STANDARD PROTOCOLS

NICOTINE DEPENDENCE ASSESSMENT AND INTERVENTION – INPATIENT MANAGEMENT

Keywords: Nicotine replacement therapy, NRT, smoking policy, nicotine assessment, smoking in hospital

AIM

- To direct care that complies with the state guideline: Clinical Guidelines and Procedures for the Management of Nicotine Dependent Inpatients (2011).

KEY POINTS

1. Smoking cessation programs in pregnancy reduce the number of women who smoke and consequently reduce low birth weight and pre term birth.[6]
2. Nursing/ midwifery advice and support in a hospital setting has been demonstrated to increase success in people quitting smoking.[7]
3. All women should be advised the WNHS is a smoke free organisation on admission or at the antenatal booking visit.
4. All antenatal women at the booking visit should have a Fagerstrom Test performed and documented on the MR215.10 form.
5. All antenatal women who smoke or are exposed to smoke should be provided with verbal and written information about the effect of smoking on their health, their pregnancy, for the neonate and others exposed to smoke.
6. All women or their partners who smoke or have quit smoking should be encouraged to make use of the counselling services available from the 'Pregnancy Quitline'.
7. Ideally smoking cessation during pregnancy should be achieved without NRT. However , for the women unable to quit on their own the use of NRT should be encouraged.[10]
8. After counselling if women decide to use NRT advise her that intermittent dosing products are preferable (e.g. gum, lozenges or aerosols) as the intermittent plasma peaks of nicotine attained with these products may be preferable to the continuous nicotine plasma levels attained with patches. Transdermal patches may provide an option for a nauseated woman.
9. Currently there is lack of evidence for safe use NRT in pregnancy. Expert opinion considers in certain circumstances it may be considered an option for a pregnant woman who is unable to quit, and the benefit of its use outweighs the risk for continued smoking.[1]

INPATIENT MANAGEMENT

- All patients admitted to hospital shall be asked about their smoking status via the Admission Assessment Tool in their unit. Smoking status shall be recorded on patient records, discharge summaries and referral forms by noting the relevant International Classification of Disease (ICD-10) code for tobacco use.
- Following the identification of patients that smoke, the health professional shall determine the suitability of the patient to receive nicotine replacement therapy (NRT) by using the Fagerstrom Test for nicotine dependence

  See the Flowchart –Management of Nicotine Dependent Inpatients Page 4
- Effective management of nicotine dependent inpatients will depend to a large extent on the timeliness of management of withdrawal symptoms with NRT. The elimination half-life of nicotine is <2 hrs, which means that many patients will seek to smoke unless withdrawal symptoms can be prevented via timely and regular provision of NRT. NRT aims to replace some of the nicotine obtained from cigarettes, thus reducing withdrawal symptoms when stopping smoking.
- The nurse/ midwife may initiate NRT via Nurse/ Midwife-Initiated Medication protocol for eligible patients, subject to medical review. Medical officers, nurses and midwives share

responsibility to review the patient for ongoing withdrawal symptoms and NRT medication. Clinical staff shall advise patients of the correct ways to use NRT

- Clinical staff shall consider combination pharmacotherapy for all patients. Combination pharmacotherapy is the provision of fast acting products (such as gum, lozenge or inhaler) to combine with the patch. It can enhance chances of quitting and is appropriate if the patient continues to experience withdrawal symptoms or has difficulty abstaining from smoking while on the nicotine patch.
- For patients who indicate they are not ready to give up smoking completely, clinical staff shall still offer NRT. Evidence suggests that using a nicotine patch whilst smoking either as a 'pre quit' tool or to 'cut down to stop' can improve rates of success. Carbon monoxide monitors, that measure expired carbon monoxide levels, are useful to demonstrate to the patient the reduction in their smoking and to verify that progress
- All clinical staff shall complete the Online Brief Tobacco Intervention Training, developed by the National Drug Research Institute for Smoke Free WA Health, to achieve competency in brief intervention and motivational interviewing.

NURSE AND MIDWIFE ROLES:

- Ask patients if they are a current smoker or have recently quit.
- If yes, follow the Flow Chart – Management of Nicotine Dependent Inpatients (nurse/ midwife initiated).
- If no, inform patients of the Smoke Free WA Health Policy and ask they advise those who visit them whilst in hospital that the grounds are smoke free.

NB: Medication Competent Enrolled Nurses may administer nurse/ midwife-initiated NRT if approved by their hospital Drug Committee as long as they have checked with their supervising registered nurse, prior to administration, that the medication is appropriate and safe.

MEDICAL OFFICER ROLES:

- Understand the role of nurses and midwives in the management of nicotine dependent inpatients and recognise the points of care requiring intervention by a medical officer (as outlined in the Flow Chart in Appendix 2).
- Review and prescribe appropriate NRT within 24 hours of nurse/ midwife-initiated NRT.
- Assess all patients with contraindications to nurse/ midwife-initiated NRT and prescribe appropriate NRT.
- Monitor patient withdrawal and adjust medication accordingly.
- Ensure smoking status is recorded on patient records, discharge summaries and referral forms by noting the relevant International Classification of Disease (ICD-10) code for tobacco use.
- Include reference to NRT administered as part of the patient discharge plan and provide a minimum of 7 days NRT upon discharge.

