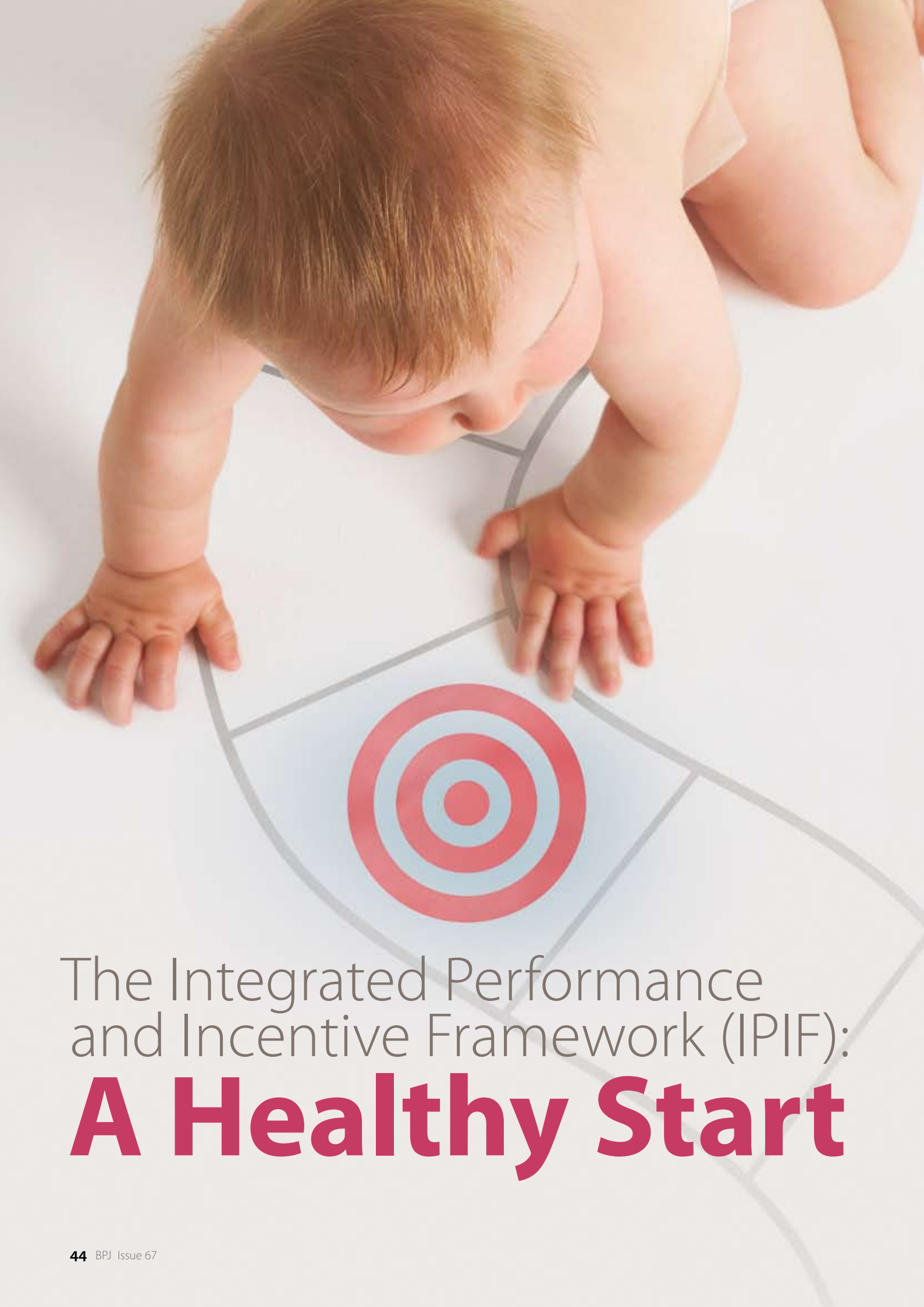


The Integrated Performance and Incentive Framework (IPIF): A Healthy Start

IPIF is a quality improvement programme designed to enhance the quality, accessibility, and integration of the New Zealand healthcare system. One of the five high-level system performance measures proposed within IPIF is a "Healthy Start" to life. Providing the best possible start to life for an infant begins with optimising the health of the mother before and during pregnancy. Providing good pre-conception advice, continuity of care during pregnancy, birth and the postnatal period all contribute to giving an infant the optimal chance to thrive.

The Ministry of Health has introduced IPIF with the aim of setting goals and measures that will, over time, improve all facets of primary and secondary health care in New Zealand. IPIF is an attempt to integrate the whole of the healthcare system and move away from the narrower, purely target-driven PHO Performance Programme (PPP) which ended in June, 2014.

It won't happen overnight – but it will happen

The development and implementation of IPIF will be a gradual process and evolve over a number of years, taking into account the needs and priorities for health and disability services in New Zealand. Phase one (2014/15) of IPIF, which commenced on 1 July 2014, was viewed as a transitional year. The five initial measures that were implemented to provide continuity with, and transition from, the PPP were:

1. More heart and diabetes checks *(target 90%)*
2. Better help for smokers to quit *(target 90%)*
3. Increased immunisation rates at age eight months *(target 95%)*
4. Increased immunisation rates at age two years *(target 95%)*
5. Cervical screening coverage *(target 80%)*

N.B. Not all of these targets will be continued in their present form as the structure of IPIF evolves.

In 2014, the IPIF Expert Advisory Group (EAG) recommended that the measures, incentives and reporting be organised according to the life stages of Healthy Start, Healthy Child, Healthy Adolescent, Healthy Adult and Healthy Ageing.[1] There is also an intention to introduce a number of measures within IPIF that will address the capacity and capability of the healthcare system to deliver equitable access to services.

