

# Standard 18

*Vulnerable patients, including those in residential facilities and those with mental health or cognitive problems, should have access to all aspects of care, tailored to their individual needs.*

## Key practice points

- Standard 18 considers vulnerable persons as, but not limited to, the following: Māori and Pacific peoples, older adults, those in residential care facilities, those with mental/cognitive health issues, those requiring advanced care planning, individuals in prison, immigrants and refugees.
- Health care delivery and workforce development should be culturally appropriate (as determined by the individual or family/whānau).
- Participation to their fullest ability in decisions about their health and wellbeing is encouraged.
- Physical and mental health services should develop a closer alignment as mental health illness is often overlooked or misdiagnosed in people with intellectual disability.
- Decreased cognitive function and poor health literacy may result in less self-management capability.
- Offer individuals and their family/whānau the opportunity to discuss an end-of-life care plan, avoid unnecessary poly-pharmacy and consider de-escalation of treatment where appropriate.
- Access to diabetes care for people in prison should be available as per national standards.
- Immigrants or refugees often have high health needs and cultural and religious beliefs may impact on health care choices.

Read this standard in conjunction with the equality and diversity section in the Introduction to the Toolkit.

## What the quality statement means for each audience

**Service providers** ensure that people with diabetes who are in vulnerable population groups have access to all aspects of care, tailored to their individual needs.

**Health care professionals** ensure they are competent to provide individually tailored care for people with diabetes who are in vulnerable population groups.

**Planners and funders** ensure services are commissioned that enable all aspects of care to be provided to people in vulnerable population groups, tailored to the individual.

**Vulnerable people with diabetes** receive all aspects of care, tailored to their individual needs.

## Definitions

The term ‘vulnerable’ is broadly defined by the International Diabetes Federation (Williams et al 2006) as ‘the person, community or group is for some reason at increased risk of diabetes or is a victim of unforeseen circumstances that make their health situation precarious’(p 30).

Definitions for specific population groups are provided in the guidelines section below.



## Introduction

Definitions for vulnerable people appear to be focused by topic or to be based on race or ethnicity, socioeconomic status, geography, gender, age, disability status, risk status related to sex and gender, cancer survivors, immigrants and refugees, incarcerated men and women, persons who use drugs, pregnant women and veterans (Centers for Disease Control and Prevention 2014). A further way of understanding vulnerable may be based on an analytical framework developed by CBG Health Research (2011) which considers the individual’s predisposition to health and health services, availability of services both geographically and across population groups, accessibility (distance and transport), accommodation (hours of operation of the service), affordability, acceptability (language, culture, gender, privacy) and appropriateness of the service. Additionally, vulnerable people may also encompass those ‘whose needs are not addressed by traditional service providers or who feel they cannot comfortably or safely access and use the standard resources offered’ (Central Cancer Network 2012). Thus vulnerable groups may encompass many different groups of people including Māori, Pacific peoples, older adults, the homeless, children (and those under or leaving Child Youth and Family Services’ [CYFS] care), pregnant women, those in rural areas, individuals in prison, inpatients, veterans, immigrants, refugees, those in residential care, individuals with mental/cognitive health issues, those with low literacy levels and individuals requiring advanced care planning.

In the context of Standard 18 a ‘vulnerable patient’ is a person with diabetes who falls into one or more of the following groups:

- Māori and Pacific peoples
- the older adult
- those in residential care facilities
- those with mental/cognitive health issues
- those requiring advanced care planning
- individuals in prison
- immigrants and refugees.



## Guidelines

This section addresses guidelines related to: (1) Māori and Pacific peoples; (2) older adults and those in residential care; (3) mental health and cognitive problems; (4) advanced care planning; (5) prisons; and (6) immigrants/refugees. However, many of these sections are interrelated given that the literature suggests there are links between diabetes and cognitive impairment (Allen et al 2004; Roberts et al 2014); anticholinergics and cognitive impairment (Fox et al 2011); and diabetes and mental health conditions (Balhara 2011; Llorente et al 2006).

### Māori and Pacific peoples

Māori have on average the poorest health statistics of any ethnic group in New Zealand and the government has made it a key priority to reduce these inequalities (Ministry of Health 2014). Harwood and Tipene-Leach (2007) suggest 'For no other disease are significant health inequalities more obvious than when we look at diabetes' (p 162). Diabetes is almost three times more common in Māori than non-Māori. In addition, for Māori aged 45–64 years death rates due to diabetes are nine times higher than for non-Māori New Zealanders of the same age. Māori are diagnosed younger and are more likely to develop diabetic complications such as eye disease, kidney failure, strokes and heart disease.

According to the Ministry of Health, access to health care is reduced for Māori. Cost prevented 23% of Māori adults, and 8% of Māori children from visiting a GP when they needed to in the past 12 months whilst many Māori adults (18%) and children (12%) did not collect a prescription item in the past 12 months due to the costs (Ministry of Health 2013a). Health literacy may also be an issue as shown in the recent Māori health literacy research into gestational diabetes (Ministry of Health 2014) and it is a barrier to understanding and managing gestational diabetes which is a precursor to type 2 diabetes.

