AGE SPECIFIC SCREENING and PREVENTATIVE MEDICINE

NEW ZEALAND GENERAL PRACTICE 2016

FEMALE

12 Immunisation-HPV

20-69 Cervical Screening

45-69 Breast Screening

45+ CVD risk (E)

Chronic Kidney Disease (E)

NON-SPECIFIC

6/52 Six week check

Immunisation-Infant

3/12 Immunisation-Infant

5/12 Immunisation-Infant

15/12 Immunisation-Child

2-5 Weight, Height, BMI

4 Immunisation-Child

B4 School Check

11 Immunisation-Child

12-19 HEEADSSSS

15+ Smoking

Alcohol

20+ Mental Health

20+ Melanoma (E)

<25 Chlamydia (R)

25+ Hepatitis B (E)

35+ COPD (R)

45 Immunisation-Td

45+ Glaucoma

Macular Degeneration

50 Immunisation-Shingles

50+ Osteoporosis (R)

50-69 Peripheral-Vascular Disease (R)

50-74 Bowel Cancer (P)

65 Immunisations

Pneumococcal

Td

65+ Immunisation

Influenza-annual

65+ Falls

MALE

15+ Testicular Cancer

35+ CVD risk (E)

Chronic Kidney Disease (E)

50-70 Prostate cancer

REFERENCES and EXPLANATORY NOTES

Age

Regular Age for Screening and/or Preventative Management

* Therefore, may ‘excludes’ high-risk patients who may require ‘Earlier’ input E.g.
  + ‘Positive family history’
  + ‘Annual Influenza Immunisation’ for pregnant women or those with a

chronic medical condition as defined by Pharmac criteria – Diabetes etc.

Underline

Immunisation – type of vaccine

(E)

Ethnicity

* Screening may be ‘Earlier’ or ‘Later’ or ‘Specific’ to an Ethnic Group.

(R)

Risk Factor

* Screening based on the presence of a risk factor for a disease.

(P)

Pilot Screening Programme

Screening Opportunity – Age is an Author Recommendation

* The Author has reviewed the disease morbidity and mortality statistics and literature, and has made an assessment that an open discussion maybe warranted with some patients. E.g.
  + Education on Patient Regular Self Examination
  + Patient wanting a Full Check Up
  + Well Man or Well Woman Check

Exclusions

* Family History

As mentioned above, this article ‘excludes’ high-risk patients who may require ‘Earlier’ screening E.g. Family history of Bowel Cancer.

* Screening in a hospital setting, birthing centre or at home E.g.
  + Newborn Hearing Screening
  + Newborn Metabolic Screening
* Screening for Hemochromatosis

The U.S. Preventive Services Task Force (USPSTF) recommends against routine genetic screening for hereditary hemochromatosis in the asymptomatic general population.

Screening For and Against

* Notes including references have been documented where screening is debatable. E.g.
  + Melanoma
  + Prostate Cancer
  + Testicular Cancer

REFERENCES and EXPLANATORY NOTES

Alcohol

* Age: 15+

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) May 2016

Alcohol misuse: how to help patients in primary care

* In 2014–15, 18% of the population aged over 15 years reported misusing alcohol,many of whom view their drinking as normal and do not realise, or refuse to acknowledge, that they have a problem.
* People of lower socioeconomic status, males and those of Māori or Pacific ethnicity are the most likely to misuse alcohol.
* Alcohol is a toxin, a carcinogen, and an addictive psychotropic drug.
* Every year alcohol is estimated to cause between 600 and 1000 premature deaths in New Zealand.
* For every ten of these deaths, approximately four are due to injuries while under the influence of alcohol, three are due to alcohol-related cancers and three to long-term diseases attributable to alcohol.

Recommended upper limits of drinking

* Drinking alcohol is not recommended for children and pregnant women.
* For other adults, recommended upper limits of intake to reduce the long-term risk from drinking are:

Females:

* + Two standard drinks\* daily
  + AND
  + No more than ten standard drinks per week
  + AND
  + At least two days with no drinking

Males:

* + Three standard drinks daily
  + AND
  + No more than 15 per standard drinks week
  + AND
* At least two days with no drinking.
* To reduce the risk of injury while under the influence of alcohol, females are recommended to have no more than four standard drinks on any one occasion, and males no more than five standard drinks on any one occasion.
* One standard drink in New Zealand equals 10 g of pure alcohol. Examples of standard drinks include a 100 mL glass of wine, a 330 mL can of beer or a 30 mL measure of spirits.

Recording alcohol use

* Record when patients have been asked about their alcohol use and their reported levels of consumption.
* Revisit the topic at least annually for patients aged 15–25 years, every three years between the ages of 25 and 35 years and every five years for patients older than 35 years.
* More frequent enquiries are appropriate for patients identified as misusing alcohol or if there are suspicions that they are concealing their drinking.

ABC

* The ABC approach to smoking cessation is well known. A similar approach is recommended for identifying and assisting patients who are misusing alcohol: Ask, Brief intervention and Counselling.

