Supporting smoking cessation during pregnancy - nicotine replacement therapy (NRT)

Key messages

- Non-pharmacological interventions such as multi-session behavioural intervention (for example, as delivered by Quitline) are recommended as first-line therapy.

- Nicotine replacement therapy (NRT) in conjunction with behavioural intervention may be considered in women unable to achieve abstinence using non-pharmacological interventions alone or in those with moderate to high nicotine dependence.

- NRT can be introduced at any trimester to maximise the health benefits from smoking cessation. NRT use should be regularly reviewed by a medical practitioner (general practitioner (GP) or obstetric care provider) as often as practicable.

- NRT should be used at the most effective dose for the shortest duration possible to minimise fetal exposure to nicotine.

In this document

- Ask, Advise, Help
- Assessment prior to smoking cessation
- Treatment
- Appendices:
  1. Summary of the smoking cessation pathway - ‘Ask, Advise, Help’ model
  2. Examples of clinically significant drug interactions with cigarette smoking
  3. General Pharmaceutical Benefit Scheme (PBS) prescribing schedule for NRT

1. Purpose

The Women’s has a smoke free policy, which reflects the organisational commitment to reducing the harms associated with smoking and exposure to second hand smoke.

This guideline describes the prescribing and administration of nicotine replacement therapy (NRT) to aid cigarette smoking cessation during pregnancy.

2. Definitions

CO – carbon monoxide

HSI – Heaviness Smoking Index

NRT – nicotine replacement therapy

PBS – Pharmaceutical Benefit Scheme

PKU – phenylketonuria

Faster-acting NRT - includes lozenge, mini lozenge, gum, inhalator and mouth spray

NICU - neonatal intensive care unit
3. Responsibilities
This guideline is for all staff involved in the clinical management of pregnancy, which may include:

Nursing/midwifery staff:
- Ask all pregnant women about their smoking status
- Assess women with underlying medical conditions and review concurrent medicines use
- Organise referral to Quitline for behavioural intervention

Medical staff:
- Assess women with underlying medical conditions
- Review and manage concurrent medicines use
- Prescribe and review NRT use, monitor signs and symptoms of nicotine withdrawal and titrate NRT dose accordingly

Pharmacist:
- Undertake or be involved in medicines reconciliation and review concurrent medicines use
- Provide support regarding the prescribing of NRT and management of nicotine withdrawal
- Provide recommendations and counselling on NRT products based on the individual’s preference.

4. Guideline
Tobacco smoking during pregnancy has been associated with an increased risk of obstetric complications, adverse birth outcomes and infant mortality (1, 2). The benefits of smoking cessation during pregnancy include reduced rates of low birth weight, preterm birth and NICU admission (3). Non-pharmacological interventions such as behavioural intervention is recommended as first-line therapy.

4.1 Ask, Advise, Help
The ‘Ask, Advise, Help’ model is an approach that helps provide an evidence-based framework to support smoking cessation (Appendix 1).

4.1.1 ‘Ask’ – Asking about smoking history
At every antenatal appointment and during any hospital admission, ask all women about their tobacco smoking history and document the following in the medical record:

Smoking status:
- Current smoker
- Quit because of pregnancy (spontaneous quitter); document quit date
- Previously smoked; document quit date
- Never smoked

Type of tobacco (if currently smokes):
- Cigarettes
- Cigars*
- Pipes*
- Smokeless tobacco*

* Women using these products should be referred to a medical officer for individualised treatment recommendations

Offer carbon monoxide (CO) monitoring to all pregnant women who are currently smoking or
4.1.2 ‘Advise’ – Advising women on the most effective way to quit and why quitting is important

Provide information about smoking cessation to all pregnant woman, who are currently smoking and those who have quit because of pregnancy, in a clear, strong, personalised and non-judgemental way. This may include:

- The importance of quitting completely, not just cutting down
- Benefits of quitting for woman and baby, personalised to the woman's unique clinical situation where possible
- The most effective way to quit using evidenced-based interventions (i.e. behavioural intervention ± NRT)
- The importance of remaining abstinent, especially in women who have recently quit (recognising that these women are at higher risk of relapse)

If a woman declares she is not ready to quit smoking, discuss the following:

- The barriers to quitting
- The need to review and monitor smoking status at every visit

4.1.3 ‘Help’ – Helping women quit smoking

Offer all women who are currently smoking and those who have quit because of pregnancy a referral to Quitline (13 7848) for multi-session behavioural intervention.