The EAG proposed a layered structure of measures, with different approaches to measurement for different purposes and perspectives. At a local level, there will be contributory measures. This will be a selection of measures that are intended to support clinical governance and service development. Local alliances will have choice over the particular measures which they wish to use, allowing freedom to adopt measures which are most relevant for local challenges. Contributory measures will be chosen on the basis that they reflect activities or outcomes which are relevant to higher level measures of system performance. Contributory measures will be supported by an infrastructure which provides consistent data definitions and information about data collection.

What is new in 2015?

The Deputy Director-General of Sector Capability and Intervention, Ministry of Health, Cathy O'Malley, has confirmed that four new measures will be added to IPIF in July 2015 for the 2015/16 year. These include two Healthy Start measures and one measure each for Healthy Ageing and Capability and Capacity:[2]

- Registration with a lead maternity carer (LMC) within 12 weeks of conception (Healthy Start)
- Enrolment with a PHO within four weeks of birth (Healthy Start)
- Measures to better manage people aged 65 years or older who are prescribed 11 or more medicines (Healthy Ageing)
- Measures to improve the proportion of patients with access to online healthcare, e.g. patient portals (Capability and Capacity)

The aim of the first three measures is to encourage more collaboration between general practitioners and nurses, LMCs, pharmacists and aged-care workers. Discussion on exactly how the new measures will be introduced is planned to take place at a meeting of the PHO Service Agreement Amendment Protocol (PSAAP) group in April, 2015. Discussion will include how the targets are to be applied and what financial incentives may be linked to the measures. Ongoing work continues on other measures to be potentially added to IPIF for 2015/16, including those which will assist service development and quality improvement.

Healthy Start: three measures will be in place for 2015/16

The aim of the Healthy Start measure is to improve the integration of services, equity and health outcomes for pregnant women and their infants for the first year of life. At this stage, the three Healthy Start measures that will be in place for 2015/16 are:

- Registration with lead maternity carer (LMC) within 12 weeks of conception (new)
- Enrolment within a PHO practice within four weeks of delivery (new)
- Completion of all scheduled immunisations by age eight months (existing)

Other developmental measures being considered within the Healthy Start measure include:

- Smoking cessation advice to pregnant women
- Birth weight in healthy range
- Infants being born at term
- Triple enrolment with a PHO, Well Child/Tamariki Ora and oral health provider
- Infants exclusively breastfed at three months
- Completed all scheduled Well Child/Tamariki Ora contacts at 12 months

Data on these developmental measures will be collected and analysed in 2015/16 and considered for future inclusion in IPIF.

Regardless of the final iteration of the IPIF Healthy Start measures, primary care has a key role in continuing to provide quality healthcare to ensure that women who are pregnant have the best possible chance of giving birth to a healthy infant. Pre-conception care should be considered the starting point for this goal.

Part 1: Healthy pregnancy starts with good pre-conception and early pregnancy advice

Education to improve pre-conception health should be viewed as a routine aspect of primary care for all females of reproductive age, with the overall aim of achieving healthy pregnancies and therefore healthy infants. Although some women consult their general practitioner specifically for pre-conception advice, many pregnancies are unplanned, so the integration of pre-conception care opportunistically into general practice consultations can work towards improving future pregnancy outcomes for all women. Specific advice may be required for women with risk factors that can affect pregnancy, e.g. obesity, diabetes, smoking, epilepsy and asthma.

For further information, see "Pre-conception care in general practice" BPJ 35 (Apr, 2011).

The pre-conception education window: ask women about their pregnancy intent

Women of reproductive age should be asked about their pregnancy intent, as appropriate, e.g. are they trying/intending to become pregnant. If not, what contraceptive measures are they using?

If a woman expresses an intent to become pregnant in the near future, or is at risk of becoming pregnant, there are a number of topics that should be discussed, including advice about smoking cessation, immunisation status, sexual health, healthy diet and BMI, folic acid and iodine supplements, the safety of long-term medicines and avoiding substances that are potentially harmful to a fetus.

Quitting smoking is one of the most important things a woman can do

All women, regardless of whether or not they wish to become pregnant, should be strongly encouraged to quit smoking. The "Growing up in New Zealand" study reported that 11% of New Zealand mothers who were pregnant during 2009 and 2010 smoked at some stage during pregnancy, with higher rates among Māori (34%) and women from lower socioeconomic areas (17%).[3]

Smoking cessation advice can be particularly effective in women who are pregnant. Women who smoke are more likely to give up during pregnancy than at any other time.[7]

Nicotine replacement therapy (NRT) can be used during pregnancy as the benefits are considered to outweigh the risks.[8] Amitriptyline, bupropion and varenicline should be avoided. Smoking cessation advice should also be given to other household and family/whanau members, as second-hand smoke is harmful to an infant and post-partum smoking relapse is more common for women who live in a household where other people smoke.

For further information, see: "Encouraging smoke-free pregnancies" BPJ 50 (Feb, 2013).

Check the safety of long-term medicines

All medicines that a woman is taking should be checked to ensure they are safe and appropriate for use during pregnancy as many medicines can affect pregnancy outcomes. Women should be advised not to automatically stop taking their prescribed medicines when they become pregnant, without a benefit-risk assessment being performed by their healthcare team.