Using questionnaires to detect hazardous drinking

* The AUDIT contains ten questions and a score of eight or more has a sensitivity of 84% and specificity of 83% for detecting alcohol use disorder.
* Clinicians, however, often find questionnaires rigid and in practice modify or adapt them according to patient responses.
* A pragmatic approach is to begin with a short series of questions, such as the AUDIT-C, which contains the first three questions of the AUDIT relating to:
  + How often alcohol is consumed
  + How many alcoholic drinks are usually drunk
  + How often six or more drinks are consumed in one session
* This preliminary approach is recommended by the Health Promotion Agency and the Royal New Zealand College of General Practitioners.
* Routinely handing patients the AUDIT-C while they are waiting to see a clinician is one way to initiate alcohol reduction interventions across a practice.

B4 School Check

* Age: 4

Reference: [www.moh.govt.nz](http://www.moh.govt.nz)

* The B4 School Check is a nationwide programme offering a free health and development check for four year olds.
* The B4 School Check aims to identify and address any health, behavioural, social, or developmental concerns which could affect a child's ability to get the most benefit from school, such as a hearing problem or communication difficulty.

Bowel Cancer

* Age: 50 – 74

Reference: [www.bowelscreeningwaitemata.co.nz](http://www.bowelscreeningwaitemata.co.nz)

* New Zealand has one of the highest bowel cancer rates in the world. Bowel screening can save lives by finding cancers early.
* Men and women aged 50 to 74 who live in the [Waitemata District Health Board area](http://www.bowelscreeningwaitemata.co.nz/BowelScreening/Images/Waitemata-District-Map.png) and who are eligible for publicly funded health care have been taking part in a free BowelScreening programme.
* The results of the pilot will be used to decide whether bowel screening should be introduced throughout New Zealand.
* The BowelScreening pilot has been extended for two more years until the end of 2017. This means most eligible people will receive a third invitation and test kit through the mail when it’s their turn to participate.
* No screening test is 100% accurate so it’s important to do the test every two years while the pilot is running, even if your previous results have been normal.

Reference: [www.health.govt.nz](http://www.health.govt.nz)

Cancer: New registrations and deaths 2012

* New Zealand has one of the highest bowel cancer rates in the world. In 2012, 3016 people were diagnosed with bowel cancer and 1283 died from the disease.

Reference: [www.health.govt.nz](http://www.health.govt.nz)

National Bowel Screening Programme

* A national bowel screening programme will be rolled out progressively from 2017.
* Budget 2016 has provided $39.3 million over four years to begin implementation of the National Bowel Screening Programme (NBSP). This will cover the design, planning and set-up phases. Additional funding has also been set aside for work that will support the IT needed for a national programme.
* The programme will offer bowel screening every two years to eligible people aged 60 to 74 years.
* The roll-out will begin with Hutt Valley and Wairarapa District Health Boards (DHBs), with other DHBs following in stages.
* Bowel screening will continue to be offered to eligible people at Waitemata DHB, which will transition from the pilot to the national bowel screening model over the course of the roll-out.
* It is expected that a national coordination centre will be established by 2018 to manage and send screening invitations and coordinate the processing, analysis and management of completed bowel screening test results.
* DHBs will be responsible for delivering colonoscopies, overseen by four bowel screening centres that would support clinical leadership, ensure patients have been notified of results, and manage quality and equity in their area.

**Breast Screening**

* Age: 45 - 69

Reference: [www.nsu.govt.nz](http://www.nsu.govt.nz)

* BreastScreen Aotearoa is New Zealand’s free national breast screening programme for women aged between 45 and 69.

**Cardiovascular (CVD) Risk Assessment**

* Age: 35+ Dependant on Age, Gender, Cardiovascular Risk Factors

Reference: [www.health.govt.nz](http://www.health.govt.nz)

New Zealand Primary Care Handbook 2012

* Asymptomatic people without known risk factors
  + Age 45 years Men
  + Age 55 years Women
* Maori, Pacific peoples or Indo-Asian peoples
  + Age 35 years Men
  + Age 45 years Women
* People with other known cardiovascular risk factors or at high risk of developing diabetes
  + - Family history risk factors
      * Diabetes in first-degree relative (parent, brother, sister)
      * Premature Coronary heart disease or ischaemic stroke in a first-degree relative (father or brother <55 years, mother or sister <65 years)
    - Personal history risk factors
      * People who smoke (or have quit only in the last 12 months)
      * Gestational diabetes, polycystic ovary syndrome
      * Prior blood pressure (BP) ≥ 160/95 mm Hg,

Prior TC:HDL ratio ≥7

* + - * Prediabetes
      * BMI ≥30 or truncal obesity (waist circumference ≥100cm in men or ≥90cm in women)
      * eGFR <60ml/min/1.73 m2
  + Age 35 years Men
  + Age 45 years Women

**Cervical Screening**

* Age: 20 - 69

Reference: [www.nsu.govt.nz](http://www.nsu.govt.nz)

* The National Cervical Screening Programme is available to all women in New Zealand between 20 and 70 years old.
* All women who have ever been sexually active should have regular cervical smear tests from the time they turn 20 until they turn 70.