Refer women with cardiovascular disease, mental illness or diabetes, and/or those who are taking concurrent medicines to a medical officer (see Section 4.2).

NRT may be considered in women unable to achieve abstinence using non-pharmacological interventions alone or those with moderate to high nicotine dependence. The risks and benefits of NRT should be discussed with the woman prior to initiation. See below.

Table 1: Risks and benefits of NRT

<table>
<thead>
<tr>
<th>Risks</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term effects are unknown</td>
<td>NRT generally delivers lower levels of nicotine compared to cigarette smoking (8-10)</td>
</tr>
<tr>
<td>Adverse effects from NRT are possible</td>
<td>NRT provides a ‘clean’ source of nicotine, thus minimising the exposure to other harmful chemicals of cigarette smoke</td>
</tr>
<tr>
<td>Nicotine may be associated with potential risk of low birth weight, preterm birth, stillbirth, and/or cognitive impairment (1, 2, 4-6). However, findings from studies evaluating NRT during pregnancy did not corroborate these claims (7).</td>
<td>NRT use has been shown to increase smoking cessation rate by 43% (7)</td>
</tr>
<tr>
<td></td>
<td>Infants born to women who quit using NRT had better developmental outcomes at two years of age, compared to those born to women who did not quit (11).</td>
</tr>
</tbody>
</table>

Engage the woman’s partner and other close family members who currently smoke and offer referral to Quitline.

Document the discussion in the woman’s medical record and provide ongoing follow up care and support at all subsequent appointments.
4.2 Assessment prior to smoking cessation

4.2.1 Review underlying medical conditions

Relevant underlying medical conditions should be taken into consideration when a woman quits smoking and prior to the commencement of NRT. Consult a medical officer if the woman has any of the following:

Table 2: Relevant underlying medical conditions, concerns and recommendations.

<table>
<thead>
<tr>
<th>Underlying medical condition</th>
<th>Concerns and recommendations</th>
</tr>
</thead>
</table>
| Mental illness                                                   | • Withdrawal symptoms from smoking (such as depressed mood, irritability and anxiety) can be mistaken for symptoms of mental illness.  
• Refer to a mental health professional for further advice.                                                      |
| Cardiovascular disease                                           | • Smoking cigarettes is known to contribute to adverse cardiovascular events, including acute coronary syndrome, myocardial infarction, stroke, angina, or congestive heart failure.  
• Anecdotal reports of adverse cardiac and vascular consequences resulting from the use of NRT have led to cautious use or avoidance in these patients. However, this is not supported by the current evidence.  
• NRT use in patients with underlying cardiovascular disease is not associated with an increased risk of adverse cardiovascular events (12-14). However, it should be used under medical supervision (15). |
| Diabetes mellitus or gestational diabetes mellitus               | • Nicotine may decrease insulin absorption, secondary to peripheral vasoconstriction (16)  
• Monitor blood sugar levels during and post-NRT. Insulin dose adjustment may be required  
• Consider use of sugar free faster-acting NRT.                                                                 |
| Generalised skin disease                                         | • NRT patch may not be suitable in patients with pruritus secondary to conditions such as obstetric cholestasis and pruritic urticarial papules and plaques of pregnancy.  
• Consider use of faster-acting NRT.                                                                                                                                 |
| Nausea and vomiting, including hyperemesis                       | • Faster-acting NRT may exacerbate nausea and vomiting  
• Swallowing nicotine can exacerbate symptoms of oesophagitis and gastric or peptic ulcer disease                                                              |
| Phenylketonuria (PKU)                                            | • Avoid faster-acting NRT containing aspartame in patients with PKU.                                                                                                                                                       |
| Dentures or complicated dental work                             | • Avoid the use of nicotine gum as it may stick to and damage the dentures or dental work. Consider an alternative NRT formulation.                                                                                     |
| Asthma                                                           | • Use NRT inhalator with caution as it may irritate the throat and cause coughing. Consider an alternative NRT formulation.                                                                                       |
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4.2.2 Review concurrent medicines use