New Zealand's health context is unique in that health inequalities between Māori and non-Māori can be held to redress in part by New Zealand's founding document, The Treaty of Waitangi. As controversial as the Treaty is, part of its obligations is to provide equality. Within the health context Māori should be able to enjoy the same health and wellbeing as non-Māori and Māori health interests are protected. Additionally, Māori should have equal access to appropriate health services (Kingi 2007). This also fits with the Health Quality and Safety Commission (HQSC) of New Zealand's Triple Aim Strategy.

Examples of government strategies that are trying to address health inequalities are the implementation of the He Korowai Oranga: Māori Health Strategy (Ministry of Health 2014); the Māori health provider development scheme, Māori hauora/health scholarships; promotion of Māori health models; District Health Board (DHB) Māori Health Plans; Whānau Ora programmes and funding rongoā Māori in some areas.

Some helpful recommendations for working with Māori with diabetes can be found in the booklet prepared for the Medical Council of New Zealand by Mauri Ora Associates – *Best health outcomes for Māori: Practice implications*. It can be accessed at: <https://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Maori.pdf>.

According to Foliaki and Pearce (2003), diabetes prevalence has increased rapidly over time in the indigenous people of the Pacific region (Polynesian, Melanesian, Micronesian), both in the Pacific islands and in countries such as New Zealand, and Pacific people experience greater morbidity and more complications than people of European descent with diabetes. This was confirmed by Statistics New Zealand based on 2002–2004 data, which stated the incidence of cardiovascular disease, diabetes, and respiratory illness is significantly higher among Pacific peoples than other ethnic groups. In addition, type 2 diabetes occurs earlier in Pacific peoples, about 10 years before New Zealand Europeans (NZE), including a growing number of children and adolescents. Young people with type 2 diabetes are at greater risk of morbidity and mortality (Constantino 2013).

In the 2013 report on the Adult Nutrition Survey, Coppel et al found that diabetes was prevalent among Māori and Pacific peoples, and particularly high among Pacific peoples. One-third or more of Pacific peoples aged 45 years and over had diabetes. Age-specific rates of undiagnosed diabetes were highest among Pacific peoples, for whom the ratio of diagnosed to undiagnosed diabetes was 5:4 compared with 10:3 for Māori and 10:1 for NZE. The highest prevalence of diabetes was observed among Pacific peoples, with rates among Māori in between that observed for Pacific peoples and the NZE groups. Rates increased with age with the highest prevalence observed for those aged 75 years and over.

Some helpful recommendations for working with Pacific peoples with diabetes can be found in the booklet prepared for the Medical Council of New Zealand by Mauri Ora Associates – Best health outcomes for Pacific peoples: Practice implications. It can be accessed at: [www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf](http://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf).

The report *Primary care for Pacific people: A Pacific and health systems approach* (Southwick et al 2012) presents evidence to support improvements in primary care delivery to Pacific peoples. The full document is available here: [www.pacificperspectives.co.nz/primary-health-research.html](http://www.pacificperspectives.co.nz/primary-health-research.html) or here: [www.health.govt.nz/publication/primary-care-pacific-people-pacific-and-health-systems-approach](http://www.health.govt.nz/publication/primary-care-pacific-people-pacific-and-health-systems-approach).

### **Older adults and residential care**

The definition of an ‘older adult’ is not clear as it can be based on chronological or functional age. ‘Older adults’ may be those over the age of 65 but this can be further broken down into the ‘young old’ under 75 and the ‘old old’ over 75. Additionally a distinction may be made between ‘healthy’ older adults (those who are aging but are in sound physical and mental health) and ‘frail’ older adults (those with comorbidities or physical, mental or emotional disability which compromises management of diabetes)’ (Australian Diabetes Educators Association 2003).

The Ministry of Health has produced the *Health of Older People Strategy* (2002). This document sets out the vision and eight objectives for the care of older adults aged 65 and over.

Guidelines for care of the older adult with diabetes are important because older people are more likely to have comorbidities which complicate management of diabetes (Australian Diabetes Educators Association 2003) and available guidelines often make little or no reference to this age group (Australian Diabetes Educators Association 2003; International Diabetes Federation 2013). Several organisations have developed diabetes guidelines specific to, or including, older adults (see below). The overriding message related to care of the older adult with diabetes is treat the patient not the HbA<sub>1c</sub> (McLaren et al 2013).

## Older adults

A statement released by the International Association of Gerontology and Geriatrics (IAGG), the European Diabetes Working Party for Older People (EDWPOP), and the International Task Force of Experts in Diabetes (Sinclair et al 2012) provides consensus statements across eight domains covering glucose targets, influence of comorbidities, patient safety, hypoglycaemia, therapy, diabetes in care homes, diabetes education and family/whānau/carer perspectives pertinent to those aged 70 and over.

The **American Diabetes Association** (ADA) includes a section on older adults in its annual Standards of Medical Care in Diabetes – 2014 (American Diabetes Association 2014b). This section provides recommendations and a framework for considering treatment goals for glycaemia, blood pressure and dyslipidaemia in older adults with diabetes.