This includes:

* All women who have been immunised against HPV
* Women who are single
* Lesbians
* Disabled women
* Women who have been through menopause
* Women who are no longer having sex
* Cervical Screening may be used as an opportunity to enquire about other symptoms (below) which might help identify common conditions E.g. Endometriosis, Genital Prolapse, Polycystic Ovarian Syndrome, Sexually Transmitted Infections, Uterine pathology.
  + Dysmenorrhoea
  + Heavy Menstrual Bleeding – Blood test maybe required – FBC, iron, etc.
  + Menstrual Irregularity
  + Urinary Incontinence
  + Vaginal Discharge
* Future plans on pregnancy maybe applicable for some women, in which case the following topics would be relevant
  + Pre-Conception Folic Acid
  + Rubella Immune status
* Family Violence screening is being done in some General Practices by trained staff.

Chlamydia testing

* Age: <25

Reference: [www.nzshs.org](http://www.nzshs.org)

**TEST FOR CHLAMYDIA IF:**

* Sexually active under 25 years
  + OR more than 2 partners in lastyear
  + OR has had an STI in past 12 months
  + OR has a sexual partner with an STI
* Pregnant
* Increased risk of complications of an STI

e.g. pre-termination of pregnancy (TOP)

Intrauterine device (IUD) insertion

* Signs or symptoms suggestive of chlamydia
  + **Females:**
    - Vaginal discharge
    - Dysuria
    - Pelvic pain
    - Intermenstrual bleeding(IMB)
    - Post-coital bleeding(PCB)
  + **Males:**
    - Dysuria(urethritis)
    - Urethral discharge
    - Testicular pain
    - Anal pain or discharge
* Requesting a sexual health check

**Note:**

* **Most laboratories are automatically performing dual NAAT testing for chlamydia and gonorrhoea.**
* **False positive gonorrhoea results are possible in low prevalence populations – see NZSHS Management of Gonorrhoea 2014, and Response to the Threat of Antimicrobial Resistance.**

Chronic Kidney Disease

* Age: 35+ Dependant on Age, Gender, Risk Factors

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) February 2016

The detection and management of patients with chronic kidney disease in primary care

* It is recommended that primary care clinicians routinely offer kidney function testing for patients with risk factors for CKD as part of CVD risk assessments and diabetes checks.Risk factors for CKD include:
  + Hypertension
  + Proteinuria
  + Diabetes
  + Age over 60 years
  + Body mass index (BMI) > 35
  + Family history of CKD
  + Māori, Pacific or Indo Asian ethnicity
  + Cardiovascular disease resulting in reduced renal perfusion and endothelial dysfunction
  + Prostatic syndrome/urologic disease which has the potential to cause obstructive nephropathy
* Patients with risk factors for CKD should be assessed at least every one to two years; annual assessment is required for patients with diabetes.
* Screening for CKD in people without risk factors is not necessary.
* Patients with CKD can be identified in primary care by requesting both:
  + A serum creatinine, which automatically generates an eGFR from the laboratory
  + An albumin:creatinine ratio (ACR) test
* The presence of persistent albuminuria further categorises the patient’s risk. If the patient has microalbuminuria (ACR 2.5 – 25 mg/mmol for males and 3.5 – 35 mg/mmol for females) or macroalbuminuria (ACR > 25 mg/mmol for males and > 35 mg/mmol for females), the ACR test should be repeated one to two times over the next three months to confirm the diagnosis.

COPD (Chronic Obstructive Pulmonary Disease)

* Age: 35+

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) February 2015

The optimal management of patients with COPD - Part 1: The diagnosis

* A clinical diagnosis of COPD can be considered in anyone aged over 35 years who has had long-term exposure to cigarette smoke, occupational exposure to dust, fumes or gas, or who has typical symptoms of COPD, i.e. breathlessness, cough and/or sputum production. Symptoms such as chest tightness, wheezing, and airway irritability are also common, although wheezing is not an indication of disease severity.
* COPD cannot be diagnosed based on the presence of symptoms alone. Spirometry is required to confirm a diagnosis,however, the results of spirometry are not disease specific. For example, it may not be possible to differentiate between COPD, chronic bronchitis or asthma as the cause of a patient’s low FEV1
* Spirometry can be reliably performed in a general practice setting, although training is required in both the technique and the maintenance of the equipment.
* When performing spirometry:
  + Patients should be clinically stable and free of respiratory infection
  + Patients should not have inhaled a short-acting bronchodilator in the previous six hours, or a long-acting beta2-agonist (LABA) in the previous 12 hours
  + An FEV1 < 80% predicted and a FEV1/FVC ratio < 0.7 indicates an airflow limitation
* Over-diagnosis of COPD is more likely in older patients who have decreased lung function and under-diagnosis of COPD is more likely in younger patients, especially when the FEV1/FVC is close to 0.7.

Reference: [www.nejm.org](http://www.nejm.org) 2016; 374: 1811-1821

Clinical Significance of Symptoms in Smokers with Preserved

Pulmonary Function

* Although they do not meet the current criteria for COPD, symptomatic current or former smokers with preserved pulmonary function have exacerbations, activity limitation, and evidence of airway disease.
* They currently use a range of respiratory medications without any evidence base.

Falls

* Age: 65+

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) April 2015

**Stand up to falls - April Falls month and the Health Quality & Safety Commission’s reducing harm from falls campaign**

Contributed by the Health Quality & Safety Commission

* Falls are the most common and costliest cause of injury in older people, with around 30 – 60% of people aged 65 and over falling each year and 10 – 20% of those falls resulting in injury such as hip fracture, hospitalisation or death.
* The Commission – through its falls programme as well as April Falls and the campaign focus on falls – supports and encourages a number of proven preventive measures that can be integrated into routine health care.

