The Pharmacy Guild of Australia

Community Pharmacy Roadmap Program Development Template

Program/Service **Quadrant**	Maternal and Infant Services C – Pharmacy Medicines and Health Products – Services and Programs
1. Program/Service Description	
a) Background	For the purpose of this document, an infant is defined as a child up to 24 months of age[1]. Community pharmacy is ideally placed to assist in support for women who are planning a pregnancy, pregnant and post-partum to facilitate optimal health for mother and infant. The area of maternal and infant services is broad, with pharmacies having the ability to adopt practices along a spectrum dependent on the business context of the pharmacy. The minimal end of service includes the provision of nursing mother health care products, baby care products and infant formula, and the usual practice of advice regarding medicines. Building on from this is the provision of advice and resources consistent with current practice and recommendations relating to alcohol consumption, smoking cessation, breastfeeding and immunisations, screening services and support programs, to the incorporation of comprehensive baby clinics run by maternal and child health professionals. Areas that could be addressed in community pharmacy at varying levels include: **Postnatal Depression[2]** Postnatal depression (PND) affects almost 16% of women giving birth in Australia and has the same signs and symptoms as depression. The Edinburgh Postnatal Depression Scale (EPDS) is a set of 10 questions designed to see if a new mother may have depression. The answers will not provide a diagnosis, but can assist in the identification of women with symptoms that are common in women with PND. Community pharmacy has the potential to play an important role in the identification of women at risk of PND and provision of advice and support, including referral to a GP. Further, for women with diagnosed PND, community pharmacy can provide support and information relating to medications, particularly the safety of use while breastfeeding. **Gestational Diabetes[3]** During 2004–05, approximately 10,900 women giving birth in hospital had diagnosed gestational diabetes (GDM); however, as not all pregnant women are screened it is likely that this is an underrepresentation. This is an area in which community pharmacy could become engaged. Community pharmacy already extends the spectrum of care by involvement in the National Diabetes Service Scheme, which had 6700 women with GDM receiving treatment on their register in 2004-05. **Smoking Cessation[4]** If a woman smokes when she is pregnant there is a higher risk of a premature birth and low birth weight. Passive smoking is a real and significant threat to an infant's health, and the poisons in cigarettes inhaled by a mother are passed on to the infant through breast milk. There is also an increased risk of Sudden Infant Death Syndrome (SIDS), asthma, other respiratory illness and middle ear infections. In relation to smoking cessation, the availability through community pharmacy of qualified health professionals is even more important during pregnancy, and pharmacies are an ideal setting for the delivery of a smoking cessation program (refer to Smoking Cessation Roadmap

1 *MedTerms Medical Dictionary*
2 Beyondblue the national depression initiative
3 *Diabetes: Australian facts 2008* (2008), Australian Institute of Health and Welfare
4 *Smoking and Pregnancy* NSW Health Factsheet (2007)

Template). Pharmacists should routinely assess the smoking status of pregnant patients, provide brief advice about the importance of stopping, and offer additional assistance as required. In pregnancy and breastfeeding it is preferable to try to quit first without using nicotine replacement therapy (NRT), however NRT is less harmful than smoking as the infant receives less nicotine and no exposure to carbon monoxide and other toxic substances. NRT in the forms of gum, lozenge, sublingual tablet or inhaler (rather than patch) may be considered, but it is important to seek medical advice. Nicotine passes freely into breast milk, just as it easily crosses the placenta during pregnancy. The use of the NRT can be timed to minimise the amount of nicotine in the breastmilk by using it immediately after a feed to extend the time between using the NRT and the next feed.