There is an increased risk of teratogenicity and other adverse effects with most anticonvulsant medicines, particularly valproate. Women with epilepsy who are taking anticonvulsant medicines should be discussed with a neurologist or obstetrician (or both), preferably prior to becoming pregnant, so that the most appropriate treatment can be determined and planned for. Women who require antipsychotic medicines should be discussed with their mental health team for appropriate options to use during pregnancy and breastfeeding. SSRIs and benzodiazepines, e.g. to treat depression and anxiety, should generally not be used during pregnancy, unless the potential benefit outweighs the risk. Other management methods may be required, e.g. counselling and cognitive behavioural therapy.

Refer to the New Zealand Formulary for information on prescribing medicines in pregnancy: **www.nzf.org.nz/nzf_151**

Ensure vaccinations and cervical screening are up to date

A pre-conception discussion is a chance to assess immunisation status (history of vaccinations and illnesses) and bring all vaccinations up to date. Particular emphasis should be placed on rubella and varicella status prior to pregnancy.

Best Practice Tip: Once pregnancy is confirmed set an electronic reminder task to invite the woman back for pertussis, and seasonal influenza vaccination.

Contraception: preventing unplanned pregnancies promotes a healthy start

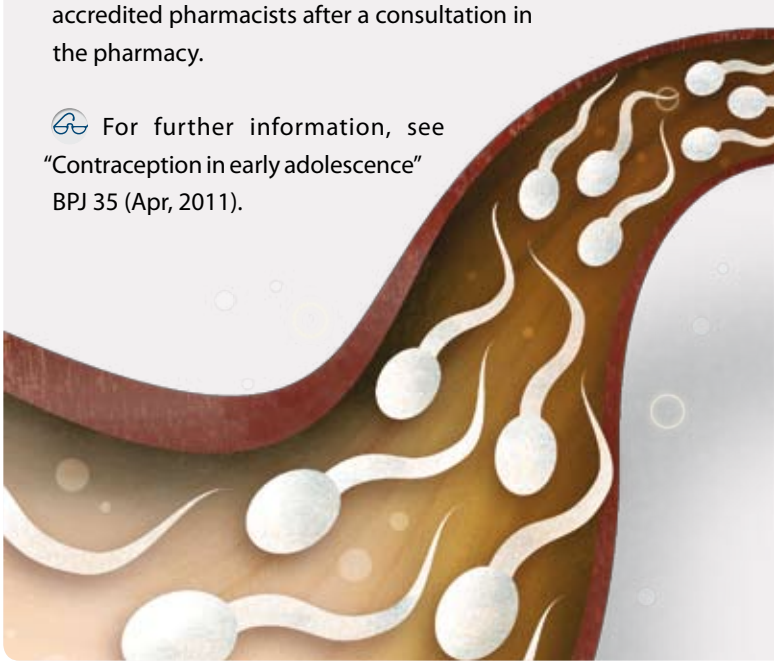
Providing sexual health and contraceptive advice is a key component of pre-conception consultations, as women with unplanned pregnancies are:

- Less likely to take folic acid, iron and vitamin supplements[3]
- More likely to drink and smoke during pregnancy (including before they are aware of being pregnant)[3]
- Less likely to breastfeed and, among those that do, more likely to breastfeed for a shorter time[4]

It has been estimated that approximately 40% of pregnancies in New Zealand are unplanned.[3] New Zealand has the second highest rate of teenage pregnancy in the OECD with approximately 28 births per 1000 females aged 15 – 19 years.[5]

It is recommended that young women who are sexually active are advised to use condoms plus one other form of contraception, e.g. an oral contraceptive. Emergency contraception can be discussed as an option if unprotected intercourse has occurred and the woman does not wish to become pregnant. The emergency contraceptive tablet (fully subsidised) contains 1.5 mg of levonorgestrel and should ideally be taken within 12 hours, and no later than 72 hours, after unprotected intercourse.[6] It may be used 72 – 96 hours after intercourse (unlicensed indication), but efficacy decreases with time.[6] The emergency contraceptive tablet may also be purchased from accredited pharmacists after a consultation in the pharmacy.

For further information, see "Contraception in early adolescence" BPJ 35 (Apr, 2011).



Rubella: The MMR vaccine cannot be given to pregnant women

Although rubella is relatively rare in New Zealand, infection during pregnancy can result in serious fetal abnormalities, e.g. congenital rubella syndrome. If there is uncertainty over the woman's rubella status, it is recommended that she is tested for rubella immunoglobulin (IgG) antibodies when pregnancy is planned (not subsidised).[9] Rubella IgG testing is part of routine antenatal care (subsidised) once pregnancy is confirmed.[9]

Two doses of the measles, mumps and rubella (MMR) vaccine (subsidised) should be given to women with no evidence of rubella immunity prior to conception.[9] Pregnancy should be avoided for up to four weeks after vaccination.[9] A woman can be considered to be immune to rubella if she has received two documented doses of MMR, or her immunity has been proven through serological testing as an adult.[9]

The MMR vaccine cannot be given to pregnant women, but can be administered to the mother after delivery and during breast feeding.[9] Pregnant women with low rubella IgG levels (<10 IU/mL) should be advised to avoid situations where contact is more likely (especially in the first trimester), e.g. international travel to countries with endemic disease or known outbreaks of rubella.