The **International Diabetes Federation** (IDF) (2013) guidelines for managing older people with type 2 diabetes provides extra detail for consideration when working with this group of people. The guidelines are designed for those aged 70+ and are also considered applicable for those with type 1 diabetes. The guidelines are based on expert consensus and clinical expertise but may not be useful for all older adult populations in New Zealand because of a lack of consideration for the needs of Māori and Pacific peoples. However the key message that older people are highly individual and their needs can differ dramatically is pertinent to New Zealand.

The Australian Diabetes Educators Association (2003) provides best practice standards for the diagnosis and care of older people in Australia with diabetes.

A New Zealand position statement produced by the **New Zealand Medical Association** (NZMA nd) provides 17 principles specific to care of older adults.

## Residential care

Residential care includes long term care provided by rest homes, continuing care (hospital), dementia care units and specialised hospital care units (psycho-geriatric care) for individuals aged over 65; or aged between 50 and 64, unmarried and with no dependent children (Ministry of Health 2014). Younger persons may also be receiving care in residential facilities via disability services.

Older adults in residential care – the consensus statement from the International Association of Gerontology and Geriatrics (IAGG), the European Diabetes Working Party for Older People (EDWPOP), and the International Task Force of Experts in Diabetes (Sinclair et al 2012) pertinent to caring for individuals with diabetes in residential care suggests major aims for care for these individuals should be individualised care, prevention of hypoglycaemia, avoidance of acute metabolic complications, reducing risk of infection, prevention of hospitalisation and introduction of timely end-of-life care.

For examples of guidelines specific to care of older adults with diabetes in residential care refer to:

- New Zealand residential care – Diabetes care for aged residential care facilities in Hawkes Bay (Diabetes Clinical Advisory Group 2012)  
[www.healthhb.co.nz/wp-content/uploads/2012/11/Diabetes-Care-for-Aged-Residential-Care-Facilities-in-Hawkes-Bay-2012-Reference-Book.pdf](http://www.healthhb.co.nz/wp-content/uploads/2012/11/Diabetes-Care-for-Aged-Residential-Care-Facilities-in-Hawkes-Bay-2012-Reference-Book.pdf)
- United Kingdom residential care – *Good clinical practice guidelines for care home residents with diabetes* (Diabetes UK 2010)  
[www.diabetes.org.uk/Documents/About%20Us/Our%20views/Care%20recs/Care-homes-0110.pdf](http://www.diabetes.org.uk/Documents/About%20Us/Our%20views/Care%20recs/Care-homes-0110.pdf)

- Canadian residential care – Diabetes guidelines for elderly residents in long term care (LTC) facilities and the frail elderly (Diabetes Care Program of Nova Scotia 2010)  
<http://diabetescare.nshealth.ca/sites/default/files/files/LTCBackground2010.pdf>.

## **Mental health or cognitive problems**

### Mental health

Mental health is defined as a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community (World Health Organization 2013). Mental illness refers to a wide range of mental health conditions affecting mood, thinking and behaviour (such as depression, anxiety disorders, schizophrenia, eating disorders and addictive behaviours) (Mayo Foundation for Medical Education and Research 1998–2014).

### Cognitive problems

Cognition relates to or involves conscious mental activities (such as thinking, understanding, learning and remembering) (Merriam-Webster 2014). Cognitive impairment or disability is difficult to define but the implication is that persons with cognitive impairment or disability may have difficulty with various types of mental tasks (Center for Persons with Disabilities nd; Disabled World nd). Cognitive impairment or disability arises from physiological or biological processes (genetic disorder, traumatic brain injury). Cognitive disability may be described as a clinical diagnosis (eg, Down syndrome, traumatic brain injury, autism, dementia, dyslexia, Attention Deficit Disorder, dyscalculia) or from a functional perspective (eg, difficulties or deficits involving problem solving, attention, memory, math comprehension, visual comprehension, reading, linguistic and verbal comprehension) (Center for Persons with Disabilities nd; Disabled World nd).

The literature suggests there is evidence to support the view that people with diabetes have increased risk of developing cognitive impairment (Allen et al 2004; McCrimmon et al 2012) and that cognitive impairment is associated with poor diabetes control (Munshi et al 2006).

Documents relating to mental/cognitive health have a focus on mental health (Ministry of Health 2009) or disability (Te Pou o Te Whakaaro Nu: The National Centre of Mental Health Research Information and Workforce Development 2013). However, it appears that for both broad groups there is a common theme that suggests closer alignment of physical/mental services is required because mental health issues are often missed or treated inadequately in these groups of people.

The Ministry of Health (2009) document ‘Towards optimal primary mental health care in the new primary care environment: A draft guidance paper’ is a guidance document which addresses vulnerable populations with mental health conditions. The key message relates to primary mental health services taking a targeted approach to meeting the needs of these groups and highlights ‘that there are currently major gaps in primary mental health service provision for children and youth, Pacific peoples, migrant and refugee peoples, and patients with alcohol and/or other drug problems. These gaps, along with sustained effort on meeting the mental health needs of Māori, should be priority areas for future service development’ (Ministry of Health 2009, p 76).