PHARMACIST ROLE

- Provide the ward with appropriate smoking cessation pharmacotherapies.
- Be involved with patient medication reconciliation.
- Provide advice to other clinical staff regarding nicotine withdrawal and smoking cessation pharmacotherapies.
- Arrange discharge advice for patients regarding ongoing smoking cessation pharmacotherapy options, where possible.

PREGNANT WOMEN AND NRT

- Ideally, smoking cessation during pregnancy shall be achieved without NRT. However for women unable to quit on their own, NRT shall be offered as the risk to the fetus is lower than tobacco smoking 15. Intermittent dosing products (i.e. lozenges, gum and inhalers) are

preferable as these deliver nicotine only as required and avoid the constant nicotine release from patches.

- In those circumstances where the woman is unable to quit using intermittent dosing products, a medical officer can assess for the safe use of patches.
- Nicotine can have an adverse effect on labour and fetal heart rate. Therefore, women presenting in labour shall be assessed for nicotine dependence and offered NRT as required during the labour and reviewed for ongoing therapy post partum.
- Smoking during pregnancy is associated with risks such as unhealthy birth weight premature birth or stillbirth. The antenatal phase provides opportunities for the early identification and assessment of smokers and smoking cessation advice and support 16. The earlier abstinence is achieved during pregnancy the better.

Precaution: Lactating mothers of pre-term infants are excluded from nurse/ midwife-initiated NRT and should be referred to a Medical Officer.

REFERENCES / STANDARDS	
National Standards – 1- Care provided by the clinical workforce is guided by current best practice; 4- Medication Safety Legislation - Related Policies – • OD 0414/13 Smoke Free WA Health System Policy / WNHS W003 Smoke-free Organisation Policy (2013) • Clinical Guidelines and Procedures for the Management of Nicotine Dependent Inpatients (2011) Other related documents – Online Brief Tobacco Intervention Training	
RESPONSIBILITY	
Policy Sponsor	**Nursing & Midwifery Director OGCCU**
Initial Endorsement	May 2011
Last Reviewed	September 2014
Last Amended	December 2014
Review date	September 2017

Do not keep printed versions of guidelines as currency of information cannot be guaranteed. Access the current version from the WNHS website.

Flow Chart –Management of Nicotine Dependent Inpatients (nurse/midwife-initiated) across WA Health

1. Assess smoking status via admission assessment tool and record smoking status using relevant ICD-10 code for tobacco use

- Never smoked or ex-smoker (> 6 months since last cigarette) – Encourage continued abstinence
- Current smoker or recently quit – Follow steps 2 – 7

2. Inform patient of the Smoke Free WA Health System Policy and provide them with a Smoke Free Advice for Patients brochure

3. Complete Fagerstrom Test for all current and recent smokers

4. Offer eligible patients NRT according to their level of dependence

Discuss previous quit attempts with patient – this may assist in determining appropriate NRT.
Explore 'cut down then stop' methods for patients who are not ready to stop smoking completely.
Offer Nicotine Replacement Therapy Factsheet.

Contraindicated (NRT should not be used)	Precaution (Medical Officer consultation required)
Non smokers	Under 18 years
Children under 12 years	Gastrointestinal disease
Those with hypersensitivity to nicotine	Acute myocardial infarction, unstable or worsening angina, severe cardiac arrhythmias
Phenylketonurics (should not use lozenge)	Recent or planned coronary angioplasty, bypass graft or stenting
Menthol hypersensitivity (should not use inhaler)	Peripheral vascular disease
	Renal & hepatic impairment
	Recent cerebrovascular accident
	Patients in intensive care unit or critical care unit
	Mothers of preterm infants
	Lactating mothers

*Recent is defined as within the last 4 weeks

Dependence Level	Nicotine Replacement Therapy: Combination therapy
High Fagerstrom score = 5+	**PATCH:** 21MG/24HR OR 15MG/16HR AND ***Lozenge or Gum:** 2mg or **inhaler**
Moderate Fagerstrom score = 4	**PATCH:** 21MG/24HR OR 15MG/16 HR AND ***Lozenge or Gum:** 2mg or **inhaler**
Low to Moderate Fagerstrom score = 3	**Patch:** 14mg/24hr or 10mg/16hr AND ***Lozenge or gum:** 2mg or **inhaler**
Low Fagerstrom score = 1-2	***May not need NRT*** Monitor for withdrawal symptoms **Patch:** 7mg/24 hr or 5mg/16hr OR **Lozenge:** 2mg OR **Gum:** 2mg

*Maximum of 12 lozenges or gum per 24hrs when combined with patch. Minimum recommended is 4 per 24hrs if experiencing breakthrough cravings (MIMS Australia Online).

5. Monitor signs and symptoms of withdrawal and review dosing if symptoms persist

The Nicotine Withdrawal Management Plan can be used for monitoring.
For patients with a Fagerstrom Test score 5+ and patients experiencing breakthrough cravings with combination NRT, consider the use of 2nd patch and continue supplementary NRT.

6. Review by Medical Officer (within 24 hrs) & ongoing management of nicotine dependence

7. On discharge, assess patients intention to remain abstinent after leaving hospital.

- Supply a minimum of 7 days of NRT for those who choose to remain abstinent.
- Record smoking status (using ICD-10 code) and nicotine dependence management during hospitalisation on discharge summary.
- Advise patients interested in non-nicotine pharmacotherapies to discuss with their GP.
- Provide information or referrals to community based smoking cessation services for ongoing support. Eg.Quitline 13 QUIT; www.quitnow.info.au/; Cancer Council WA Fresh Start Course; GP; Pharmacist