Review concurrent medicines use when a woman quits smoking and prior to the commencement of NRT. Consult a medical officer if the woman is currently taking any medicines listed in Appendix 2.

General considerations:
- When a woman quits or significantly cut down on smoking, the dose of certain medicines may need to be adjusted
- Chemicals in tobacco smoke accelerate the metabolism of certain medicines by inducing the cytochrome P450 (CYP) 1A2 (17) and uridine 5'-diphosphate glucuronosyltransferases (18).
- Nicotine may counter the pharmacological actions of certain medicines via stimulation of the sympathetic nervous system (16).

4.2.3 Review history of previous quit attempts and withdrawal symptoms

- Review previous quit attempts (if any) and history of withdrawal symptoms.
- Women who experience withdrawal symptoms during previous quit attempts are likely to experience them again.
- Withdrawal from nicotine can be an uncomfortable experience, particularly within the first 24 hours when symptoms are most severe.

Symptoms of nicotine withdrawal can include:
- craving for nicotine,
- restlessness, anxiety, irritability, emotional lability, frustration, anger
- depression
- inability to concentrate
- insomnia
- increased appetite, weight gain
- headaches

4.3 Treatment recommendations

Assessing nicotine dependence

Nicotine dependence can be assessed using the Heaviness Smoking Index (HSI) (Table 3) (19).

Table 3: The Heaviness Smoking Index (HSI) and treatment recommendations

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many cigarettes do you smoke each day?</td>
<td>10 or fewer</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>11 to 20</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>21 to 30</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>31 or more</td>
<td>3</td>
</tr>
<tr>
<td>How soon after waking do you smoke your first cigarette?</td>
<td>After 60 minutes</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>31 to 60 minutes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>6 to 30 minutes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Within 5 minutes</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Score</td>
<td></td>
</tr>
</tbody>
</table>
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Supporting smoking cessation during pregnancy - nicotine replacement therapy (NRT)

Treatment recommendations:

Treatment recommendations based on HSI, taking into consideration previous quit attempts.

Pregnant women who have relapsed in the past or who experience cravings using one form of NRT alone may consider combination NRT (i.e. NRT patch and faster-acting NRT) under medical supervision.

Table 4: Treatment recommendation based on the level of nicotine dependence

<table>
<thead>
<tr>
<th>HSI Score (level of dependence)</th>
<th>0 to 2 (Low nicotine dependence)</th>
<th>3 to 4 (Moderate nicotine dependence)</th>
<th>5 to 6 (High nicotine dependence)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment recommendation</td>
<td>Multi-session behavioural intervention (Quitline) alone</td>
<td>Multi-session behavioural intervention (Quitline) ± faster-acting NRT Use the highest strength faster-acting NRT initially</td>
<td>Multi-session behavioural intervention (Quitline) + NRT patch ± faster-acting NRT</td>
</tr>
</tbody>
</table>

If cravings or withdrawal symptoms are not controlled, consult a medical practitioner and consider:

- The addition of faster-acting NRT
- The addition of a NRT patch
- Maximising the dose for NRT patch and faster-acting NRT

Women who currently smoke, but have indicated they would like to quit, should set a quit date.

NRT can be introduced as early as possible in pregnancy. NRT use should be regularly reviewed by the general practitioner (GP) or obstetric care provider as soon as practicable.