It is also suggested that comorbid health problems are being missed or not treated adequately (ie, depression, metabolic syndrome resulting from treatment with antipsychotic medication) (Ministry of Health 2009). The Ministry of Health highlights that for older adults mental health and addiction problems are often undetected, untreated and individuals are not referred to appropriate services. This often leads to poly-pharmacy which is problematic because of drug interactions arising from physiological changes in the elderly.

### **Advanced care planning**

The focus of advanced care planning or end-of-life care can be viewed from two perspectives: those of the individual and family/whānau planning for end-of-life care and health care professionals involved in end-of-life care for an individual. Resources for individuals about advanced care planning are included in the resource section.

The International Diabetes Federation provides a rationale and evidence base for the care of individuals at the end of their life. Individuals at the end of life are characterised by a significant medical illness or malignancy and have a life expectancy reduced to less than one year. Recommendations reflect compromised self-care (fatigue, drowsiness from medicines), the need for pain relief, avoiding dehydration, withdrawal of treatment, and a raised threshold for investigation. Goals of care are often very different from other categories. These individuals typically require significant health care input and specific diabetes care may not necessarily be the most important priority. However, diabetes care remains important to manage symptoms, comfort, and quality of life (International Diabetes Federation 2013).

There does not appear to be one overarching guideline regarding advanced care planning pertaining specifically to diabetes for New Zealand. However, a number of different sources specific to New Zealand are available around end-of-life or advanced care planning and include:

- Best Practice Advocacy Centre (BPAC) NZ (2006) *Providing Palliative Care to Māori* available at: [www.bpac.org.nz/resources/campaign/palliative/palliative\\_Maori.asp](http://www.bpac.org.nz/resources/campaign/palliative/palliative_Maori.asp)
- BPAC NZ (2011) Treatment for the dying patient: *The Liverpool Care Pathway* available at: [www.bpac.org.nz/BPJ/2011/june/lcp.aspx](http://www.bpac.org.nz/BPJ/2011/june/lcp.aspx)
- BPAC NZ (2011) End-of-life care for patients with chronic disease: The need for a paradigm shift available from: [www.bpac.org.nz/BPJ/2011/november/end-of-life.aspx](http://www.bpac.org.nz/BPJ/2011/november/end-of-life.aspx)
- Hospice NZ Standards for Palliative Care (2012). The purpose of this document is to ensure the best possible care for all people in New Zealand as they approach the end of their life and die. Available here: [www.southerncancernetwork.org.nz/file/fileid/45559](http://www.southerncancernetwork.org.nz/file/fileid/45559).

### **Individuals in prison**

All prisons provide primary health care to prisoners, with secondary and tertiary health care provided by the local DHB. Prisoners are referred by prison health services under the same eligibility criteria as any other member of the public (Department of Corrections nd).

The American Diabetes Association (ADA) has a position statement about diabetes management in correctional institutions (American Diabetes Association 2014a). This document covers management plans from intake to discharge and includes nutrition and food services, urgent and emergency issues, medication, monitoring and screening for complications, education for both inmates and staff, alcohol and drugs, transfer and discharge, information sharing, children and adolescents, and pregnancy.

## Immigrants and refugees

As there does not appear to be an overarching guideline for care of immigrants and refugees with diabetes specific to New Zealand, all immigrants or refugees should receive care for their diabetes as per national standards.

Immigrants and refugees have different experiences of arriving in New Zealand. Immigrants choose to leave their homeland and resettle whereas refugees do not choose to leave their homeland, rather they flee in response to a crisis (Ministry of Health 2012). These differences in reasons for coming to New Zealand may give rise to different health needs. Additionally, many of these people (particularly refugees) will have had vastly different experiences of health care in their country of origin.

Although not specific to the care of diabetes in these groups, two documents are available that provide additional information.

The Ministry of Health (2012) has developed a handbook about refugee health care providing background to the countries of origin for many refugees in New Zealand, main areas of resettlement, considerations for a consultation with a refugee, common issues in physical health care, mental health issues, considerations for refugees with special health and disability needs, a contact list and additional information.

A Canadian document with recommendations for the health care of immigrants and refugees, Evidence based clinical guidelines for immigrants and refugees (2011), covers infectious diseases, chronic and non-communicable diseases, women's health and knowledge translation.



## Implementation advice

### Māori and Pacific peoples

‘The degree of comfort individuals feel with seeking health services impacts on their use of services and in turn health outcomes ... The delivery of care in a culturally appropriate manner is an important element in determining both the willingness of people to access services and the success of any treatment or care then delivered’ (Durie 2001 in Mauri Ora Associates 2008, p 12).

Health care professionals must consider their own attitude, awareness, knowledge, and skills before any health care interactions with individuals, family/whānau.

