Tobacco dependence treatment for people with severe mental illness:
Guiding principles and best practice

NCSCT

Department of Health & Social Care

Tobacco dependence treatment for people with severe mental illness: Guiding principles and best practice

With thanks to the people with SMI who have inspired us with their motivation and efforts to stop smoking.

Supporting people with severe mental illness (SMI) to manage their tobacco dependence offers significant benefits to physical and mental health, and general wellbeing, especially when individuals stop smoking long term. Although just as likely to want to stop smoking as people who do not have SMI, this patient group typically faces significant barriers and challenges to stopping.

The guiding principles and best practice recommendations listed here have been drawn from published literature and clinical experience. They are designed to maximise opportunities, overcome barriers and meet the challenges encountered by people with SMI who smoke.

These guiding principles should underpin and accompany all interventions that support people with SMI to manage their tobacco dependence in both inpatient and community settings.

Patients with SMI need and deserve high-quality, evidence-based support tailored to their individual needs to give them the best possible chance of stopping smoking.

How to use this document

This document is intended to support services to adapt, and practitioners to tailor, stop smoking support to improve outcomes for individuals with SMI. The principles and best practices are accompanied by **in-text links** to further information.

This is a dynamic document that will be updated to reflect advances in practice and research. We welcome feedback from practitioners working with this important population. Feedback can be directed to: **enquiries@ncsct.co.uk**

Guiding principles

1 **Very Brief Advice on Smoking (VBA+)** is delivered to all patients with SMI and **referral pathways to tobacco dependence treatment** are in place and operational.

2 **Offer both abrupt quit and Cut Down to Stop (CDTS) treatment options** in line with NICE guidance to extend the reach and impact of stop smoking services, designed to meet individual preferences.

3 All patients have access to **combination nicotine replacement therapy (NRT) and/or nicotine vapes**, or **nicotine analogue medicines** at doses needed to prevent and relieve withdrawal symptoms. These are available both prior to stopping and for extended periods after stopping to prevent relapse.

4 Person-centred support is tailored to the individual, including **flexible appointment venues and times, more frequent contact and extended duration of support**.

5 Address **barriers to stopping** and **facilitate identifying solutions and alternative activities**.

6 **Signposting family and caregivers to local stop smoking services is standard practice.**

7 **Staff are prepared for setbacks** and build these into the treatment plan.

8 **Good communication with the care team** is ensured so that medication is reviewed and medicines affected by smoking are appropriately adjusted for efficacy and adverse effects.

9 **All mental health staff are trained in VBA+ tailored for people with SMI.** Staff delivering tobacco dependence treatment for people with SMI complete specialist training.

10 **Smokefree environment policies** are developed, maintained and promoted.

Best practice

This best practice section aims to provide practical recommendations for the delivery of each guiding principle, to ensure that people with SMI receive the tailored support they need to stop smoking.

This patient group require flexibility and time. Attempting to fit them into rigid pre-existing treatment protocols will be unlikely to meet their needs. The recommendations focus on a person-centred approach using a flexible service delivery model designed to promote engagement of patients with SMI, guided by patients' individual needs.

| **1** | **Make every contact count: Very Brief Advice on Smoking (VBA+) is delivered to all patients with SMI and referral pathways to tobacco dependence treatment are in place and operational. See Appendices A and B.** |

Offering support to stop smoking, rather than asking a person how interested they are in stopping or telling them to stop smoking, leads to more people making a quit attempt.

1.1 Assume that people with SMI want to stop smoking and offer hope and help by delivering VBA+ systematically and opportunistically to all patients.

1.2 When delivering VBA+, give advice about the best way to stop smoking and offer support.

1.3 Pathways should be in place for delivering VBA+ with opt-out referral to specialist tobacco dependence treatment in all mental health settings. This involves advising the patient that it is part of routine care to put them in touch with the tobacco dependence treatment or stop smoking service. Referrals should be made unless patients object.

1.4 Procedures for delivering VBA+ need to be defined in the treatment pathway and reflected in clinical record systems and in quality assurance checks.

1.5 Clear referral pathways to specialist tobacco dependence treatments should be in place and operational, with appropriate response times.

1.6 VBA+ should be repeated frequently, including at ward rounds, Care Programme Approach (CPA) meetings, case conferences, annual health checks and all other appropriate clinical meetings with patients.