Pregnant women who have relapsed in the past or who experience cravings using one form of NRT may consider combination NRT under medical supervision. Women should keep a diary to identify smoking triggers and to determine daily NRT use. This information is useful to inform and optimise smoking cessation strategies.

Aim to discontinue NRT and quit within six to eight weeks of commencing NRT or earlier if possible. NRT may be ceased abruptly.

If women are tempted to smoke after cutting down or stopping NRT, encourage use of behavioural intervention through Quitline to help manage cravings. Consider reinitiating or resuming previous dose of NRT if necessary.

4.3.1 Behavioural intervention

- Behavioural interventions have been shown to be effective in supporting pregnant women to stop smoking (3)
- Telephone counselling interventions are effective
- Utilise the Quitline service to provide phone-based multi-session, tailored behavioural interventions to people who smoke, including pregnant women
- Use a range of behaviour change techniques to support people to make and sustain a quit attempt, and adjust to a smoke-free life
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- Encourage people to use smoking cessation pharmacotherapies if clinically appropriate, and in consultation with a health professional
- Refer to Quitline (via www.quit.org.au) to arrange for professional advice and for a free call-back service

4.3.2 Nicotine replacement therapy (NRT)

Fast-acting NRT
- Oral, fast-acting forms of NRT such as lozenge, gum or inhalator that allow intermittent dosing are recommended for women with lower levels of nicotine addiction, or women who have been successful in cutting back on smoking but have not been able to quit.
- Fast-acting NRT may be useful when strong cigarette cravings occur (20).
- Eating and drinking, especially acidic beverages, e.g. coffee or soft drinks, should be avoided 15 minutes before and during the use of fast-acting NRT as reduced salivary pH may interfere with nicotine absorption through the oral mucosa (21).
- The mouth spray contains a small amount of alcohol and is not recommended for use in pregnancy.

Table 5: Faster-acting NRT formulations

<table>
<thead>
<tr>
<th>NRT formulation</th>
<th>Strengths</th>
<th>Recommended dose</th>
<th>Directions for use</th>
</tr>
</thead>
</table>
| Lozenge        | 2mg      | One lozenge every 1-2 hours (up to 15 lozenges per day) | - Allow the lozenge to slowly dissolve in the mouth (may take up to 30 minutes)  
- Move the lozenge from one side of the mouth to the other from time to time  
- The lozenge should not be chewed or swallowed whole  
- Lozenge containing aspartame is not suitable for women with PKU |
|                | 4mg      | Maximum of 12 (2mg) lozenges per day when used in combination with an NRT patch | |
|                |          | Maximum of 12 (2mg) lozenges per day when used in combination with an NRT patch | |
| Mini lozenge   | 1.5mg    | One mini lozenge every 1-2 hours (up to 20 mini lozenges per day) | |
|                |          | Maximum of 12 mini lozenges per day when used in combination with an NRT patch | |
| Gum            | 2mg      | One gum every 1-2 hours Up to 20 (2mg) gums or 10 (4mg) gums per day. | - Slowly chew the gum (about ten times) until tingling or bitter taste, then place it between gum and cheek. When the strong taste or tingling has subsided, chew again  
- Repeat until the strong taste fades or it no longer cause tingle (can be up to 30 minutes)  
- The gum may not be suitable for women with dentures or complicated dental work  
- Gum containing aspartame is not suitable for women with PKU |
|                | 4mg      | Maximum of 12 (2mg) gums per day when used in combination with an NRT patch | |
| Inhalator      | 15mg     | Three to six cartridges per day | - Take short and shallow inhalations  
- Avoid deep inhalation as it may cause coughing and/or throat irritation  
- About eight to ten inhalator puffs substitute for one cigarette puff (if a cigarette is smoked in eight puffs, 64 to 80 puffs should be used for the inhalator) |
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- Each cartridge substitutes for seven cigarettes, after which a new cartridge should be used.
- This product contains small amounts of alcohol, less than 100mg per spray, and is not recommended in pregnancy.
- Spray into the inside of the cheek or under the tongue; do not inhale whilst spraying.
- Avoid swallowing for a few seconds to allow the nicotine to be absorbed.