These include:

* Exercise programmes, such as the Otago Exercise Programme, and group exercise classes, such as tai chi, which can reduce falls by 30–40% in older people living in the community
* Vitamin D prescribed for those at risk of vitamin D deficiency
* Home safety assessments and modifications where necessary
* Individually targeted multi-factorial interventions

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) August 2015

**Stay Independent Falls Prevention Toolkit**

* The Stay Independent Falls Prevention Toolkit is an aid for Primary Care Teams for the assessment of an individual's risk of falling, including practical strategies to reduce this risk.
* The toolkit is based on the STEADI falls campaign developed by the United States Centers for Disease Control and Prevention (CDC), and has been adapted for use in New Zealand by bpacnz in association with the Health Quality & Safety Commission.
* Screening for falls risk involves asking three simple questions which quickly cover several important points:
  + Have you slipped, tripped or fallen in the last year?
  + Can you get out of a chair without using your hands?
  + Are there some activities you’ve stopped doing because you are afraid you might lose your balance? Do you worry about falling?
* A positive answer to any one of these three questions above leads to multi-factorial risk assessment and intervention.

Glaucoma

* Age: 45+

Reference: [www.glaucoma.org.nz](http://www.glaucoma.org.nz)

* Glaucoma affects 2% population over the age of 40.
* One out of every 10 adults over the age of 70 has glaucoma.
* Glaucoma NZ's key message for all New Zealanders is that early detection of glaucoma is vital when it comes to preventing blindness.
* That means an eye examination for glaucoma every five years from the age of 45 and every three years from the age of 60.
* However, at any age, if you notice changes in your eyesight, then you should have your eyes examined at that time. For example, if you require hobby glasses, it is a good idea to have your eyes checked by an eye health professional, just in case there is an underlying problem.
* In addition if you have risk factors for glaucoma, such as family history, then you may need your eyes checked more frequently. It is really important for people to know if glaucoma runs in their family, because if it does, your risk increases substantially.
* You are also at higher risk of getting glaucoma if you are 60 years and over, are short sighted, have a past or present use of steroid drugs, or previous eye injury.

HEEADSSSS assessment

* Age: 12 – 19

Reference: Youth Health – Enhancing the skills of Primary Care Practitioners In caring for all young New Zealanders – A Resource Manual – Published 2011

* HEEADSSSS is a tool for engagement, a screening tool that helps gather information to form a picture of the context for the person and their presenting complaint. It is also a tool for planning what the next step should be, together with the young person. Categories covered include:
  + Home
  + Education and Employment
  + Exercising and Eating
  + Activities
  + Drugs
  + Sexuality
  + Suicide
  + Spirituality
  + Safety and Strengths

Reference: [www.health.govt.nz](http://www.health.govt.nz)

* The Prime Minister’s Youth Mental Health Project (YMHP) was launched in 2012 and aims to help prevent the development of mental health issues and improve young people’s access to youth mental health services.
* The project is made up of 26 initiatives phased to deliver improvements for young people by July 2016.
* The Youth Mental Health Project responds to a report from the Prime Minister’s Chief Science Advisor – ‘[Improving the Transition: Reducing Social and Psychological Morbidity During Adolescence](http://www.pmcsa.org.nz/improving-the-transition/)’
* This report raised concerns about mental health issues in the period when young people move from childhood to adulthood including depression and other mental health disorders, cannabis use and harmful use of alcohol, and youth suicide.
* The project is designed to address many of these concerns for young people aged 12–19 years:
  + In their families and communities
  + At school
  + The health service
  + Online.

Hepatitis B (Chronic infection)

* Age: >25

Reference: [www.hepatitisfoundation.org.nz](http://www.hepatitisfoundation.org.nz)

* Hepatitis B is the most common serious liver infection in the world. It is the leading cause of liver cancer. About 100,000 people in New Zealand are chronically infected with the virus.
* Hepatitis B is spread through contact with blood or bodily fluids. It is highly infectious and can survive outside the body for more than seven days. The age a person is infected is very important in determining whether the person gets sick and whether they clear the infection.
* About 99% of people with chronic hepatitis B were infected as babies or young children. The most common way babies get infected is from their mother during birth. The most common way young children get infected is from playing with other children who have hepatitis B or by close contact with a hepatitis B household member. When young children and babies get infected, they develop chronic infection with the associated life-long risks of cirrhosis, liver failure and liver cancer.
* When adults are infected, they often become sick with acute hepatitis (jaundice, abdominal pain and vomiting) but usually get rid of the infection.
* Those most at risk of hepatitis B are people who:
  + Are of Māori, Pacific Island, or Asian ethnicity over the age of 25 years
  + Were born outside New Zealand
  + Have a mother or close family member has hepatitis B
  + Live with someone who has hepatitis B
  + Have ever had unprotected sexual contact with an HBV person
  + Have ever injected drugs (once is enough)
  + Have received a tattoo using unsterile equipment
* Testing is very important as the virus often begins damaging the liver before any symptoms appear. With regular monitoring, hepatitis B can be successfully managed.