1.7 Implement a process to ensure smoking status, provision of VBA+ and outcome of opt-out referral is recorded in patient records.

1.8 Advise all community patients who smoke that all acute and mental health hospitals are now completely smokefree. Provide support to develop an advance agreement on how they would like their tobacco dependence to be managed if they need admission. Record agreement in the patient care record and revisit/review at regular intervals to ensure it remains relevant and in line with patients' changing needs and preferences.

2   **Offer both abrupt quit and Cut Down to Stop (CDTS) treatment options in line with NICE guidance to extend the reach and impact of stop smoking services, designed to meet individual preferences.**

Stopping will often occur at a slower pace when compared to people without SMI. While abrupt stopping with support should be the first option, some patients with SMI benefit from the option to start by cutting down on their smoking before they set a quit date. The SCIMITAR trial provided evidence regarding the acceptability and efficacy of CDTS among people with SMI who are not ready to quit in one go.

2.1   Assess patients' readiness and ability to stop smoking. If they are ready to stop in one step, progress to the abrupt quit treatment programme. Extended support prior to setting a quit date may be required.

2.2   The CDTS option should be a standard offer for patients with SMI who don't feel that they can stop in one go.

2.3   CDTS support should include both structured multi-session support and treatment with a first-choice stop smoking aid. While individuals will benefit from flexible and person-centred timeframes, it is recommended that CDTS support focuses on setting realistic reduction targets, with the goal of stopping completely six weeks to six months after the treatment start date.

3 All patients have access to combination nicotine replacement therapy (NRT) and/or nicotine vapes, or nicotine analogue medicines at doses needed to prevent and relieve withdrawal symptoms. These are available both prior to stopping and for extended periods after stopping to prevent relapse.

Combination NRT, nicotine vapes, and nicotine analogue medicines (varenicline, cytisinicline) can be safely used by people with SMI and are effective in increasing success with stopping. Compared to people in the general population who smoke, patients with SMI are more likely to be more dependent and experience more severe withdrawal symptoms. This is particularly true among people with schizophrenia, with research showing higher levels of nicotine dependence, in addition to more pronounced withdrawal symptoms and urges to smoke, within this patient group. It can be anticipated that they will require higher doses of NRT as well as nicotine vapes to manage withdrawal and urges to smoke, and they are more likely to require the extended use of aids. They are also more likely to use a vape to stop smoking than those without SMI. People with SMI tend to find vaping more acceptable than NRT.

3.1 Nicotine vapes should be available to all people with SMI over the age 18 who are being supported with stopping or cutting down, or for temporary abstinence, and for relapse prevention.

3.2 Higher dose combination NRT (nicotine patch plus one or more faster-acting NRT products) and/or nicotine vapes should be standard treatment. See **Appendix C** for dosing guidance for people with SMI**.**

3.3 Licensed NRT products can be used in combination with nicotine vapes and varenicline for patients who are more dependent on tobacco smoking. See **Appendix C** for dosing guide.

3.4 Combining stop smoking aids with different mechanisms of action, such as varenicline and NRT, has resulted in increased quit rates in some studies compared with use of a single product. This combination may be particularly useful among people with a higher severity of tobacco dependence, those who continue to experience urges to smoke and/or withdrawal symptoms, and those who have reduced their cigarette consumption but not stopped completely with monotherapy. While there is limited research regarding combining varenicline with nicotine vapes we would expect this combination to have similar efficacy given vapes can be seen as a form of NRT.

The product information for cytisinicline includes advice that it is not combined with nicotine-containing products. However, the pharmacology of cytisinicline and nicotine, and evidence available for varenicline (with a very similar action to cytisinicline), suggests this should be safe. This would be outside of recommended use (off-label) and therefore require the prescriber to review.

3.5 NRT and nicotine vapes should be, as far as possible, provided free of charge with minimal barriers to access to support temporary abstinence (not smoking for a specific period such as when admitted to hospital), harm reduction (reducing tobacco consumption but not stopping), abrupt stopping and CDTS.

3.6 Policies should facilitate people with SMI having access to NRT and nicotine vapes for extended periods after quitting (up to 12 months may be needed), whether stopping abruptly or with a CDTS approach.