Varicella vaccination is also contraindicated during pregnancy

Contracting varicella during pregnancy poses a risk of congenital varicella syndrome to the fetus, especially in the first 20 weeks.[9] Varicella antibody status should be checked in women who are planning a pregnancy who have no (or uncertain) history of illness, i.e. chicken pox or shingles, or vaccination. Varicella vaccination cannot be given during pregnancy, but can be administered after delivery to non-immune mothers who are breastfeeding. Varicella vaccination is recommended for susceptible women, however, vaccination is usually not subsidised for women planning to become pregnant.[9] Pregnancy should be avoided for four weeks after vaccination.[9]

Ensure cervical smears are up to date

All women who have ever been sexually active should have a cervical screening test every three years from age 20 – 70 years. A cervical smear is not contraindicated during pregnancy, however, a routine test can usually be delayed until after the pregnancy, taking into account the time since the last test and if there is a history of abnormal smear results. There is no evidence that performing a cervical smear during pregnancy is harmful to the fetus.[10]

Also check whether the woman has received the human papillomavirus (HPV) vaccine, which was added to the national immunisation schedule in 2008, and is recommended, and subsidised, for women aged 12 – 20 years.[9] There is still benefit in vaccinating young women in this age group who are already sexually active. Women older than 20 years do not routinely require HPV vaccination, however, it may provide some protection for those with risk factors, e.g. multiple partners. It is not recommended that HPV vaccine is given to pregnant women, but there is no evidence that it is harmful to the fetus if inadvertently administered.[11]

Consider if an STI check is required

Questions about sexual health should be routinely included as part of general history for all sexually-active people seen in primary care. A sexually-transmitted infection (STI) check may be appropriate for some women, e.g. those with a new partner, with multiple partners, or with symptoms suggestive of a STI. Women should be asked about their risk of contracting HIV as HIV testing will be carried out as part of the routine antenatal screening tests unless the woman does not consent.

For further information, see "A 'how-to guide' for a sexual health check-up" BPJ 52 (Apr, 2013).

BMI and the benefits of a healthy diet

The optimal pre-pregnancy body mass index (BMI) is 20 – 25 kg/m^2. Women who fall outside this range should be advised that being over- or underweight can affect the chance of becoming pregnant and can result in adverse pregnancy outcomes.[12] It has been reported that overweight and obese women have an increased risk of pre-eclampsia and gestational diabetes, and underweight women have an increased risk of pre-term delivery.[13] Weight loss or gain to attain a healthy pre-pregnancy weight should be recommended as appropriate.

A healthy and varied diet will meet most nutritional requirements during pregnancy, along with folic acid and iodine supplementation (see below). N.B. Foods that potentially contain listeria should be avoided during pregnancy, as listeriosis can result in miscarriage, stillbirth or premature birth. Foods that have a higher risk of carrying listeria include cold "deli" meats, raw seafood and soft cheeses made from unpasteurised milk.

Folic acid, iodine and multivitamins

Folic acid supplements should be started at least four weeks prior to conception

Folic acid reduces the risk of neural tube defects in the developing fetus. It is recommended that all women planning a pregnancy should start taking at least 400 micrograms of folic acid, daily.[12, 14] Women who have an increased risk of conceiving a child with a neural tube defect require a higher dose of folic acid: 5 mg, daily.[12, 14] Folic acid should ideally be taken for at least four weeks prior to conception and continued for the first 12 weeks of pregnancy.[12, 14]

Women with an increased risk of conceiving a child with a neural defect include those who:[12, 14]

- Are affected by a neural tube defect themselves, or have a family history of neural tube defects (including the partner and the partner's family)
- Have previously had a pregnancy affected by a neural tube defect
- Have a BMI > 30
- Have diabetes mellitus
- Have coeliac disease (or other risk of malabsorption)
- Are taking medicines known to affect folic acid metabolism, e.g. carbamazepine, valproate, clomiphene

Folic acid is available as an 800 microgram tablet or a 5 mg tablet (each taken once daily), subsidised on prescription or purchased over-the-counter from a pharmacy. The Ministry of Health recommends that women should only take folic acid tablets that are registered as medicines and should not rely on dietary supplements.[12] If a woman wishes to take a multivitamin product as her source of folic acid, advise her to check that it is designed for use in pregnancy, that it contains at least 400 micrograms of folic acid and that the other constituents are within recommended levels.

Iodine supplements should be taken throughout pregnancy and breastfeeding

Iodine is essential for normal growth and brain development in the fetus. It is recommended that pregnant and breastfeeding women take 150 micrograms of supplementary iodine, daily, starting when pregnancy is confirmed and continued until breastfeeding ceases.[12, 14] Potassium iodate (Neuro Tabs) tablets are fully subsidised; each tablet contains 253 micrograms of potassium iodate which is equivalent to 150 micrograms of elemental iodine.[6] It is not necessary to take iodine prior to conception, although it is not harmful to do so as many New Zealanders have low iodine levels.

The recommended daily intake (RDI) of iodine for women during pregnancy is 220 micrograms per day and 270 micrograms in women who are breastfeeding.[12] Therefore, dietary intake of iodine is necessary in addition to an iodine supplement. Foods that contain iodine include cooked seafood (fish, shellfish and seaweed), milk, eggs, iodised salt and bread (iodised since 2009).[12]

For further information, see: "Snippets: iodine supplements, zoledronic acid & atorvastatin" BPJ 30 (Aug, 2010).

Iron supplements and multivitamins are not routinely required

Iron supplements are not routinely required during pregnancy if dietary iron intake and iron stores are adequate. The best way to ensure this is to maintain adequate pre-conception iron stores by eating foods high in iron, e.g. lean beef and lamb. Sub-optimal stores are difficult to replenish once a women has become pregnant.[12] The RDI of iron in pregnant women is 27 mg per day for the duration of pregnancy.[12] If low iron stores or iron deficiency are suspected or confirmed, pregnant women can be prescribed oral iron supplementation. Ferrous fumarate 200 mg tablets (containing 65 mg of elemental iron) and ferrous sulphate 325 mg tablets (105 mg of elemental iron) are subsidised.[6] Iron supplements can cause constipation, therefore women can be advised to include adequate amounts of fluid and fibre in their diet.