Developing the Māori workforce across the spectrum of service providers and disciplines is essential in order for services to provide appropriate care to Māori individuals, their whānau and all New Zealanders (Ministry of Health 2013). In 2012, there were 77,929 Māori students studying in tertiary institutions in New Zealand. Of these 12,116 (15.5%) students were enrolled in health related subjects with 2285 (18.9%) students completing their health-related qualification in that year. Durie (2003) supports increasing the indigenous workforce and discusses pertinent points when looking at workforce issues for Māori. For example, if the doctor and patient are from different cultural backgrounds there is a greater likelihood of non-compliance and misdiagnosis. Furthermore Durie (2003) recommends giving priority to developing an indigenous health workforce that has both professional and cultural competence including adopting indigenous health perspectives such as spirituality into conventional health services. Emphasis should also be given to self-determination and autonomy.



Additionally, consideration must be given to the Māori worldview, cosmology and tikanga; concepts of whānau, tapu, and noa; and holistic views of health (Mauri Ora Associates 2008). Some helpful recommendations for treating Māori with diabetes can be found in the booklet prepared for the Medical Council of New Zealand by Mauri Ora Associates *Best health outcomes for Māori: Practice implications*. It can be accessed at: <https://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Maori.pdf>.

An article describing Māori models of health to promote the health of Māori can be accessed here: [www.hauora.co.nz/resources/Hauora%20KeepinguptoDate3-09.pdf](http://www.hauora.co.nz/resources/Hauora%20KeepinguptoDate3-09.pdf).

Consideration must be given to the worldview of Pacific peoples, and the specific cultural preferences of the individual and family/whānau. Important aspects are relationships, family, community and environment; holistic health and spirituality; contribution and responsibility; correctness and respect; faith, integrity and dignity (Mauri Ora Associates 2010). Some helpful recommendations for working with Pacific peoples with diabetes can be found in the booklet prepared for the Medical Council of New Zealand by Mauri Ora Associates *Best health outcomes for Pacific peoples: Practice implications*. It can be accessed at: [www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf](http://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf).

Examples of government strategies that are trying to address health inequalities are the implementation of the He Korowai Oranga: Māori Health Strategy (Ministry of Health 2014); the Māori health provider development scheme, Māori hauora/health scholarships; promotion of Māori health models; DHB Māori Health Plans; Whānau Ora programmes and funding rongoā Māori in some areas.

The report *Primary Care for Pacific People: A Pacific and health systems approach* (Southwick et al 2012) presents evidence to support improvements in primary care delivery to Pacific peoples. The full document is available here: [www.pacificperspectives.co.nz/primary-health-research.html](http://www.pacificperspectives.co.nz/primary-health-research.html) or here: [www.health.govt.nz/publication/primary-care-pacific-people-pacific-and-health-systems-approach](http://www.health.govt.nz/publication/primary-care-pacific-people-pacific-and-health-systems-approach). Below is a summary of recommendations from pages 14–18:

1. Require public funded primary care organisations to provide appropriately anonymous data for quality improvement, accountability and achievement of Better Sooner More Convenient Care (BSMC) health services for Pacific people.
2. Improve consistency in the application of capitation funding at primary health organisation (PHO) and practice level so as to achieve a population health approach which includes targeting enrolled patients with high health needs and service delivery models based on a primary care team approach. Many practices are still operating a fee-for-service regime internally.
3. Improve the use of ethnicity data. Despite near universal collection of data, there is very little analysis or use of this information to improve quality of health services and to determine who is not accessing services. Mandatory reporting of service provision and outcomes by ethnicity would be one mechanism to address health equity.
4. In locating primary care provision, the availability of public and/or private transport is a key factor affecting Pacific peoples' access to primary care.
5. Require improved appointment system approaches in order to deliver Better Sooner More Convenient Care to Pacific peoples. This will generally mean practices actively managing a balance between consultations with and without pre-arranged appointments, and flexible length of consultation and appointment times.

6. Implement strategies that derive advantage from the clustering of Pacific peoples by area of residence and by practices they choose to attend. This clustering can facilitate delivery of local solutions within these clusters to target high needs groups requiring chronic care management.
7. Support cultural competence across the health services workforce and training for health professionals in family/whānau based approaches to health and wellbeing.
8. Pacific health workers make a significant contribution to Pacific health improvement, in frontline roles offering language and cultural skills and at every level of the health system providing insights into the realities of the health system and of Pacific world views. Pacific Health and Disability Workforce Development Plan has been a key resource for supporting Pacific workforce participation at all levels of the health system. This support should be continued.
9. Development of policy for translation services and approaches to support effective communication between Pacific peoples and health care providers is required to address this complex topic.
10. Further investment in the development of ethnic-specific research methodologies to promote intercultural understanding and enhance the richness and knowledge of diverse populations within the New Zealand context.