3.7 Ensure patients optimise their use of stop smoking aids by advising and coaching on the correct techniques and dispelling any myths about nicotine. It can be useful to reassure patients that NRT contains a clean form of medicinal nicotine that does not cause harm to adult health or maintain dependence.

<table>
<tr><td>**4**</td><td>**Person-centred support is tailored to the individual, including flexible appointment venues and times, more frequent contact and extended duration of support.**</td></tr>
</table>

Consideration should be given to how patients' mental health status may require treatment delivery to be modified to support compliance and improve treatment efficacy. The SCIMITAR trial has provided the evidence regarding the importance of flexible bespoke patient-centered treatment models for people with an SMI to increase engagement in treatment and improve treatment efficacy.

4.1   Offer flexibility on where appointments are delivered, including home visits or outreach into community mental health services and facilities. Home visits can increase engagement as well as, if the patient wishes, involving family and friends with the quit attempt. They also help allay fears among family and friends that stopping smoking will negatively impact the individual's mental health.

4.2   Patients with SMI often require more frequent contact during quit attempts as well as an extended duration of treatment (a minimum of 12 sessions, or three months) for relapse prevention, with the opportunity to receive extended relapse prevention support if needed.

4.3   Weekly appointments are recommended for at least the first four weeks and based on individual need thereafter.

4.4   Arrange appointments at a time that works best for the person, for example, some people with SMI may find morning appointments difficult due to symptoms and mental health medication side effects.

4.5   Breaks during appointments or breaking appointments up (multiple short appointments over a few weeks) may be required.

4.6   Consider the patient's mental health condition and any considerations that might affect their ability to participate in stop smoking support. For example, for patients with social anxiety, consider providing a quiet waiting area or organise appointments at a time of day that is not too busy.

4.7   Deliver stop smoking support with patients' mental health histories in mind to enhance engagement and treatment success. This includes having a good understanding of patients' mental health diagnoses and how treatment and your own approach may need to be tailored to best meet patient needs.

4.8   Consider offering integrated care to maximise engagement and ensure long-term support. Co-delivered appointments within the clozapine clinic, depot clinic or physical health clinic are highly efficient and effective, as they maximise patients' access to care. This joined-up approach provides a safer way to care for patients as it ensures medications are carefully monitored.

5 Address barriers to stopping and facilitate identifying solutions and alternative activities.

5.1 Address the myth that smoking helps to manage stress. Smoking does not alleviate stress, it alleviates withdrawal symptoms: the irritability, restlessness and low mood that falling nicotine levels cause. Support patients to consider ways of coping with stress, as well as planning ahead for times in their lives where they may experience higher levels of stress.

5.2 Address concerns that stopping may worsen symptoms of mental illness. Evaluations of targeted smoking cessation interventions for people with psychosis who smoke indicate patients do not experience a worsening of mental health symptoms after they stop. The evidence points instead to tobacco withdrawal as a potential stressor which, like any stressor, can temporarily exacerbate mental health symptoms if not treated appropriately.

5.3 Given the increased likelihood of more frequent and severe urges to smoke, behavioural support should include strategies for effectively coping with cravings including both the use of stop smoking aids, and distraction and deep breathing techniques.

5.4 Work with patients to address barriers known to affect people with SMI including boredom, loneliness, stress and social interactions. Facilitating alternative activities is important. Help people to find activities that could be used in place of smoking and offer the opportunity to stay busy, socialise and be active without smoking. Encourage patients to identify activities they would find enjoyable or helpful. If patients find it difficult to identify activities, provide a menu of options – two or three things that other patients have found helpful – and ask if they would be interested in trying any of them.

5.5 Support patients with having a plan to stay smokefree around others who smoke, including family, peers, and others within their social network. Support patients with identifying strategies for reducing time spent with individuals who smoke and/or alternatives to smoking (what they will do instead).

5.6 Link patients with other health professionals such as occupational therapists or organisations that can provide activities and social opportunities.

6 Signposting family and caregivers to local stop smoking services is standard practice.

Smoking among family, peers, and caregivers can undermine patients' efforts to being smokefree. Encourage the creation of a supportive smokefree environment which will reduce smoking cues and assist the patient with their quit attempt.