Multivitamin supplements are not routinely required in pregnancy. If a pregnant woman wishes to take a multivitamin, ensure it contains adequate amounts of folic acid and iodine (if not taking individual supplements) and does not contain excessive amounts of fat soluble vitamins (vitamins A, D, E and K), which can accumulate in the body. Vitamin A-containing supplements, in particular, are not recommended during pregnancy, as excessive consumption of vitamin A has been associated with teratogenicity during the first trimester, e.g. cleft lip and palate, central nervous system abnormalities.[12] The RDI of vitamin A during pregnancy is 800 micrograms of retinol-equivalents (2667 IU) per day.[12] The upper limit of 3000 micrograms of retinol-equivalents (10 000 IU) per day should not be exceeded.[12]

For further information, see "Nutrition and supplements during pregnancy" BPJ 18 (Dec, 2008).

Limit alcohol prior to conception and avoid totally during pregnancy

Alcohol consumption should be limited prior to conception and avoided during pregnancy as there are no known safe limits. For non-pregnant females, alcohol intake should be no more than two standard drinks per day and no more than ten drinks per week. High alcohol consumption during pregnancy is associated with fetal alcohol spectrum disorders (FASD) which result in intrauterine and postnatal growth retardation, among other effects.[12] High alcohol consumption also interferes with the absorption and metabolism of micronutrients. Women should avoid drinking alcohol when breastfeeding.[12]

Limit caffeine intake

It is recommended that women who are pregnant or breastfeeding limit their daily caffeine consumption to approximately 300 mg*.[12] Energy drinks can contain high levels of caffeine (often in the form of guarana) and should be avoided. High doses of caffeine during pregnancy have been associated with increased risks of congenital abnormalities, miscarriage, low birthweight and withdrawal symptoms in the newborn infant.[12] Caffeine is also transferred into breast milk and high levels can lead to irritability and poor sleeping patterns in the infant.[12] Moderate amounts of caffeine from food and beverages appear to be safe in women who are pregnant or breastfeeding.[12]

* On average, a long black coffee (160 mL) contains 211 mg of caffeine, a cappuccino (260 mL) contains 105 mg, an instant coffee (250 mL) contains 51 mg, a tea made with a tea bag (250 mL) contains 47 mg, a serve of energy drink (250 mL) contains 80 mg and a chocolate bar (100g) contains 65 mg.[12]

Pre-conception laboratory investigations

Laboratory investigation as part of pre-conceptual care is dependent on the individual risk factors of the woman. Appropriate testing may include:

- HbA_{1c} and lipids if increased BMI
- Chlamydia, gonorrhoea if increased risk of STI
- Rubella antibodies if unknown vaccination history
- Ferritin if risk of iron deficiency
- TSH if suspicion of thyroid dysfunction

Part 2: Continuity of care and achieving a Healthy Start

Women should ideally be encouraged to attend their general practice to confirm a pregnancy, as this is an opportunity to discuss and assess factors which can influence a healthy pregnancy and a healthy start for the infant. In 2013, 77% of all first antenatal screens were requested by doctors.[15] Approximately 50% of women do not book with a LMC until the end of the first trimester.[15] Women aged < 20 years or ≥ 45 years and Māori women are the most likely groups not to receive any antenatal testing.[15]

A checklist of points to cover at a first pregnancy consultation includes:

- Confirm pregnancy with a dipstick human chorionic gonadotropin (hCG) test (there is no requirement for serum hCG unless the dipstick test is negative, but pregnancy is still suspected)
- Request the first antenatal screen, which includes: blood group and antibodies, full blood count, rubella antibody status, HIV, hepatitis B and syphilis serology (For further information, see: **www.bpac.org.nz/BT/2011/July/pregnancy.aspx**)
- Discuss screening for Down syndrome and other congenital abnormalities; appropriate testing is dependent on the stage of pregnancy (For further information, see: **www.nsu.govt.nz/pregnancy-newborn-screening/antenatal-screening-down-syndrome-and-other-conditions**)
- Assess immune status and potential vaccination needs
- Measure weight and blood pressure
- Advise about lifestyle factors, such as smoking, diet, alcohol intake and exercise
- Enquire about any social aspects that may be relevant to the pregnancy, including occupation
- Prescribe folic acid if it is not already being taken, and iodine
- Check any medicines and long-term conditions that may complicate pregnancy
- Discuss options for choosing a LMC (including whether there is any need for referral to an obstetrician)
- Know what other support services are available for pregnant women, e.g. Māori or Pacific services
- Have a plan in place to ensure the newborn infant is enrolled at the practice in a timely manner

N.B. a "dating scan" is not required in early pregnancy (prior to approximately 11 weeks); dating can be done at the scan for antenatal screening for Down syndrome and other congenital abnormalities, if the woman consents to that screening.

Helping your patient select a LMC

The Perinatal and Maternal Mortality Review Committee Reports and Health Select Committee's Inquiry into Improving Health Outcomes and Preventing Child Abuse both recommend early engagement with maternity care, ideally by ten weeks gestation.[16, 17] Registration with a LMC in the first trimester ensures that an appropriately qualified health professional can provide continuity of care, advice and education throughout a woman's pregnancy, birth and postnatal period, improving health outcomes for both the mother and infant.