NRT patches
- NRT patch provides a steady supply of nicotine and control of basal cravings. However, it may not be effective for the relief of breakthrough cravings (22). Intermittent use of fast-acting NRT may be required to relieve cravings and withdrawal symptoms.
- There is no evidence that weaning with lower strength patches at the end of treatment offers any benefit over abrupt cessation (23).
- Remove nicotine patch at bedtime to minimise adverse effects and fetal exposure to nicotine.

Table 6: NRT patches

<table>
<thead>
<tr>
<th>NRT formulations</th>
<th>Strengths</th>
<th>Recommended dose</th>
<th>Directions for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch (16 hours)</td>
<td>25mg</td>
<td>One patch daily</td>
<td>The patch should be applied on waking in the morning and removed at bedtime</td>
</tr>
<tr>
<td></td>
<td>15mg</td>
<td></td>
<td>Apply the patch to dry, clean, hairless area(s) on the upper body or arm</td>
</tr>
<tr>
<td></td>
<td>10mg</td>
<td></td>
<td>Rotate sites of application</td>
</tr>
<tr>
<td></td>
<td>5mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patch (24 hours)</td>
<td>21mg</td>
<td>Consider the 21mg/24hr or 15mg/16hr patch in women with high nicotine dependence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7mg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adverse effects
NRT are generally safe and well tolerated. However, minor side effects may occur.

Table 7: NRT formulations and common side effects

<table>
<thead>
<tr>
<th>NRT formulation</th>
<th>Common side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch</td>
<td>Skin irritation, erythema and sleep disturbance</td>
</tr>
<tr>
<td>Gum, lozenge, and mini-lozenge</td>
<td>Nausea, vomiting, indigestion, and hiccups</td>
</tr>
<tr>
<td>Inhalator and mouth spray</td>
<td>Mouth or throat irritation, cough, nausea, vomiting, indigestion, and hiccups</td>
</tr>
</tbody>
</table>
5. Evaluation, monitoring, and reporting of compliance to this guideline

Compliance to this guideline or procedure will be monitored, evaluated and reported through notification of clinical incidents via the Victorian Health Incident Management System (VHIMS).

6. Declaration

We gratefully acknowledge the contribution of clinicians and other stakeholders who participated throughout the guideline development process, particularly QUIT Victoria.

7. References

Supporting smoking cessation during pregnancy
- nicotine replacement therapy (NRT)


8. Appendices

Appendix 1 : Summary of the smoking cessation pathway – ‘Ask, Advise, Help’ model

Appendix 2: Examples of clinically significant drug interactions with cigarette smoking(16,24, 25)

Appendix 3: General Pharmaceutical Benefit Scheme (PBS) prescribing schedule for NRT

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Appendix 1

Summary of the smoking cessation pathway – “Ask, Advise, Help’ model

Ask

Ask all women about their tobacco smoking history and document in the medical record

“Do you currently smoke?”
- Currently smokes
- Quit because of pregnancy (spontaneously quit) – Congratulate and continue pathway
- Previously smoked – Congratulate and encourage them to remain abstinent.
- Never smoked

Offer CO monitoring to all pregnant women if available.

Advise

Advise all pregnant women, who are currently smoking and those who have quit because of pregnancy, in a clear, strong, personalised and non-judgemental way.