6.1 Offer family and caregivers access to stop smoking aids and behavioural support to stop smoking.

6.2 Facilitate referral to available support for family members and caregivers if you are unable to provide support as part of your role. Explain that stopping smoking together and having a smokefree environment gives their relative/patient the best chance of staying smokefree and is the best way of supporting their relative/patient through a challenging time.

7   Staff are prepared for setbacks and build these into the treatment plan.

Given relapse to smoking is high among patients with SMI having policies and practices that allow patients to continue to access support and/or easily re-engage is good practice. It can be helpful to allow patients to take a break from quitting and to make another attempt when they are ready, viewing this as part of the journey in helping people with SMI quit.

7.1   Establish whether patients who lapse or relapse to smoking are ready and willing to plan for staying on track, even if that means taking some time to get through a difficult period. Provide positive reinforcement for any success achieved, either now or previously, whether it is a few days, a few hours, or just general effort.

7.2   It is safe to continue treatment with NRT, nicotine vapes and nicotine analogue medicines for patients who lapse or relapse to smoking. Consideration should be given to increasing the dose of NRT or nicotine vapes for patients who have experienced a lapse or relapse.

7.3   Understand that there may be breaks in quit attempts or between quit attempts and don't let patients see this as a failure. Agree regular follow-ups to reassess interest in quitting and ability to easily re-engage with support.

7.4   Offer additional contact after unsuccessful quit attempts to support harm reduction and preparations for a future quit attempt.

<table>
<tr><td>**8**</td><td>**Good communication with the care team is ensured so that medication is reviewed and medicines affected by smoking are appropriately adjusted for efficacy and adverse effects.**</td></tr>
</table>

The tar in tobacco smoke can speed up the metabolism of some psychotropic medications and may require the adjustment of medication doses. People working with patients with SMI should be aware of this interaction and how it needs to be part of the stop smoking plan. It is important to note that it is the tar in combustible cigarettes, not the nicotine, that affects (i.e. speeds up) medication metabolism. Therefore, when patients no longer smoke or reduce their smoking, even for short periods of time, the metabolism of medication slows down and the dose of medication (e.g. clozapine/olanzapine) may need reducing. This happens within a week of stopping smoking. There are no interactions between psychotropic medications and first-choice stop smoking aids (NRT, nicotine vapes, nicotine analogue medicines).

8.1   Review the patient's current medication regime before treatment commences.

8.2   Establish communication with the patient's care team before starting to embark on a quit or CDTS plan.

8.3   For patients using a **medication that interacts with tobacco smoke**, a quit or CDTS attempt should not commence unless the responsible clinician (GP, psychiatrist or other) has been informed about the plan and has agreed to monitor/review the patient's medication more carefully throughout the treatment programme. This is particularly true for individuals being treated with clozapine and olanzapine, where there is a risk of serious adverse effects when smoking status changes.

8.4   Use of a psychotropic medication that interacts with smoking should not be a reason for staff to avoid encouraging and offering tobacco dependence treatment support, nor a reason for people with SMI not to engage in quit attempts. The quit attempt should be prioritised, and the care team should be engaged in appropriate monitoring of medications before and during the quitting process.

8.5   There should be close collaboration between the tobacco dependence treatment service and the clinical team to ensure all relevant information is shared to support safety and success.

8.6 Ensure that blood tests are arranged for patients taking clozapine. Changes to plasma levels can happen very quickly, sometimes within one week. Blood tests need to be carried out at baseline before any changes are made to the smoking routine, and again at one week after changes have been made. All patients who are taking clozapine must remain under the care of a psychiatrist and have regular follow-ups at a clozapine clinic.

8.7 The patient's prescriber and clinical care team should educate the patient and, if appropriate, family and caregivers on the possible side effects associated with psychotropic medications overdose and the appropriate actions to take.

8.8 Evidence suggests that varenicline can be used safely by people with stable mental health conditions and is one of the most effective licensed stop smoking aids for people with and without mental illness. There is less research on the use of varenicline for people with unstable SMI and close monitoring is recommended.

For patients who are prescribed varenicline and whose mental health relapses, the ongoing use of the medication should be reviewed.

8.9 Despite a lack of studies, there is no reason to suggest that cytisinicline cannot be used with this population. It is recommended that for people with unstable SMI and those with schizophrenia using cytisinicline, close monitoring is needed.