The first of the new IPIF measures is for all pregnant women to be enrolled with a LMC within 12 weeks of conception. To qualify for subsidised maternity care, pregnant women must register with a LMC. Registration can occur as soon as pregnancy is confirmed until six weeks after delivery. The LMC will oversee the management of the pregnant woman from the time of registration until six weeks after the birth. The general practice team can inform the woman regarding her options for choosing a LMC (and locating/referring if required), including:

- The Find Your Midwife website (run by the New Zealand College of Midwives): **www.findyourmidwife.co.nz**
- The Ministry of Health information line 0800 Mum2Be (0800 686 223)
- The local Midwifery Resource Centre (if one is available – check the White and Yellow Pages under Midwifery Resource Centre or Midwives) or maternity services at the local hospital

Māori and Pacific women are less likely to enrol with a LMC in the first trimester

In 2011, 87% of women who gave birth were registered with a LMC (90% of whom were midwives); the remaining 13% received primary maternity care through DHB services or did not receive care.[18] Of women who registered with a LMC, 62% did so in their first trimester of pregnancy.[18] Pacific and Māori women were less likely to be enrolled with a LMC in their first

trimester (35% and 46% respectively),[18] so should especially be supported by primary care regarding the importance of maternity care during pregnancy, including helping them to find a LMC.

Good communication between general practice and the LMC is beneficial for both the mother and infant

A team approach with good communication between healthcare professionals is likely to result in the best quality of care for the patient and help achieve IPIF targets. The structure of maternity care in New Zealand does, however, make this a challenging area as multiple healthcare professionals are often involved. One of the major aims of IPIF is to improve integration and collaboration, not only between primary and secondary care, but also between primary care providers.

Best practice tip: One method that can encourage collaboration is writing a LMC referral (with the woman's consent). This could be based on a standard template, including the woman's basic health information, e.g. medical history, long-term conditions, medications, and any social aspects relevant to the pregnancy, plus the results of any tests ordered in early pregnancy. It can also include a statement of expectation that the LMC will keep the general practice informed of any relevant information.

Ongoing non-pregnancy-related care is still the responsibility of general practice

General practice remains responsible for managing a woman's non-pregnancy-related healthcare after a LMC has been selected. Asthma is the most common long-term medical condition managed in pregnant women, and when well controlled asthma carries little or no increased risk of adverse fetal or maternal complications. Optimising asthma treatment during pregnancy is important to minimise exacerbations. The management of some other conditions, e.g. pre-existing diabetes, hypertension and epilepsy, requires a collaborative approach with appropriate specialists. For example, it is recommended that a neurologist is involved at an early stage in women with epilepsy (ideally pre-conception) and an obstetrician often has a role in the care of pregnant women with hypertension.

For further information, see: "Continuing care for pregnant women with asthma" BPJ 35 (Apr, 2011).

Pertussis and influenza vaccines are recommended during pregnancy

Pertussis vaccination is recommended between weeks 28 – 38 of pregnancy and the Tdap vaccination is subsidised during this period.[9] Influenza vaccination is also recommended for pregnant women and is subsidised for this group during the winter season. The vaccine can be safely administered at any stage of pregnancy.[9]

For further information, see: "Pertussis immunisation in pregnancy" BPJ 60 (Apr, 2014)

A patient leaflet on influenza vaccination during pregnancy is available from:
www.influenza.org.nz/sites/default/files/2015%20Flu%20Pregnant%20women-midwives%20Brochure%20.pdf

Enrolment with a PHO within four weeks of birth

In 2012, the Ministry of Health implemented the preliminary newborn enrolment policy (the B code) to facilitate early enrolments in general practice. Prior to the policy, fewer than half of infants were enrolled with a general practice at age 12 weeks; as at 19 August 2013, this number had increased to 70%.[19]

It is important that newborns are enrolled close to birth to ensure that childhood immunisations are given on time and to maximise the child's health as they grow. Furthermore, early enrolment ensures that newborns have access to affordable and essential health care sooner.

The second of the new IPIF targets is for infants to be enrolled with a PHO within four weeks of birth. General practices now receive notification about new births from the National Immunisation Register (NIR) via their practice management system (PMS) if the mother has designated the general practitioner as either their infant's preferred general practitioner or Well Child/Tamariki Ora provider (see: "Well Child/Tamariki Ora providers", opposite).

The LMC is responsible for ensuring that the mother/family has been provided with information on the NIR, and has chosen a general practitioner and a Well Child/Tamariki Ora provider for the infant, after they have finished providing maternity care.

All newborns are entered on the NIR, which records the child's name, NHI number and DHB. Parents may choose to "opt off" putting any more of their child's information or details of their immunisations on the NIR. Children are eligible to receive subsidised vaccines even if they have been opted off the NIR.

General practices receive NIR notifications through their provider inbox and these should be ideally actioned within three days of receiving the notification. The "B" code will be

activated once the infant's details have been added into the PMS; the infant does not need to be present for this to occur. When the enrolment form has been signed by the parents the infants code in the PMS is changed to "E".[20]

Once the child has been enrolled, two of the most important things general practice can do to provide quality care in the first year of life are:

1. Promote and support mothers in breast feeding
2. Ensure that infants are fully vaccinated at age appropriate milestones

Further information on newborn enrolment is available from:
www.health.govt.nz/publication/newborn-pre-enrolment-toolkit

Best practice tip: To facilitate collaboration between healthcare providers, it is good practice for the LMC to write a "referral letter" back to the woman's general practitioner, outlining any relevant issues that occurred during her maternity care.

