ■ Fast-acting NRT product; or ■ 10–15 mg NRT patch
Moderate level dependence 10–19 cigarettes per day	<ul style="list-style-type: none"> ■ 12–20 mg/ml vape (1 daily); or ■ 21 or 25 mg patch + fast-acting NRT product
High level dependence 20–29 cigarettes per day	<ul style="list-style-type: none"> ■ 18–20 mg/ml vape (1–2 daily); or ■ 18–20 mg/ml vape (1 daily) + 21 or 25 mg NRT patch; or ■ 21 or 25 mg NRT patch + fast-acting NRT product
Very high level dependence >30 cigarettes per day	<ul style="list-style-type: none"> ■ 18–20 mg/ml vape (2–3 daily); or ■ 18–20 mg/ml vape (1–2 daily) + 21 mg or 25 mg NRT patch; or ■ 2 x 21 or 25 mg NRT patch + fast-acting NRT product

Prior to the consultation

Check the patient's record for an advance agreement for tobacco treatment – if you find one, honour it

Conduct medications review (See **Appendix 12** for interactions with smoking)

Following the consultation

Record tobacco dependence in the admission diagnosis list

Record details of treatment in care plan

Arrange provision of nicotine vapes or NRT

Complete referral to/notify in-house Tobacco Dependence Team using local protocol

For patients taking clozapine or olanzapine, or other medication where smoking affects drug metabolism, consult with prescriber on dose adjustment as per local protocol (See **Appendix 12**)

Record baseline carbon monoxide (CO) test result

Tips

- Tailor advice according to the patient's mental health status. Using your clinical judgement and the patient's presentation, decide how much detail you should go into regarding the tobacco dependence treatment options. For patients who are too ill, this information can be repeated when appropriate.
- On admission, the patient may be experiencing florid psychotic symptoms which can make them feel unsafe, confused, agitated, anxious and distressed. Feeling agitated and anxious are also symptoms of nicotine withdrawal. Prompt treatment to effectively manage the onset of nicotine withdrawal symptoms and minimise urges to smoke is crucial. Early intervention will help ensure mental health symptoms are better managed and not compounded by nicotine withdrawal.
- Check the patient's record to establish if there is an advance agreement in place which details how the patient would like their tobacco dependence to be managed – if you find one, honour it!
- The patient may be feeling anxious and reluctant or unable to engage in a conversation about their smoking, so your approach is key to providing reassurance. Communicating in a non-judgmental, empathetic manner is important to help patients feel more open and receptive to engage in support.
- Changes in smoking status can affect the metabolism of some medications. This is irrespective of the tobacco dependence medication or aid used. Most interactions are not clinically significant but there are a few exceptions, including antipsychotic medications, in particular clozapine and olanzapine. A medication review is recommended at the time of admission and whenever a patient's smoking status changes. For patients identified as using clozapine or olanzapine, or other medicines affected by smoking, support dose adjustment as per the trust protocol. See **Appendices 12 and 13** for more information.

The section below provides further detail on the admission care bundle.

1**Identify current tobacco and vape use**

Ask all patients:

“Do you currently smoke or use any other tobacco?”

“Do you currently vape?”

If the patient reports being smokefree in the last two weeks > **Record.**

If the patient reports smoking in the last two weeks
> **Treat by completing the admission care bundle.**

If the patient reports vape use > **Record and support continued use.**

Measure and record carbon monoxide (CO) level at point of admission (See **Box 2**).

2**Provide brief advice and details about available treatment and support**

- Inform the patient about the smokefree policy and the support available to cut down and stop smoking.

“All NHS hospitals including this one are completely smokefree, both in the buildings and on the grounds. This is to protect the health and wellbeing of patients and staff.”

- Advise on managing withdrawal symptoms, urges to smoke and the role of treatment.

“Whilst you are in hospital it is important that we help you manage the withdrawal symptoms and urges to smoke that you may experience. We can give you a vape or nicotine replacement therapy to make it much easier for you to not smoke.”

See **Box 3** for guidance on addressing patient concerns and providing reassurance.

3

Initiate treatment with a nicotine vape or combination NRT

To effectively treat withdrawal from nicotine, it is of critical importance that nicotine vapes or combination NRT (patch plus a fast-acting NRT product) be initiated as soon as possible following admission, ideally within 30 minutes and always within two hours.

■ Complete a risk assessment (See **Appendix 7**)

The risk assessment will be used to ascertain if, based on the available information and current presentation, the patient can safely use a vape or NRT products. Once this is completed the options can be offered, allowing the patient to choose their preferred option.