8.10 Any concerns regarding the patient's mental health or mental health medication should be discussed with the care team.

9	All mental health staff are trained in VBA+ tailored for people with SMI. Staff delivering tobacco dependence treatment for people with SMI complete specialist training.

Staff working with patients with SMI should receive specialised training on tailoring advice and support for people with SMI.

9.1   Train all patient-facing staff in delivering VBA+, including opt-out referral for support to manage tobacco dependence.

9.2   Specialist, multi-session tobacco dependence treatment should be delivered by trained healthcare professionals knowledgeable in tailoring treatment to people with SMI.

9.3   Staff delivering tobacco dependence treatment for people with SMI should complete specialist training and meet the knowledge and skills identified in the NHS-NCSCT Competency framework for tobacco dependence treatment: mental health services.

9.4   Regular (at least monthly) practice supervision should be available to tobacco dependence treatment staff, to ensure quality standards are maintained and practitioners maintain their commitment to best practice.

More information can be found in the following briefing:

Smoking Cessation and Mental Health: A briefing for front-line staff
This briefing is aimed at those who work in a mental health setting and gives expert, concise guidance on how to deliver Very Brief Advice (VBA+) to patients who smoke.

www.ncsct.co.uk/publications/smoking_cessation_and_mental_health_briefing

---

See the **Training and resources** section of this document for more information on available specialist training for front-line staff and those staff providing stop smoking support to people with SMI who smoke.

10 — Smokefree environment policies are developed, maintained and promoted.

Patients cared for in smokefree environments, where all the cues to smoke are removed, find it easier to stop smoking. This includes smokefree buildings and grounds.

10.1 Develop smokefree environment policies in conjunction with patients and staff that are conducive to prompting individuals to make a quit attempt and supporting them with stopping. See **CQC: Brief guide for inspection teams: Smoke free policy for mental health inpatient services**.

10.2 In inpatient settings there should be no provision for the storage of smoking materials and no facilitation of leave periods that enable people to smoke.

10.2 Communicate, enforce and review policies clearly and consistently. Do not apologise for smokefree policies and ensure there is an understanding that these are part of good care and support with recovery.

More information about preparing, implementing and maintaining a smokefree policy can be found in the following briefing:

Smoking cessation and smokefree policies: Good practice for mental health services
This briefing provides advice on supporting patients admitted to smokefree premises and maximising the chances of cessation, managing temporary abstinence and implementing and maintaining smokefree policies.

www.ncsct.co.uk/publications/mental_health_briefing

Training and resources

Training for front-line staff

eLearning: Tobacco dependence in inpatient mental health hospitals
This training will enable the admitting team and front-line mental health staff to further their knowledge on the benefits of treating tobacco dependence as a new standard of care.

https://learninghub.nhs.uk/catalogue/tobaccodependenceinpatienttraining

Training for Stop Smoking Practitioners

eLearning: NCSCT Mental Health and Smoking Specialty Module
This post-certification course was originally designed for stop smoking practitioners helping people with significant mental health problems to stop smoking, this module is actually suitable for any health and social care professional.

https://elearning.ncsct.co.uk/mental_health_specialty_module-launch

Two-day Training course for Community Mental Health Tobacco Treatment
This two-day course is designed for health professionals who will be delivering specialist tobacco dependence treatment to SMI patients in community mental health settings.

www.ncsct.co.uk/publications/virtual-course-community-mental-health

Training Course for Inpatient Mental Health Tobacco Dependence Advisers
This two-day course is for NHS staff who will be delivering specialist tobacco dependence treatment to patients during admission to an inpatient mental health facility.

www.ncsct.co.uk/publications/virtual-inpatient-mental-health-tda

Resources for Local Trainers

The materials provide trainers with high-quality, evidence-based training resources to support local training delivery.

Community Mental Health Tobacco Treatment Training Resources
www.ncsct.co.uk/publications/category/NHSE-training-materials-SMI

NHS MH Inpatient Tobacco Dependence Adviser Training Resources
www.ncsct.co.uk/publications/category/inpatient-mental-health-training-resources

Appendix A:
Very Brief Advice on Smoking (VBA+) for people with SMI in community settings

ASK and record smoking status

"Do you smoke?"