Ensure infants are fully vaccinated at the appropriate age

One of the interim IPIF performance measures for 2014/15, to be continued in 2015/16, is increased immunisation rates at age eight months (target 95%). The latest immunisation coverage rates for full vaccination at age eight months was 94%, for the three-month period ending December 2014.[21]

As per the National Immunisation Schedule, it is recommended that children receive rotavirus vaccine (RotaTeq) along with Infanrix-hexa and the 13-valent pneumococcal vaccine (Prevenar) at age six weeks and three and five months.[9]

Listening to, and acknowledging, any parental concerns about immunisation can help overcome barriers. Providing clear and balanced information regarding the benefits and risks of immunisation and respectfully correcting any misinformation can help build a trusting relationship. Key points to cover with parents that can encourage vaccination include:[22]

Educate parents about the benefits of vaccination:

- Diseases do not discriminate - vaccination is for all infants
- Vaccination is highly effective and protects infants against severe diseases
- Vaccination protects other family members and the community in general

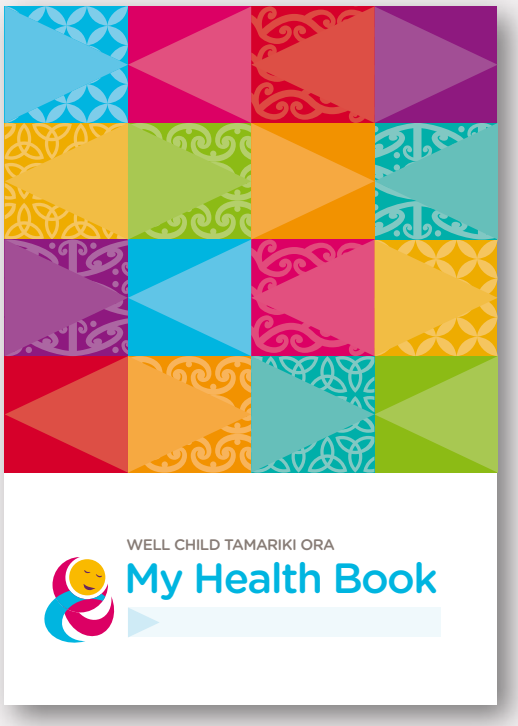
Well Child/Tamariki Ora providers

Well Child/Tamariki Ora is a free service that is offered to all New Zealand children from birth to age five years. The first "well baby" checks are performed by the LMC before transfer to the Well Child/Tamariki Ora provider. Thirteen free wellness checks for growth and developmental milestones are available, starting at birth and continued until the "B4 school check" at age four years.

Parents will be issued with a Well Child book for their infant by their Well Child/Tamariki provider and all relevant information should ideally be entered in the book. Accurately filling out the book can also help improve collaboration between healthcare professionals as all parties will have access to the information.

There are a number of Well Child/Tamariki Ora provider options, including Plunket, general practitioners and specialised Māori and Pacific services.

A list of Well Child/Tamariki Ora programme providers by region is available from:
www.health.govt.nz/your-health/services-and-support/health-care-services/well-child-tamariki-ora/find-well-child-tamariki-ora-service



Respectfully correct any misinformation:

- Reassure parents that there is no link between vaccination and autism
- None of the vaccines on the current New Zealand immunisation schedule contain thiomersal (the mercury-containing compound used in some older vaccines)

Remind parents that each round of vaccinations should be administered at the recommended time:

- Ensure the first appointment at age six weeks is scheduled and reminders are in place for the appointments at age three and five months, and beyond
- Encourage the parents to speak to a practice nurse or their general practitioner when they are considering cancelling a vaccination appointment because the child is unwell (and also inform reception staff of this protocol). In some cases, the infant may still be able to be vaccinated, or they may require an appointment to investigate why they are unwell.

For further information, see "Immunisation in children by age two years" BPJ 29 (Jul, 2010).

Breast milk is the preferred food for the infant

The proportion of infants in New Zealand who are exclusively or fully breast fed* for the first three months of life has remained at approximately 56 – 60% from 2008 – 2013.[23] The corresponding rates at age six months for the same period were 25 – 27%.[23] Improving the rates of breast feeding is one of the measures that may be added as a Healthy Start IPIF component at a later date.

The Ministry of Health and World Health Organisation recommend that infants are exclusively breast fed until they are aged six months.[12] It is recommended that the infant continue to be breast fed, along with the introduction of appropriate complementary foods, until at least age two years.[12]

Improving breast feeding rates presents a challenge as the reasons infants are not being exclusively breast fed are multi-factorial. Measures to improve breast feeding rates need to involve families, communities, and government and non-government groups and agencies. Māori and Pacific women, women from low-income families and young mothers have lower breast feeding rates than other groups.[24]

General practice can help to increase breast feeding rates in a number of ways, such as promoting and educating women about the benefits and techniques of breast feeding and referring them to other providers if further assistance is needed, e.g. to a lactation consultant.

Appropriately managing women with mastitis and cracked nipples can also help with continuation of breast feeding. Both conditions commonly result in discontinuation of breast feeding, often unnecessarily.

For further information, see "Mastitis and sore nipples while breast feeding" BPJ 18 (Dec, 2008).

* Exclusively breastfed: The infant has not, to the mother's knowledge, had any water, formula or other liquid or solid food. Only breastmilk from the breast or expressed breastmilk and prescribed medicines have been given from birth

Fully breastfed: The infant has had only breastmilk with no other liquids or solids except for a minimal amount of water or prescribed medicines in the last 48 hours.

Where to from here?

The introduction of the first healthy start targets as part of the IPIF programme is a timely reminder for practices to consider how they are working and interacting within a collaborative model in the wider healthcare sector. This may prompt discussion about how the IPIF can be applied within a practice's own community, and what this may mean for the roles and responsibilities of practice staff. A good starting point is to put plans in place to ensure that infants are enrolled early in the practice, and assigning responsibility for responding to NIR notifications. Consider the practice's current protocol for reminding and encouraging parents to bring infants for vaccinations, and whether any improvements to this process can be made.