Reference: Gane E. Screening for chronic hepatitis B infection in

New Zealand: unfinished business. NZMJ 2005;118:1211

* Almost 20% will develop active liver disease (chronic hepatitis B or CHB) and will progress to cirrhosis and liver failure, whilst another 5 to 40% will develop hepatocellular carcinoma.
* In 1998, the Government decided to fund a national HBV screening programme, targeting Asian, Pacific, and Maori New Zealanders older than 15 years (thus unlikely to be protected by universal neonatal vaccination). Screening commenced in 1999 and continued for 3 years.
* Observed rates in Maori (5.6%) were similar to those reported by previous studies, but significantly higher rates were found in Pacific Islanders (median 7.3%, Tongan 13%) and Asians (median 6.2%, 8.1% in South East Asian, 8.9% in Chinese), thus reflecting higher prevalence rates in those countries of birth.
* The vast majority (85%) of HBsAg-positive New Zealanders remain unaware of their status.
* Urgent consideration should be given to reopening the screening programme.

Immunisations – Child and Adult

* Age: various

Reference: [www.immunisation.book.health.govt.nz](http://www.immunisation.book.health.govt.nz)

* Immunisation visits may provide screening opportunities

E.g. Developmental delay

Reference: [www.pharmac.govt.nz](http://www.pharmac.govt.nz)

28th July 2016 Update

**From 1 January 2017:**

* The human papillomavirus (HPV) vaccine will be available for all children and adults up to the age of 26 years, and boys will now be included in the HPV school vaccination programme.
* The HPV vaccine itself will also change to cover more strains of the virus, in fewer doses.

**From 1 July 2017:**

* The varicella (chickenpox) vaccine will be funded for all children as a part of the childhood immunisation schedule
* The pneumococcal vaccine will change from a 13 strain to a 10 strain version
* The rotavirus vaccine will change brand and move to a two-dose regimen
* The measles, mumps and rubella (MMR) and haemophilus influenza type b (Hib) vaccines will move to new brands.

Immunisation – Pneumococcal disease

* Age: 65

Reference: [www.immunisation.book.health.govt.nz](http://www.immunisation.book.health.govt.nz)

Recommended but not funded

* Adults ≥18 years with high-risk conditions
  + 1 dose of PCV13
  + Give a maximum of 3 doses of 23PPV in a lifetime. The 1st 23PPV dose is given at least 8 weeks after PCV13; the 2nd a minimum of 5 years later; the 3rd dose at age ≥65 years.
* Adults ≥65 years with no risk factors
* 1 dose of PCV13
* 1 dose of 23PPV, given at least 8 weeks after PCV13

Reference: [www.pharmac.govt.nz](http://www.pharmac.govt.nz)

28th July 2016 Update

**From 1 July 2017:**

* The pneumococcal vaccine will change from a 13 strain to a 10 strain version

Immunisation – Shingles

* Age: 50

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) March 2016

Valaciclovir – a first line antiviral medicine

* Zoster vaccine (Zostavax, a live attenuated vaccine) is recommended but not subsidised in New Zealand for people aged 50 years and over.
* Vaccination can prevent the development of herpes zoster by approximately 50% and reduce the incidence of post- herpetic neuralgia by approximately 40%.
* Patients aged 60–69 years may receive a greater benefit from vaccination (64% reduction in risk) than patients aged 70 years and over (36% reduction in risk). The number-needed-to-treat is 50, in patients aged 60 years and over, for vaccination to prevent one case of herpes zoster.
* Adverse effects include mild to moderate injection site reactions.
* The vaccine is effective for at least five years, but it is not known how long protection lasts beyond this time; and if, or when, repeat vaccination is necessary.

Macular Degeneration

* Age: 45+

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) February 2016

Age-related macular degeneration: what should a general practitioner know?

* Age-related macular degeneration is a progressive condition, which results in loss or distortion of the central visual field and is the leading cause of blindness in New Zealand.
* To reduce the risk of developing age-related macular degeneration, patients can:
  + Quit smoking; this is the single biggest step patients can take to reduce their risk
  + Consume a diet high in fruit, vegetables and fish
  + Avoid UV light
* Regular optometrist examinations from the age of 45 years can facilitate early detection of macular degeneration, which is usually asymptomatic.
* If patients are unable to attend an optometrist, visual acuity testing and assessment of retinal changes by direct fundoscopy in general practice can help identify those most in need of further clinical attention.

Melanoma

* Age: 20+

Reference: [www.health.govt.nz](http://www.health.govt.nz)

Prevalence of Opportunistic Melanoma Screening in New Zealand. Published online: 03 September 2010

* New Zealand has the 2nd highest melanoma incidence rate (ASR 38.8 per 100,000 in 2005) worldwide.
* The total rate of melanoma has been increasing over the past decade.
* Skin screening is one way of achieving early diagnosis of melanoma, and although there is no substantial evidence of its effectiveness, it is being conducted in some populations opportunistically.

Reference: [www.health.govt.nz](http://www.health.govt.nz)

Mortality and Demographic Data 2011

* [In 2011](http://www.health.govt.nz/publication/cancer-new-registrations-and-deaths-2009) there were 359 deaths caused by melanoma, more than the annual road toll of 305.