■ Assess tobacco dependence

Two questions are used to estimate the initial dose of nicotine vape or NRT the patient will require to manage nicotine withdrawal symptoms and urges to smoke. These are:

“On a typical day, how many cigarettes do you smoke?”

“On a typical day, how soon after waking up do you have your first cigarette of the day?”

People who smoke within 30 minutes of waking have greater dependence.

■ Initiate rapid vape/NRT treatment protocol

Box 4 provides initial treatment guidance for nicotine vapes and/or combination NRT.

If the patient is unable to provide you with information about their current smoking, but the patient record or an informant (family/escorting staff) indicates the patient currently smokes, treatment, with consent, can be initiated using the rapid vape/NRT protocol. The specialist team can adjust treatment upon further assessment.

■ Provide instructions for product use and support to use the products correctly

- Reassure the patient that these products are safe and any side effects are usually mild.

“Vapes and NRT are a great option for people like you who are in a situation where they cannot smoke. Using either a vape or NRT will ensure any withdrawal symptoms you may get from not smoking are well managed and urges to smoke are reduced.”

- **Review and demonstrate correct use of vape/NRT products.**

Nicotine vapes (See **Appendix 4** for vaping quick reference sheet).

“Use the vape regularly throughout the day and when cravings/urges to smoke occur. Take slow puffs on the vape to draw the vapour into your mouth and then inhale into your lungs.”

Combination NRT (See **Appendix 5** for NRT quick reference sheet).

- Emphasise the importance of using fast-acting NRT products *“on the hour, every hour”* and as needed to manage urges to smoke, in addition to a patch.

“I recommend you start using the NRT patch, which provides a steady level of nicotine throughout the day. I will also provide you with a fast-acting NRT, such as an inhalator or lozenge. These fast-acting NRT products can deliver nicotine quickly and help top up your nicotine throughout the day.”

“It’s important to use the [fast-acting NRT product, e.g. mouth spray, lozenge] throughout the day, on the hour, every hour before you get urges to smoke. In addition, it can be used when you have urges to smoke. If you are using the NRT correctly and still have urges to smoke, we can increase the dose of the patch or add another type of NRT.”

If appropriate, a **nicotine analogue medication** may be considered (see **Appendix 6**).

Patients who do not report current smoking who request use of a vape or NRT

Inpatients who do not report smoking in last two weeks but who request use a vape or NRT during their inpatient admission should be referred to the Tobacco Dependence Team for assessment. These patients (who often used to smoke) may find they have difficulty remaining smokefree during their admission and treatment may be warranted to prevent relapse.

4

Complete referral and inform patient they will be referred to the in-house Tobacco Dependence Team

Advise the patient that:

“A member of our Tobacco Dependence Team will come and see you shortly to check how you’re doing and provide additional support for you to stay smokefree during your admission.”

Arrange referral to the Tobacco Dependence Team via the local referral pathway.

5

Record tobacco dependence in the admission diagnosis list and disease care plan

Tobacco dependence should be listed within the **admission diagnosis** list and its treatment described within the admission progress notes. The care plan should specifically record the actions that were agreed.

Box 2: Measure CO levels and explain results

Measure and record carbon monoxide (CO) at the point of admission and record in the patient record. Even if members of the admission team do not review results with the patient, having a CO measure at admission allows the Tobacco Dependence Team to have a baseline (admitting CO level) to reference. This can be done alongside all the other vital signs monitoring.

Explain to patients that CO is a toxic gas contained in tobacco smoke and that there is a simple test that can be carried out to determine CO levels:

“Carbon monoxide is a toxic gas inhaled when you smoke a cigarette. This machine measures the amount of carbon monoxide in your lungs.”

Carry out the CO test (see **Appendix 10** for instructions).

■ If the reading was below 6 ppm:

“This reading is that of someone that no longer smokes and shows you are already benefiting from not smoking. Well done!”

■ If the reading was 6 ppm or above:

“The machine is showing a reading of ___ parts per million. The normal range for a person who doesn’t smoke is between 1 and 5ppm and so you can see your reading is (much) higher than the normal (healthy) range. The good news is that if you do not smoke at all you can get this down to the levels of someone who has not smoked.”

Box 3: Providing reassurance and addressing patient concerns

The point of admission might not be the best time to explore concerns about being in a smokefree hospital. Use your clinical judgement to decide if you feel it is appropriate to discuss this issue further at this stage or return to it later. When you feel the time is right, here are some ideas about what to say to reassure patients:

“Being in hospital can be a worrying time and we appreciate that not smoking can sometimes be hard, but we will make sure that you receive the best treatment to ease any discomfort.”