### **Older adults and residential care**

Vision and eight objectives taken from the Ministry of Health (2002) Health of Older People strategy:

- Older people participate to their fullest ability in decisions about their health and wellbeing and in family, whānau and community life. They are supported in this by coordinated and responsive health and disability support programmes.
- Older people, their families and whānau are able to make well-informed choices about options for healthy living, health care and/or disability support needs.
- Policy and service planning will support quality health and disability support programmes integrated around the needs of older people.
- Funding and service delivery will promote timely access to quality integrated health and disability support services for older people, family, whānau and carers.
- The health and disability support needs of older Māori and their whānau will be met by appropriate, integrated health care and disability support services.
- Population-based health initiatives and programmes will promote health and wellbeing in older age.
- Older people will have timely access to primary and community health services that proactively improve and maintain their health and functioning.
- Admission to general hospital services will be integrated with any community-based care and support that an older person requires.
- Older people with high and complex health and disability support needs will have access to flexible, timely and coordinated services and living options that take account of family and whānau carer needs.

Specific to diabetes care, treat the individual not the HbA1c. Guidelines and commentary around the care of the elderly or frail living with diabetes at home or in residential care suggest individualised care plans are imperative when treating diabetes (Diabetes UK 2010). Essential components of the individualised plan are that it maximises quality of life, avoids unnecessary medical and therapeutic interventions and provides support and opportunity for self-

management where feasible (Diabetes Clinical Advisory Group 2012; Diabetes UK 2010). Additionally, the individualised care plan should consider the individual's ability to self-manage, their cognitive status, comorbidities, risk of hyper/hypoglycaemia and life expectancy (Diabetes UK 2010; Mallery 2009; McLaren et al 2013).

Key messages contained in the International Diabetes Federation (IDF) guidelines:

- Prevention through proactive risk assessment, screening and ongoing assessment.
- Planned individualised care based on an individual's functional status (mental and physical competence).
- The need for more frequent assessment – 'Older people do very well until something goes wrong, and then they often deteriorate suddenly, so those assessments might need to be more frequent than the annual ones we normally do' (Dunning, accessed at [www.medscape.com/viewarticle/817705](http://www.medscape.com/viewarticle/817705)).
- Medication management – reducing unnecessary poly-pharmacy and hyper/hypoglycaemia and prevention of other adverse events (such as falls).
- Referral to geriatricians or doctors/nurses skilled in the care of the elderly with diabetes.
- Involvement of a multidisciplinary team.

These guidelines also include decisions such as when to stop driving and end-of-life care planning.

The following framework for considering treatment goals for glycaemia, blood pressure and dyslipidaemia in older adults with diabetes is taken from the American Diabetes Association position statement (ADA 2014b). Note that this represents a consensus framework for considering treatment goals for glycaemia, blood pressure, and dyslipidaemia in older adults with diabetes. The patient characteristic categories are general concepts. Not every patient will clearly fall into a particular category. Consideration of patient/caregiver preferences is an important aspect of treatment individualisation. Additionally, a patient's health status and preferences may change over time. A lower HbA<sub>1c</sub> goal may be set for an individual if achievable without recurrent or severe hypoglycaemia or undue treatment burden. Coexisting chronic illnesses are conditions serious enough to require medications or lifestyle management and may include arthritis, cancer, CHF, depression, emphysema, falls, hypertension, incontinence, stage 3 or worse CKD, MI, and stroke. By multiple, we mean at least three, but many patients may have five or more.

- **Healthy patient** with few existing chronic illnesses, intact cognitive and functional status, and longer remaining life expectancy: Reasonable HbA<sub>1c</sub> goal <58 mmol/mol; Fasting or preprandial glucose 5–7.2 mmol/L; bedtime glucose 5–8.3 mmol/L; blood pressure <140/80 mmHg; lipids – statin unless contraindicated or not tolerated.
- **Complex/intermediate patient** with multiple coexisting chronic illnesses or 2+ instrumental activities of daily living impairments or mild to moderate cognitive impairment, and intermediate life expectancy, high treatment burden, hypoglycaemia vulnerability and fall risk: Reasonable HbA<sub>1c</sub> goal <64 mmol/mol; Fasting or preprandial glucose 5–8.3 mmol/L; bedtime glucose 6.1–11.1 mmol/L; blood pressure <140/80 mmHg; lipids – statin unless contraindicated or not tolerated.
- **Very complex patient/poor health** with long term care or end-stage chronic illnesses\* or moderate-to-severe cognitive impairment or 2+ ADL dependencies and limited life expectancy making benefits uncertain: reasonable HbA<sub>1c</sub> goal <69 mmol/mol<sup>†</sup>; fasting or preprandial glucose 5.5–10 mmol/L; bedtime glucose 5–8.3 mmol/L; blood pressure <150/90 mmHg; lipids – consider likelihood of benefit with statin (secondary prevention more so than primary).

- \* The presence of a single end-stage chronic illness such as stage 3–4 CHF or oxygen dependent lung disease, CKD requiring dialysis, or uncontrolled metastatic cancer may cause significant symptoms or impairment of functional status and significantly reduce life expectancy.
- † A1C of 69 mmol/mol (8.5%) equates to an eAG of ~200 mg/dL. Looser glycaemia targets than this may expose patients to acute risks from glycosuria, dehydration, hyperglycaemic hyperosmolar syndrome, and poor wound healing.