Mental Health including Alcohol and Drug Problems

* Age: 20+ selected by Author as HEEADSSSS assessment

takes place in Adolescent age range 12-19

Reference: Identification of Common Mental Disorders and Management of Depression in Primary care. An Evidence-Based Best Practice Guideline. Wellington: New Zealand Guidelines Group; July 2008

* Verbal two to three question screening tools for common mental disorders.

**Questions for depression**

* During the past month, have you been bothered by feeling down, depressed or hopeless?
* During the past month, have you been bothered by little interest or pleasure in doing things?

If yes to either question, ask **Help question** below

**Question for anxiety**

* During the past month have you been worrying a lot about everyday problems?

If yes, ask **Help question** below

**Questions for alcohol and drug problems**

* Have you used drugs or drunk more than you meant to in the last year?
* Have you felt that you wanted to cut down on your drinking or drug use in the past year?

These two questions have been shown to pick up about 80% of current drug and alcohol problems

If yes to either question, ask **Help question** below

**The Help question**

* Is this something that you would like help with?

Reference: coronialservices.justice.govt.nz

18th October 2016

* Chief Coroner Judge Deborah Marshall has today released the annual provisional suicide statistics, which show 579 people died by suicide in the 2015/16 year.
* This is the highest number of suicide deaths since the provisional statistics were first recorded for the 2007/08 year, and follows last year’s total of 564, which was then the highest total.
* It’s important to note, however, that the suicide rate per 100,000 population for this year (12.32) remains just lower than the 2010/11 year (12.65).
* The rate of people dying by suicide has again remained consistent and shows New Zealand still has a long way to go in turning this unacceptably high total around.
* Judge Marshall said there needed to be more discussion about suicide prevention and how family, friends and colleagues can identify someone at risk and help them get professional support. “Everyone should recognise the importance of taking suicidal thoughts seriously and knowing where to get help.”

Osteoporosis

* Age: 50+

Reference: [www.osteoporosis.org.nz](http://www.osteoporosis.org.nz)

**Clinical Standards for Fracture Liaison Services in New Zealand 2016**

* There are 6 Clinical Standards for Fracture Liaison Services in New Zealand
  + 1 Identification
  + 2 Investigation
  + 3 Information
  + 4 Intervention
  + 5 Integration
  + 6 Quality
* **To keep the article concise, I have only included detailed information on the first 2 Standards, which are most pertinent for General Practitioners.**
* **Standard 1: Identification**

**All men and women aged 50 years and over who suffer a fragility fracture will be systemically and proactively identified by FLS (Fracture Liaison Service).**

**Measurement:** The proportion of all fragility fracture patients aged 50 years and over presenting to health care services in the local population that are identifed by the FLS. This includes patients presenting with fractures to hospital Emergency Departments (EDs), community-based Accident and Emergency Medical Clinics or General Practitioners (GPs). In the event that the total number of fragility fractures in a local population is unknown, it can be estimated by multiplication of the total number of hip fractures occurring in men and women aged 50 years and over by a factor of 5 .

**Standard 2: Investigation**

**Fragility fracture sufferers will undergo an assessment for future fracture risk including bone health (i.e. osteoporosis) and falls risk.**

**Measurement:** The proportion of fragility fracture sufferers identified who undergo:

1. Bone health assessment within 12 weeks of the fracture presentation. The assessment may include use of an absolute fracture risk calculator such as FRAX , Garvan or Q-fracture. It should be noted that physicians may determine that an individual’s clinical history may be sufficient to warrant initiation of osteoporosis treatment without undertaking bone mineral density (BMD) testing (‘in rare instances’ – Dr Ajith Dissanayke Endocrinologist Peer Reviewer) to confirm a diagnosis of osteoporosis e.g. among individuals aged 75 years and over, or among those who have undergone BMD testing during the last 2 years. Individuals in whom progression to immediate osteoporosis treatment is deemed clinically appropriate can be considered to have undergone a bone health assessment.
2. Falls risk assessment within 12 weeks of the fracture presentation.

*N.B. At the time of publication of the Clinical Standards in August 2016, a New Zealand Osteoporosis Clinical Guideline was in development. The Clinical Guideline is scheduled to be published in Q1-2017. Therefore, in the absence of an Osteoporosis Clinical Guideline at the time of publication of these Clinical Standards for FLS, the above wording with regard to bone health assessment is suggested as a ‘stop-gap’ during 2016. When the NZ Osteoporosis Clinical Guideline is published in early 2017, this Standard will be re- worded to state that bone health assessment should be in accordance with the new Clinical Guidelines.*

**Standard 3: Information**

**Fragility fracture sufferers and family members or carers will be provided with information in their own language on bone health, lifestyle measures, nutrition and osteoporosis treatments.**

**Standard 4: Intervention**

**Fragility fracture sufferers determined to be at high risk of suffering future falls and/or fractures will be offered appropriate osteoporosis treatment with PHARMAC subsidised medicines and be referred for interventions to reduce falls risk.**

**Standard 5: Integration**

**The FLS develops a long-term care plan with the fragility fracture sufferer and their GP to reduce risk of falls and fracture, and promote long term management.**

**Standard 6: Quality**

**The FLS will undertake an annual performance review, including audit of the quality of FLS service delivery according to adherence with Standards 1 – 5 and maintenance of appropriate Continuing Professional Development (CPD) by FLS staff.**

Peripheral Vascular Disease

* Age: 50 - 69

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) April 2014

The ankle-brachial pressure index: An under-used tool in primary care?