ACKNOWLEDGEMENT: Thank you to the IPIF Healthy Start team (including Maternity, Child and IPIF subject matter expert leads) for expert review of this article.

References

1. Health Improvement and Innovation Resource Centre. Integrated performance incentive framework update. Issue 5, November 2014. Available from: www.hiirc.org.nz/page/51337/integrated-performance-incentive-framework/;jsessionid=1F7695050131A592C5C4A9FDC55BDCE3?tab=2619&contentType=363&section=8959 (Accessed Apr, 2015).
2. Topham-Kindley L. Ministry spreads health net wider for $23 million incentive largesse. NZ Doctor, 18 February, 2015.
3. Morton S, Atatoa Carr P, Bandara D, et al. Growing up in New Zealand - before we are born. University of Auckland, 2010. Available from: https://cdn.auckland.ac.nz/assets/growingup/research-findings-impact/report01.pdf (Accessed Apr, 2015).
4. Gipson JD, Koenig MA, Hindin MJ. The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. Stud Fam Plann 2008;39:18–38.
5. Families Commission Komihana a Whanau. Teenage pregnancy and parenting - an overview. Available from: www.superu.govt.nz/sites/default/files/downloads/teenage-pregnancy.pdf (Accessed Apr, 2015).
6. New Zealand Formulary (NZF). NZF v34. 2015. Available from: www.nzf.org.nz (Accessed Apr, 2015).
7. Department of Health and Human Services. 2001 Surgeon General's report - Women and smoking. 2001. Available from: www.cdc.gov/tobacco/data_statistics/sgr/2001/complete_report/index.htm (Accessed Apr, 2015).
8. Ministry of Health (MOH). Background and recommendations of The New Zealand guidelines for helping people to stop smoking. MOH, 2014. Available from: www.health.govt.nz/system/files/documents/publications/background-and-recommendations-of-the_new-zealand-guidelines-for-helping-people-to-stop-smoking.pdf (Accessed Apr, 2015).
9. Ministry of Health (MOH). Immunisation handbook. MOH, 2014. Available from: www.health.govt.nz/publication/immunisation-handbook-2014 (Accessed Apr, 2015).
10. Ministry of Health (MOH). Guidelines for cervical screening in New Zealand - Incorporating the management of women with abnormal cervical smears. Available from: www.health.govt.nz/system/files/documents/publications/cervical-screening-guidelines-aug08.pdf (Accessed Apr, 2015).
11. Immunisation Advisory Centre. Gardasil. 2014. Available from: www.immune.org.nz/node/597 (Accessed Apr, 2015).
12. Ministry of Health (MOH). Food and nutrition guidelines for healthy and breastfeeding women: a background paper. MOH, 2006. Available from: www.health.govt.nz/system/files/documents/publications/food-and-nutrition-guidelines-preg-and-bfeed.pdf (Accessed Apr, 2015).
13. Hauger MS, Gibbons L, Vik T, et al. Prepregnancy weight status and the risk of adverse pregnancy outcome. Acta Obstet Gynecol Scand 2008;87:953–9.
14. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). Vitamin and mineral supplementation and pregnancy. RANZCOG, 2014. Available from: www.ranzcog.edu.au/college-statements-guidelines.html (Accessed Apr, 2015).
15. Best Practice Advocacy Centre (bpac^{nz}). Antenatal testing in pregnancy. bpac^{nz}, 2014. Available from: www.bpac.org.nz/Report/2014/July/AntenatalTesting.aspx (Accessed Apr, 2015).
16. Perinatal and Maternal Mortality Review Committee. Eighth annual report of the Perinatal and Maternal Mortality Review Committee 2012. Wellington: Health Quality and Safety Commission New Zealand, 2014.
17. Inquiry into improving child health outcomes and preventing child abuse with a focus from preconception until three years of age. Wellington, New Zealand: New Zealand House of Representatives, 2013.
18. Ministry of Health (MOH). Maternity tables 2011. Available from: www.health.govt.nz/publication/maternity-tables-2011 (Accessed Apr, 2015).
19. Ministry of Health (MOH). Newborn enrolment with general practices. MOH, 2014. Available from: www.health.govt.nz/our-work/primary-health-care/primary-health-care-subsidies-and-services/newborn-enrolment-general-practices (Accessed Apr, 2015).
20. Ministry of Health (MOH). Improving the timeliness of newborn enrolment: A resource for general practice (Draft). MOH, 2013. Available from: www.hiirc.org.nz/page/41128/timeliness-of-newborn-enrolment-a-draft-resource/;jsessionid=457335C871C1DFD2C262BC36A44EC457?tab=2616&contentType=1764&section=9097 (Accessed Apr, 2015).
21. Ministry of Health (MOH). National and DHB immunisation data. MOH, 2015. Available from: www.health.govt.nz/our-work/preventative-health-wellness/immunisation/immunisation-coverage/national-and-dhb-immunisation-data (Accessed Apr, 2015).
22. Ministry of Health (MOH). Audience research: Delayers of infant immunisation. MOH, 2013. Available from: www.health.govt.nz/system/files/documents/publications/audience-research-delayers-infant-immunisation.pdf (Accessed Apr, 2015).
23. Plunket. Annual breastfeeding statistics. Available from: www.plunket.org.nz/news-and-research/research-from-plunket/plunket-breastfeeding-data-analysis/annual-breastfeeding-statistics/ (Accessed Apr, 2015).
24. National Breastfeeding Advisory Committee. National strategic plan or action for breastfeeding 2008-2012. 2009. Available from: www.health.govt.nz/system/files/documents/publications/breastfeeding-action-plan.pdf (Accessed Apr, 2015).