**NB.** Adaptations to A1C goal from % to mmol/mol were taken from NZSSD (2011) HbA1c conversion tables available here:

[www.nzssd.org.nz/HbA1c/4.%20HbA1c%20unit%20conversion%20table%20NZSSD%20Sept%202001.pdf](http://www.nzssd.org.nz/HbA1c/4.%20HbA1c%20unit%20conversion%20table%20NZSSD%20Sept%202001.pdf).

## **Mental health or cognitive problems**

The Ministry of Health (2009) suggest the following as key primary health service requirements for older people:

- Give greater attention to detecting and treating mental health and substance use problems among older adults in primary care, particularly those with chronic health problems.
- Be sensitive to the possibility that falls in older adults may be the result of AOD problems.
- PHOs, Integrated Family Healthcare Centres (IFHCs) and other primary health care organisations have contracts for packages of care with non-governmental organisations (NGOs) specialised in mental health and addiction treatment for older people.
- Potentially give lower doses of drug medications (according to best clinical practice) and monitor adverse side-effects more closely (BPAC 2008).
- Assess and promote good mental health for carers of older adults.
- Use a range of mental health screening measures with older primary care patients, including abbreviated versions of the following: Geriatric Depression Scale (GDS), Patient Health Questionnaire (PHQ), Beck Depression Inventory (BDI), General Health Questionnaire (GHQ), Center for Epidemiological Studies Depression Scale (CES-D) and Beck Anxiety Inventory – Primary Care (BAI-PC). The GDS, GHQ and CES-D have been validated with different ethnic groups and are available in multiple languages.

Based on the Ministry of Health's (2009) guidance on primary mental health care document, Cosgriff (2009) makes a number of recommendations for improving outcomes for people who have developed metabolic syndrome or have increased cardiovascular risk as a result of being on antipsychotic medication. These include:

- early cardiovascular risk assessment by either the mental health clinician or GP
- routine monitoring programme for all patients prescribed antipsychotics according to established guidelines (eg, those set by the National Mental Health Metabolic Working Group in 2006). The National Institute for Health and Care Excellence (NICE) guidelines on schizophrenia recommend that primary care is best placed to monitor and manage the physical health needs of these patients (NICE 2002)
- intervention programmes which are specially tailored to meet the needs of people with long term mental disorders and can be accessed from either primary care or secondary mental health services
- clear roles and responsibilities of the primary care and mental health practitioners with respect to patients' total health care
- opportunities for further education and professional development about the clinical issues, implications, and available interventions.

## Intellectual disability

Closer alignment of physical and mental health services is recommended as mental illness is commonly overlooked or misdiagnosed in people with intellectual disability. The Ministry of Health (2009, p 69) proposes the following as key primary mental health service requirements for people with disabilities. While focused on primary mental health services these requirements are also relevant to primary health care practitioners.

- Primary health care practices are set up to enable people with disabilities easy access to the service, including:
  - physical access, eg, ramps
  - format of health information, eg, provision of information in Braille, easy-read, or highly visual format
  - access to sign language and interpreting services.
- Primary mental health practitioners should have a broad understanding of disability issues.
- Primary mental health practitioners are skilled in detecting depression and other mental health and/or substance use problems in people with disabilities; and in undertaking mental health screening for people with disabilities.
- Primary mental health practitioners monitor people who have a disability and a mental health and/or substance use disorder closely.
- There is more collaborative care and integration between primary health care, specialist mental health and disability services.
- There is better coordination of care for patients who have co-morbid disabilities and mental health or substance use disorders.
- Primary mental health practitioners are skilled in linking service users with disability support services.

## **Advanced care planning**

Older people participate to their fullest ability in decisions about their health and wellbeing and in family, whānau and community life (Ministry of Health 2002).

Early discussion with an individual about their end-of-life care plan. The aim of a palliative approach and proactive documentation of end-of-life care is to promote comfort, control distressing symptoms including pain, hypo- and hyperglycaemia and preserve dignity. General recommendations from International Diabetes Federation (2013, p 81).

## **Individuals in prison**

The key recommendation from the ADA position statement on diabetes management in correctional facilities is that people with diabetes in prison should receive care that meets national standards. Incarceration does not change the standards (American Diabetes Association 2014a).

Follow-up on recommendations/actions being taken by the Department of Corrections as identified in the Chief Ombudsman's report of 2012: the document *Investigation of the Department of Corrections in Relation to the Provision, Access and Availability of Prisoner Health Services* (Chief Ombudsman Beverly Wakem and Ombudsman David McGee 2012) identifies that although prisoners have reasonable access to health services and in general they receive health care equivalent to members of the public, there were problems with the service and in the future the service may not be able to meet the needs of this group of people. The

Department of Corrections states it is working with the Royal New Zealand College of General Practitioners to establish an accreditation process.

### **Immigrants and refugees**

Health care for this group needs to take into consideration that:

- health care for these persons should be individualised
- extra consultation time will be required
- services of a professional interpreter may be required
- clear communication is imperative to avoid miscommunication
- cultural and religious diversity must be considered
- health care professionals should be aware that an individuals' cultural and religious beliefs and practices may impact on health care choices (Ministry of Health 2012).