* In particular, international guidelines recommend targeted testing for peripheral artery disease for the following groups:
  + All people aged between 50 and 69 years who smoke or have diabetes
  + All people from age 70 years regardless of risk-factor status (In practice, the Author believes that non-targeted testing for peripheral vascular disease in all people from age 70 is not a realistic goal)
  + All people with a Framingham risk score > 10%
* The ankle-brachial pressure index (ABPI) is a non-invasive method for detecting or ruling-out the presence of peripheral artery disease. ABPI is a calculation of the ratio of the patient’s systolic blood pressure at their ankle to the systolic pressure in their arm.
* ABPI is generally between 1.0 – 1.4 in healthy people, i.e. the systolic pressure at the ankle is greater than the systolic pressure at the arm.
* An abnormally low ABPI value (i.e. < 0.9) has a sensitivity of 79 – 95% and a specificity of approximately 95% for peripheral artery disease.
* Between one-third and one-half of patients with peripheral artery disease will have some evidence of coronary artery or cerebrovascular disease.A meta-analysis of 16 studies involving over 48 000 patients without a history of coronary artery disease, found that when ABPI indicated the presence of peripheral artery disease the risk of cardiovascular mortality increased by over four times for males and approximately 3.5 times for females, compared with people with an ABPI in the normal range.

Peer Review: Dr Carl Muthu

Vascular Surgeon

Auckland City Hospital

* ABPI is an operator dependent test. Having an “occasional operator” doing ABPI is bound to lead to false positives or false negatives. In my view; if you were to use ABPI for targeted screening it would be best that either one doctor or more likely one nurse screened all the patients in a practice. Therefore they will develop skill and reliability at performing the test.
* Beware of false negative ABPI in diabetics and renal failure patients. They can have very calcified vessels that can cause artificially high ABPI readings, i.e. they may have a “normal” ABPI but have significant peripheral artery disease.
* I see the significance of a low ABPI, in the absence of symptoms such as claudication and ulceration - as:
  + A marker of the “at risk” foot, especially in diabetics. These patients should be advised to take great care of their feet avoid trauma etc. Consideration should be given to referring them to a podiatrist, orthotist for appropriate footwear, or a diabetic foot clinic if one exists.
  + A marker of underlying cardiovascular disease. A patient with a low ABPI has peripheral artery disease by definition. These patients have a reduced life expectancy due to associated vascular disease in beds other than the legs. They should have aggressive vascular risk factor modification e.g.
    - Blood Pressure
    - Lipids
    - Diabetes – Hb1Ac
    - Aspirin
* I agree with the author’s comment that screening all patients over 70 would be unrealistic. Smoker, diabetics and those with a 5-year Cardiovascular Disease (CVD) Risk >10% seems a reasonable compromise.

Prostate cancer

* Age: 50 - 70

Reference: [www.health.govt.nz](http://www.health.govt.nz)

Prostate Cancer Management and Referral Guidance

Published September 2015

* This document has an ‘Algorithm for supporting men with prostate-related concerns’ and detailed explanatory notes.
  + If aged 50 to 70 years, or over 40 years with a family history of prostate cancer, obtain informed consent before testing by discussing
    - The benefits and risks of PSA and/or DRE
    - The implications of further testing if the PSA or DRE is abnormal

Note: Carefully consider each man’s individual context when discussing benefits and risks.

Six Week Check

* Age: 6 weeks

Reference: [www.wellchild.org.nz](http://www.wellchild.org.nz)

* The Well Child programme is a package of universal health services offered free to all New Zealand families/whānau for children from birth to 5 years.
* The programme includes 12 core contacts as well as a general practitioner check at 6 weeks, linked to the 6-week immunisations.

Smoking

* Age: 15+

Reference [www.rnzcgp.org.nz](http://www.rnzcgp.org.nz)

Cornerstone – Content of Medical Records

* Risk factors are identified
  + Current Smoking Status
  + Smoking history of patients over age 15
  + Where appropriate, offer of smoking cessation

Reference: [www.bpac.org.nz](http://www.bpac.org.nz) 3rd November 2015

Peer Group Discussion – Smoking cessation: helping patients stick with it until they quit

* Approximately 5 000 people in New Zealand die each year due to smoking related causes. However, people who smoke can reverse the long-term effects of smoking if they stop early enough.
* Nicotine addiction should be managed like other long-term health issues and be addressed at every patient contact, unless it is inappropriate to do so.
* **Ask** about and document the smoking status of every patient.
* Give **Brief** advice to stop to every patient who smokes.
* Strongly encourage every person who smokes to use **Cessation** support and offer help accessing this. A combination of behavioural support and smoking cessation medicine works best.