ADVISE on the most effective way of stopping

*"Stopping smoking is one of the **most important** things you can do to improve your mental **and** physical health."*

*"The **easiest** way to stop smoking is with regular use of **stop smoking aids** such as nicotine vapes, nicotine replacement therapy or nicotine analogue medicines alongside specialist support. Specialist support is **free** and many people I work with have found the support really helpful."*

Those who are not interested or confident they can stop abruptly at this time should be informed about Cut Down to Stop:

"I understand you may not be ready to stop smoking now, would you be willing to cut down on your smoking with a view to stopping completely in the future?"

ACT – refer patients to stop smoking support

Opt-out referral: Refer all patients for specialist support unless they specifically ask you not to.

Opt-in referral: Refer patients who are interested in stopping or making a quit attempt.

Refer to locally available stop smoking support:	**If the patient says they do not want to be referred:**
"Someone from the stop smoking service will call you to discuss the options. Can I check I have the correct contact details for you?"	*"It is your choice. Help will always be available. You can always return to see me or contact the smokefree helpline or your GP if you change your mind."*
Follow-up on referral and provide encouragement.	**Ensure the patient understands where to find support.** **Repeat VBA+ at future visits and at least once a year.**

Appendix B:
Very Brief Advice on Smoking (VBA+) for SMI patients in inpatient settings

ASK – identify and record smoking status

"Do you smoke?"

"Have you recently stopped smoking (in the last two weeks)?"

ADVISE on the most effective way of stopping and available support

*"Stopping smoking is one of the **most important** things you can do to improve your mental **and** physical health and can help with your recovery."*

"All NHS hospitals including this one are completely smoke free. Whilst you are in hospital it is important that we help you manage the withdrawal symptoms and urges to smoke you may experience. We can give you a vape or nicotine replacement therapy that will make it much easier for you to not smoke."

"A member of our Tobacco Dependence Team will come and see you to check how you're doing and provide additional support during your stay in hospital. They can also help you to stop smoking long-term or cut down on your smoking."

ACT – refer patients to tobacco dependence treatment

- **Treat** – Ensure tobacco dependence aids are initiated as soon as possible (ideally within 30 minutes of admission) to address withdrawal symptoms. Risk assessment should be completed to support the selection of a tobacco dependence aid.

- **Refer** – Complete opt-out referral to tobacco dependence service.
  Refer all patients for specialist support unless they specifically ask you not to.

- **Record** in admission diagnosis and disease care plan.

Follow-up on referral and provide encouragement.

Appendix C:
Initial vape and NRT dosing guide for people with SMI

People with SMI often have higher levels of nicotine dependence and will require higher doses of NRT or nicotine vapes to effectively manage withdrawal symptoms and urges to smoke.

The sections below on initial dose for combination NRT and nicotine vapes are a suggested guide only derived from clinical experience. Initial and subsequent NRT dose should be driven by client need with the aim of minimising or eliminating withdrawal symptoms and urges to smoke.

Combination NRT

High-dose (21 mg or 25 mg) patch **and** a faster-acting NRT product is recommended. Patients who are more heavily dependent will benefit from use of more than one nicotine patch to deliver a higher steady state blood nicotine level. See **Table 1** for initial combination NRT dosing.

Table 1: Initial combination NRT dosing

Product	<10 cigs/day	10 – 19 cigs/day	20 – 29 cigs/day	30 – 39 cigs/day	40+ cigs/day
Transdermal nicotine 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)
Faster-acting Use on the hour, every hour and as needed	**AND** one of the available **faster-acting NRT products:** ■ 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 probably be 18 mg/ml or 20 mg/ml. This is sometimes described as 1.8% or 2% on vape packaging.

Patients who smoke more heavily (>20 – 30 cigarettes per day) are likely to require up to two or sometimes even three cartridge refills (or pods) daily. Combination treatment with a nicotine patch is also recommended for patients with greater dependency. See **Table 2** for guidance on initial vape dosing.

Table 2: Initial vape dosing (for mental health hospitals)

Treatment	<10 cigs/day	10 – 19 cigs/day	20 – 29 cigs/day	30 – 39 cigs/day	40+ cigs/day
Vape Refill cartridges/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 nicotine patch **Vape** Refill cartridges/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