“By providing effective medication and support during your stay, you should find it much easier to not smoke.”

“Withdrawal symptoms are normal – your body is anticipating the nicotine you used to get from your cigarettes. The good news is that this is temporary. Vapes and NRT help make withdrawal symptoms manageable.”

“Most people feel concerned about stopping smoking abruptly, is there anything that you are particularly worried about?”

Box 4: Initial nicotine vape and combination NRT treatment guidance

People admitted to mental health hospitals who smoke generally need higher doses of NRT or nicotine vapes. We suggest an initial dose of 2 mg of nicotine from a vape or NRT for each cigarette smoked per day by the patient.

Table 1: Initial vape dosing























Treatment	<10 cigs / day	10–19 cigs / day	20–29 cigs / day	30–39 cigs / day	40+ cigs / day
Vape Single-use vape/pods (per 24hrs): Nicotine strength: % Nicotine:	 1 3–12 mg/ml 0.3% or 1.2%	 1 12–20 mg/ml 1.2% or 2%	 1–2 18–20 mg/ml 1.8% or 2%	 2–3 18–20 mg/ml 1.8% or 2%	 2–3 18–20 mg/ml 1.8% or 2%
Combination treatment with NRT patch Vape Single-use vape/pods (per 24hrs): Nicotine strength: % Nicotine:			 1 18–20 mg/ml 1.8% or 2%	 1–2 18–20 mg/ml 1.8% or 2%	 2 18–20 mg/ml 1.8% or 2%
+ Nicotine patch			 1 x 21/25 mg	 1 x 21/25 mg	 1 x 21/25 mg

Table 2: Initial combination NRT dosing

Product	<10 cigs / day	10–19 cigs / day	20–29 cigs / day	30–39 cigs / day	40+ cigs / day
Transdermal NRT patch Every 24 hours	15 mg (16hr) or 14 mg (24hr) 	25 mg (16hr) or 21 mg (24hr) 	25 mg (16hr) or 21 mg (24hr) Option: 21/25 mg + 14/15 mg 	25 mg (16hr)/ 21 mg (24hr) + 14/15 mg Option: 2 x 21/25 mg 	2 x 25 mg (16hr) or 21 mg (24hr) 
Fast-acting Use on the hour, every hour and as needed	AND one of the available fast-acting NRT products: <ul style="list-style-type: none"> ■ Mouth spray (64 sprays/day) ■ Inhalator (up to 6 cartridges/day) ■ 4 mg Lozenge (up to 15/day) ■ 4 mg Gum (up to 15/day) ■ 2 mg Microtab (up to 40/day) ■ Nasal spray (64 sprays/ day)      				

Nicotine vapes

For treatment with vapes, the initial dose for most patients who smoke 20 cigarettes a day regularly will be 18mg/ml or 20mg/ml. This is sometimes described as 1.8% or 2% on vape packaging.





Patients who smoke more heavily (>20–30 cigarettes a day) are likely to require up to two or sometimes even three 18mg/ml or 20mg/ml e-liquids daily and/or combination treatment with the NRT patch to manage withdrawal symptoms.

See **Table 1** for guidance on initial vape dosing.

Combination NRT

High-dose (21 mg or 25 mg) patch **and** a fast-acting NRT product is recommended. Patients who are more heavily dependent will benefit from use of more than one NRT patch to deliver a higher steady state blood nicotine level. See **Table 2** for initial combination NRT dosing.

Top Tips for administration of NRT

			
Prompt administration	Plentiful supply	Practice use	Prolonged use
As soon as possible; ideally within 30 minutes	At least 2 NRT products combined	To get the correct technique	Extended use to prevent relapse

Assess response and adjust dose as indicated

Assess withdrawal symptoms (see below) daily and adjust NRT accordingly. If additional NRT is required, increase the patch strength initially as this will provide a stable level of additional nicotine. Self-administered fast-acting products are more effective if the patient's mental state and risk assessment allow. It is safe to use nicotine vapes with prescribed NRT.

If the dose is **too low**, the patient will experience the physical discomfort of withdrawal, including:

- irritability
- dysphoria
- restlessness
- anxiety
- insomnia
- headache
- myalgias
- decreased concentration
- strong urges to smoke (cravings)

If the dose is **too high**, the patient may present with the following and dose reduction of the fast-acting products can be considered to ensure the patient's comfort and safety:

- nausea (note: nausea is often due to incorrect product use)
- dizziness
- palpitations
- dysphoria