Alcohol during pregnancy & breastfeeding[5]

Data suggests 97% of women believe health professionals should ask about their alcohol use in pregnancy and provide advice. In Australia rates of drinking during pregnancy have been reported to be as high as 47%. High-level and/or frequent intake of alcohol in pregnancy increases the risk of miscarriage, stillbirth, premature birth and a spectrum of adverse effects, referred to collectively as fetal alcohol spectrum disorders (FASD). While the risks to the fetus from low-level drinking (one or two drinks per week) during pregnancy are likely to be low, limitations of the available evidence make it impossible to set a 'safe' or 'no-risk' drinking level for women to avoid harm to their unborn children. As such, a public health approach has therefore been taken in recommending that 'not drinking alcohol is the safest option' for pregnant women and women planning a pregnancy.

As for pregnancy, it was not possible to set a 'safe' or 'no-risk' drinking level for breastfeeding and it is again advised that not drinking as the safest option. It is acknowledged that an abstinence message may discourage breastfeeding and women who choose to drink should be offered practical guidance regarding minimising the risk to lactation and to the infant, such as to consider not drinking alcohol during the first month after delivery until breastfeeding is well established, a recommended maximum level of consumption (eg two standard drinks or less in any one day), and the length of time that alcohol is excreted in the breast milk. The optimal timing of breastfeeding in relation to intake and the option of expressing prior to consuming alcohol could also be discussed. The consumption of two standard drinks or more per day during lactation is associated with decreased lactational performance, earlier cessation of breastfeeding, deficits in infant psychomotor development and disrupted infant sleep-wake behavioural patterns.

Breastfeeding[6]

Breastfed infants are less likely to suffer from a range of serious illnesses and conditions such as gastroenteritis, respiratory illness and otitis media, while mothers who breastfeed have faster maternal recovery from childbirth and a reduced risks of breast and ovarian cancers in later life. Despite these considerations, at four months only approximately 46% of Australian infants are fully breastfed, noting that at five months this rate drops to 28%. Many mothers are reliant on their social networks which can be highly influential in many of the decision making processes associated with breastfeeding. Efforts to extend breastfeeding during the long postnatal stage (8 wks – 6 months) include the continuation of health professional support, which community pharmacy is well placed to provide. Women may attend a pharmacy seeking advice on nipple care and infant formula, which provides opportunities to discuss breastfeeding and support services. There may be circumstances where mothers may choose breast-milk substitutes and the rights of mothers to make an informed choice about the method of feeding should be respected. Consumers should be provided with current and accurate evidence-based information on breastfeeding and bottle feeding in order to make an informed choice.

Infant formula[7]

Infant formula products are designed especially to meet the nutritional requirements of infants

[5] *Australian Guidelines to reduce health risks from drinking alcohol* (2009) National Health and Medical Research Council.
[6] Australian Breastfeeding Strategy 2010-2015, Australian Government Department of Health and Ageing
[7] *New directions for infant formula products* (2002) Food Standards Australian and New Zealand Fact Sheet