Testicular Cancer

* Age: 15+

**Reference** [**www.testicular.org.nz**](http://www.testicular.org.nz)

* Testicular cancer is the most common cancer affecting men between the ages of 15 and 39, but the disease also occurs in other age groups, so all men should be aware of its symptoms. While testicular cancer is common among young men, young men typically do not get a lot of cancer, so overall testicular cancer is a relatively rare disease.
* According to the New Zealand Ministry of Health statistics 151 cases of testicular cancer were diagnosed in the NZ in 2011 and 1 man died from testicular cancer in 2011.
* Testicular cancer can cause a number of symptoms. Listed below are warning signs that men should watch for:
* A lump in either testicle; the lump typically is pea-sized, but sometimes it might be
* As big as a marble or even an egg.
* Any enlargement of a testicle
* A significant shrinking of a testicle
* A change in the consistency of a testicle (hardness)
* A feeling of heaviness in the scrotum
* A dull ache in the lower abdomen or in the groin
* A sudden collection of fluid in the scrotum
* Pain or discomfort in a testicle or in the scrotum
* Enlargement or tenderness of the breasts
* These symptoms are not sure signs of cancer; they can also be caused by other conditions.
* There are numerous other causes of swelling of the testis that are harmless, including hydrocele, a collection of fluid in the scrotum; epididymitis, a swelling of the epididymis (the structure behind the testis where sperm mature) which may also cause fever and discharge from the penis; and varicocele, varicose veins in the scrotum which is described as feeling like "a bag of worms".
* Inflammation of the testis can also be related to bacterial infections.
* Torsion of the testis occurs when a testicle rotates and the spermatic cord becomes obstructed and the blood supply is cut off. This most commonly occurs around puberty and causes excruciating pain and swelling of the testis. (If this happens, it is a surgical emergency and the patient should be rushed to an emergency room.
* However, it is important to see a doctor, preferably a urologist, if any of these symptoms occur -- any illness should be diagnosed and treated as soon as possible.
* Early diagnosis of testicular cancer is especially important because the sooner cancer is found and treated, the better a man's chance for complete recovery and the easier the treatment protocol.

**Reference:** [**www.bestpractice.bmj.com**](http://www.bestpractice.bmj.com)

* When a General Practitioner suspects testicular cancer; serum tumour markers (BHCG, AFP, LDH) and an ultrasound are appropriate first tests to order, before the patient is seen by a Urologist.
* Ultrasound is the principal test with a sensitivity near 100%. Order early in the diagnostic work-up.

Reference: [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org)

* The U.S. Preventive Services Task Force (USPSTF) recommends against screening for testicular cancer in adolescent or adult males.

Weight, Height, BMI – Weight Management

* Age: 2 - 5

Reference: [www.health.govt.nz](http://www.health.govt.nz)

Weight Management in 2-5 year olds

1 Monitor Growth

* Regularly measure height and weight to calculate Body Mass Index (BMI). Use World Health Organisation age and sex specific growth charts.
* Overweight above 91st percentile.
* Obese above 98th percentile.
* If trending towards overweight, provider the family or whanau with brief nutrition and physical advice.
* **If overweight or obese discuss long-health risks with the family or whanau. Proceed to stage 2 - ASSESS**

2 Assess

* Take a full history for BMI above 91st centile.
* Consider:
  + Co-morbidities
  + Family history of obesity, early cardiovascular disease or dyslipidaemia
  + Precipitating events and actions already taken
  + Usual diet and levels of physical activity and sleep patterns
  + Current physical and social consequences of overweight
  + Signs of endocrine, genetic or psychological causes
  + Medications that may contribute weight gain
* Include in a clinical examination:
  + Blood pressure with appropriate cuff size
  + Skin: intertrigo, cellulitis, carbuncles
  + Hepatomegaly
  + Enlarged tonsils
  + Assessment of short stature/poor linear growth
  + Abnormal gait, flat feet, lower leg bowing or problems with hips or knees
  + Dysmorphic features
  + Undescended testicle (boys)
* **Consider further investigations for BMI above 98th centile:**
  + **Lipid profile**
  + **Hb1Ac**
  + **Overnight sleep study, using pulse oximetry if history suggests sleep apnoea**

3 Manage

* Aim to slow weight gain so the child can grow into their weight.
* Use the Food, Activity (including sleep) and Behaviour (FAB) change approach to address lifestyle interventions.
  + Food/nutritionally balanced diet
  + Physical activity and reduce sedentary time
  + Sufficient sleep
  + Behaviour strategies
* To support meaningful engagement and improved health outcomes, it is important that a mutually agreed weight management plan takes into account the broader social, environmental and cultural contexts of the child, family and whanau.
* **Refer to paediatric services if significant co-morbidities are identified or an endocrine or genetic cause for obesity is suspected.**
* **Agree a plan for review and monitoring.**

4 Maintain

* Maintain contact and support and continue to monitor the child’s height and weight to ensure they are adequately supported.
* Reinforce health eating, physical activity, behaviour strategies and sleep advice.
* Identify and promote local support services. Develop collaborative partnerships with Maori health providers, Pacific health providers, Whanau Ora providers and other community-based organisations as appropriate.
* **Reassess if progress is not sustained.**

PEER REVIEW

* **General Practice**
  + Caroline Campbell RN
  + Dr Douglas Horne
  + Dr Simon Garlick
  + Dr Linda Pirrit
  + Nicole Waters RN
* **Endocrinologist** 
  + Dr Ajith Dissanayke
* **Gastroenterologist** 
  + Dr Alasdair Patrick
* **Urologist**
  + Mr Mischel Neill
* **Vascular Surgeon** 
  + Mr Carl Muthu