Provide information about:
- The importance of quitting completely, not just cutting down
- Benefits of quitting for the woman and her baby
- The most effective way to quit using evidenced-based interventions
- The importance of remaining abstinent, especially in women who have recently quit (recognising that these women are at higher risk of relapse)

Help

Helping women quit smoking through evidence based smoking cessation intervention

- Refer women with underlying medical conditions or those who are taking concurrent medicines to medical staff
- Assess level of nicotine dependence using the Heaviness Smoking Index (HSI)
- Offer all pregnant women who smoke or those who quit because of the pregnancy referral to Quitline for behavioural intervention
- Initiate NRT if clinically appropriate and after the risk-benefits have been explained to the women; dose according to the nicotine dependence level

<table>
<thead>
<tr>
<th>Low nicotine dependence (HSI score 0 to 2)</th>
<th>Moderate nicotine dependence (HSI score 3 to 4)</th>
<th>High nicotine dependence (HSI score 5 to 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural intervention alone</td>
<td>Behavioural intervention ± faster-acting NRT</td>
<td>Behavioural intervention + NRT patch ± faster-acting NRT</td>
</tr>
<tr>
<td></td>
<td>Use the highest strength faster-acting NRT initially</td>
<td></td>
</tr>
</tbody>
</table>

If cravings or withdrawal symptoms are not controlled, consult a medical practitioner and consider:

- The addition of faster-acting NRT
- The addition of a NRT patch
- Maximising the dose for NRT patch and faster-acting NRT

NRT should be used at the most effective dose for the shortest duration possible.
- Follow up and document progress in medical record
- Reassess CO at follow up appointments, if available
- Offer the woman’s partner a referral to Quitline, if they currently smoke

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Appendix 2

Examples of clinically significant drug interactions with cigarette smoothing(16,24, 25)

The information presented adapted from the references, and is not exhaustive. Please refer to a pharmacist for further information or other drug interaction resources.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Effects of cigarette smoking</th>
<th>Recommendation post-smoking cessation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzodiazepine</td>
<td>Reduced sedation mediated by nicotine stimulation of central nervous system</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Beta blockers*</td>
<td>Decreased blood pressure and heart rate control mediated by nicotine activation of sympathetic nervous system</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Caffeine</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Reduce caffeine intake by 50% (26)</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>Decreased plasma concentration</td>
<td>Monitor clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Clozapine</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Consider dose reduction and monitor trough plasma concentrations, clinical effectiveness, and adverse effects</td>
</tr>
<tr>
<td>Duloxetine</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Flecaainide</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Fluvoxamine</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Imipramine</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Insulin</td>
<td>Decreased subcutaneous absorption secondary to nicotine mediated peripheral vasoconstriction</td>
<td>Monitor blood glucose level and adjust insulin dose as required</td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Monitor for clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Increased clearance, decreased plasma concentration</td>
<td>Monitor clinical effectiveness and adverse effects. Consider dose reduction if clinically indicated</td>
</tr>
<tr>
<td>Theophylline</td>
<td>Increased clearance, decreased half-life</td>
<td>Consider dose reduction and monitor trough plasma concentrations, clinical effectiveness, and adverse effects</td>
</tr>
<tr>
<td>Warfarin</td>
<td>Increased clearance, decreased plasma concentration; no measurable effect on prothrombin time</td>
<td>Monitor INR and adjust dose accordingly</td>
</tr>
</tbody>
</table>

*Increased clearance has been reported with propranolol
Eligibility for PBS subsidised NRT

- Patients who is ready to stop smoking can access up to 12 weeks of PBS subsidised NRT per year (24 weeks for an Aboriginal or Torres Strait Islander person).
- Patients must or about to undertake behavioural intervention for smoking cessation at the commencement of the PBS subsidised NRT.
- PBS subsidised NRT brands include:
  - 21mg/24hr patch (Nicotinell® Step 1, Nicabate® P)
  - 14mg/24hr patch (Nicotinell® Step 2)
  - 7mg/24hr patch (Nicotinell® Step 3)
  - 25mg/16hr patch (Nicorette® 16hr Invispatch)
  - 4mg or 2mg lozenge (Nicotinell®)
  - 4mg or 2mg chewing gum (Nicotinell®)
- Only one PBS subsidised therapy for nicotine dependence at a time is allowed.