	up to the age of 12 months. They include formula for healthy infants such as infant formula and follow-on formula (for infants over 6 months); as well as formulas for infants with special nutritional requirements, including soy-based, lactose-free and low-lactose formulas and formulas for special dietary purposes. While breast milk is undeniably the ' gold standard', when an infant is unable to be breast fed, infant formula products are recognised as the most suitable and safe replacement for breast milk. It is not appropriate to use nutritionally incomplete alternate milks as the sole source of nutrition for infants under 12 months of age. Currently all infant formulas are required to comply with existing standards, Standard R7 - Infant Formula, Australian *Food Standards Code* (Volume 1), which is under review. It is the decision of an individual pharmacy to stock a range of infant formula and associated products, such as bottles, to meet consumer needs, but pharmacists should be able to provide evidence-based information and support for these products. Pharmacists should assist consumers in making informed decisions regarding the choice of bottle-feeding versus breastfeeding. **Immunisation** Australia has a mass childhood immunisation program (the National Immunisation Program) which recommends immunisation in a schedule of vaccinations from birth to 18 months of age: hepatitis B, poliomyelitis, pertussis (whopping cough), diptheria, tetanus, *Haemophilus influenzae* type b, pneumococcal, meningococcal C, varicella (chicken pox), rotavirus, measles, mumps, and rubella[8]. The progressive decline in the incidence of all childhood vaccine preventable disease is notable, with 99.75% decline in the numbers of deaths from these diseases since the 'prevaccination era'[9]. Despite this however, pertussis and mumps notifications have increased, still occurring at unacceptable high levels in Australia[9]. Community pharmacy plays an important role in immunisation coverage (refer to Vaccine Administration Roadmap Template).
b) Brief Description	Building on services currently delivered, a community pharmacy maternal and infant health service would have knowledge, skills and awareness raising components for pharmacists and pharmacy assistants, a practical medication adherence component (if applicable), and a component to encourage and enhance continuity of support for women and their children during this time in their lives. Pregnancy is perhaps the most opportune time for a woman to change their behaviour as they have more motivation and continuum of care than in other periods of their lives[10]. Many pharmacies offer a baby clinic service to customers, which can include baby scales, information sessions on topics such as breastfeeding and nipple care, nutrition and settling, and the availability of a maternal and child health nurse or other health professional to provide information and support. Pharmacies have the ability to adopt practices along a spectrum dependent on the business context of the pharmacy. This could utilise a number of existing programs including MedsIndex, Home Medicines Reviews, Patient Medication Profiles and Dose Administration Aids. There is also opportunity to offer specialised compounding services to improve palatability of medicines for infants thereby improving compliance. Community pharmacy is also well placed to raise community awareness of maternal and infant health issues particularly lifestyle and preventative strategies as well as the impact that alcohol and smoking has on maternal and infant health. As such, community pharmacy would be an ideal avenue to increase the uptake of the *Lifescripts* initiative as an alternative to GPs in providing consumers with evidence-based tools and skills to help address the lifestyle risk factors of smoking, poor nutrition, physical inactivity and alcohol misuse[11].

[8] Immunise Australia Program website, Department of Health and Ageing (last updated 22 September 2010)

[9] 'Vaccine Preventable Diseases and Vaccination Coverage in Australia 2003-2005' *Communicable Disease Intelligence* Vol. 31 Supplement (June 2007) Department of Health and Ageing

[10] 'Seizing the 9-month moment: Addressing behavioural risks in prenatal patients' *Patient Education and Counselling* (2006) Vol 61 pp 228-235

[11] Department of Health and Ageing Lifescripts webpage (last updated 20 August 2010)

c)	Alignment with Government Policy	Aspects of maternal and infant health cross many policy initiatives within Government, including, but not limited to: • National Chronic Disease Strategy (2006) • National Service Improvement Framework for Diabetes (2006) • Australian National Breastfeeding Strategy 2010-2015 • National Tobacco Strategy 2004-2009 • National Alcohol Strategy 2006-2011 • The National Perinatal Depression Initiative (announced 2008) • Fourth National Mental Health Plan (2009-2014) • National Preventative Health Strategy (Australia: the healthiest country by 2020)(2009) • National Immunisation Program (Immunise Australia)(launched 1997)
d)	Expected Outcomes for Government and Community Pharmacy	From a government perspective, pharmacy based infant and maternal services would assist in achieving maximum efficiency and minimising total costs associated with harmful pregnancy and poor infant health related issues. This is because the established community pharmacy network provides a national, equitable-access platform to highly qualified health professionals. This would occur through: • an increase in identification of women at risk of PND and GDM and subsequent referral to appropriate health and support services in addition to increased support of women who require subsequent medication based treatment • an increase in identification and engagement of pregnant women who smoke or consume alcohol in cessation strategies in addition to general community awareness • an increase in support provided to women to encourage the continuation of breastfeeding and referral to support services • an increase in support provided in appropriate product choice should a woman require infant formula. • consistent information provided relating to the National Immunisation Schedule. Outcomes for community pharmacy include an increased public recognition of the role of pharmacy as a provider of public health and primary health care services. This is consistent with increasing business viability by moving towards the provision of programs/services as an adjunct to the traditional dispensing and product supply model. This role expansion also provides viable career paths for the increasing numbers of pharmacy graduates.
e)	Consumer Benefits	Outcomes for the consumer include reducing the personal cost of harmful pregnancy related issues and maximising the health of mother and child during this critical period in their lives. Consumers will also benefit from the convenience of attending their local pharmacy to access such services, with the use of auditable professional standards ensuring the public receives a standardised, quality-assured professional support service. By briefly, but routinely, addressing maternal and infant health issues with consumers, community pharmacy is supporting an awareness process which may have self-directed change implications and subsequent opportunities to support that process in the future.
f)	Who Performs the Service	• Pharmacists • Pharmacy Assistants • Visiting health professionals
g)	Collaboration with Other Health Care Professionals	*Will service delivery require any formal collaboration with other health care professionals?* Yes – Cooperation and referral pathways to other health professionals will be required, including: • GPs • Maternal & Child Health Nurses • Diabetes Educators • Specialists

2. Implementation and Enablers	
a) Stakeholder Consultation	*Representative bodies from the following areas will need to be consulted in order to fully develop and implement a program:* • Consumer organisations • Pharmacy organisations • GP organisations • Issue specific organisations • Government bodies • Funders • Product sponsors • Other relevant allied health professional bodies
b) IT Requirements	*Is pharmacy software required to deliver this program?* Yes. IT solutions may assist in the delivery of these services. Program software ideally should be integrated with pharmacy software, streamlined for ease of use and consistent with pharmacy workflow. Existing pharmacy software would be adapted to support pharmacist-initiated interventions and to enable the collection of de-identified data for monitoring and evaluation of services.
c) Infrastructure and Staffing	*Is a private consultation area required to deliver this program?* Yes - existing consultation areas are likely to suffice, with modifications to ensure sufficient customer privacy where required. *Is the program within the pharmacist's/pharmacy assistant's normal scope of practice?* Yes. *Will an additional pharmacist be needed?* To be determined, according to the particular pharmacy's business model. In developing professional services that require extended pharmacist consultations, consideration needs to be given to staffing resources. An additional pharmacist could be required to ensure other professional services remain appropriately resourced.
d) Training	*Will additional formal training be needed?* Pharmacy graduates should be trained to a level where they can confidently provide support services upon registration. Training for pharmacists and pharmacy assistants should include on-line training where possible to maximise participation. Refresher training should also be available for registered pharmacists to ensure services remain aligned with current clinical guidelines. *Does any suitable training exist?* To be determined.
e) Supporting Standards, Procedures and Templates / Checklists	*Will a QCPP standard be required?* Yes - for certain components standards currently exist, for example, a Smoking Cessation Service checklist (T3 checklist) as part of QCPP, edition 3. However, standards would need to be reviewed for relevance to these issues directly relating to maternal and infant health. *Will professional guidelines and/or standards be required?* Yes. *Are there any national guidelines which need to be taken into account in developing the program to ensure consistency with best practice?*

	Any programs will need to be consistent with existing national guidelines in this area. These could include National Tobacco Strategy guidelines, Australian Alcohol Guidelines (2009) and NHMRC Dietary Guidelines for Children and Adolescents in Australia (2003) [12].
f) Legislation / Regulation Implications	It will be necessary to ensure all elements are aligned with relevant legislation.
3. Funding	
Funding Options	*Possible funding options include:* • Alternative Commonwealth Program (e.g. National Tobacco Strategy, National Alcohol Strategy, National Preventative Health Strategy, National Perinatal Depression Initiative.) • User-pays (Review GST implications) • State/Territory Health Departments *Has any funding for this Program been secured?* No
4. Timelines	
Timelines	√ Established community pharmacy practice √ Immediate to short-term implementation (< 30 June 2015) – subsidised service √Medium-term implementation(1 July 2015 to 30 June 2020) □ Longer-term implementation (> 1 July 2020)

[12] Incorporating the Infant Feeding Guidelines for Health Workers