Mortensen's (2011) publication suggests that while it is understood that refugees have high health and social needs, New Zealand has not yet developed 'institutional means to include this diverse ethnic group in policy, strategy and service planning' (p 1). Mortensen breaks findings from her study about responsiveness in the New Zealand public health system into three sections: responsiveness at national, regional and local levels. The study revealed that at a local level there are some signs of activation in the health sector, but that overall the 'opportunity structures' in the public health system are restricted. The services that were available to refugees had developed in response to health providers identifying health needs and initiating specific projects to address these locally. Many such projects had been funded through voluntary fundraising, charitable grants, or out of baseline health agency budgets. These activities are significant because they signal potential openings in the health structure for accommodating refugee groups and their ethnic communities. However, what is required to achieve a more responsive public health system are national changes to the ethnicity classification system used in health, an overarching framework for addressing cultural diversity, and the instruments and resources (such as policy and funding formulas) that recognise high needs in refugee groups (Mortensen 2011, p 10). It is unclear from the development of this standard whether or not these issues have been addressed or improved.

Although older, a further document (Henderson 2004) suggests that language is the most frequently identified barrier for immigrants in relation to seeking access to health care and services, and post-migration discrimination, underemployment and unemployment which are related to anxiety, depression and other health problems. Elderly immigrants and their families are often in particular need of support and there remains a need for culturally appropriate social services, social support and health services.



## Implementation examples / innovations

### Māori and Pacific peoples



#### Government strategies

Examples of government strategies that are trying to address health inequalities are the implementation of the He Korowai Oranga: Māori Health Strategy (Ministry of Health 2014); the Māori health provider development scheme, Māori hauora/health scholarships; promotion of Māori health models; DHB Māori Health Plans; Whānau Ora programmes and funding rongoā Māori in some areas.



#### Tauranga DHB

In 2010, Te Puna Hauora a Māori Health unit at Tauranga Hospital identified a need for a Kaupapa Māori service to address the higher burden of cardiovascular and diabetes experienced by Māori. The objective was to effectively bridge the continuum from primary to secondary services and back again. The model of care integrates the principles and values of the primary care organisation which also guides staff behaviour to achieve the organisation's overall vision. Values encompass Whanaungatanga respect, Kotahitanga unity, Manaakitanga support, Tikanga/Kawa leadership, Wairuatanga spiritual values, Tangata whenua customs and beliefs, and Ngakau Pono commitment to patient needs. The Kaupapa nurse has access to the hospital IT systems, and is able to download discharge summaries, access clinical data, and document in patient files outlining a plan of discharge. Effective communication between the interdisciplinary team and the diabetes specialist nurse (DNS) is an important objective to ensure the patient has a seamless journey, from one level of care to the next.



#### MidCentral DHB

MidCentral Health has set up new outreach clinics to help Pasifika people. In July 2014, new outreach clinics were set up by the Central primary health organisation (PHO) to provide easy access to health services for Pasifika people in the MidCentral District Health Board (MDHB) region. With a Pasifika population of around 8000 people in the MidCentral Health Board (MDHB) area, the need for more targeted services was recognised by the Pasifika Health Service which set out to provide an easy access health service. These clinics are free for Pasifika patients and provide nursing assessments, health checks, health education and physical activity education. The clinics support and provide linkages to other health service providers in the region such as the Children's Eczema Service and specialist nursing services for people with long term conditions. The service is also available to provide ongoing support to Pasifika families to access GPs and hospital care. For more information go to: [www.midcentraldhb.govt.nz/News/Pages/New-outreach-clinics-to-help-Pasifika.aspx#](http://www.midcentraldhb.govt.nz/News/Pages/New-outreach-clinics-to-help-Pasifika.aspx#).

## Older adults and residential care



### Taranaki DHB

Project SPLICE has been initiated by Taranaki District Health Board to address the projected health needs of its older population and people who have a long term conditions such as cardiovascular disease, diabetes and respiratory disease. This paper outlines a structure that will, within currently available funding, on an evolutionary basis enable services to refocus around the needs of people with long term conditions and of older people as their health deteriorates. Key developments include: care clusters with care manager, GP, allied health, and home based support services (HBSS); district support and development unit. More information can be found at: <http://workforceinnovation.hiirc.org.nz/page/32350/project-splice-taranaki-dhb/?jsessionid=AB340EF9C66FA0FBD366B1E89EA8377C?contentType=1461&section=18375>.



### MidCentral DHB

A new innovative model of care that sees the implementation of the nurse practitioner role in the aged care sector is increasing access and reducing health care inequalities for older people in the community. This innovation was developed to support three Levin aged residential care facilities in response to a GP shortage in the MidCentral region. Health Workforce New Zealand funded the evaluation, which was completed by the University of Auckland. The innovation was a collaboration between Masonic Village, Enliven Presbyterian, Support Central, Central primary health organisation (PHO) and the MidCentral District Health Board (DHB). The nurse practitioner was a joint appointment for the aged facilities and the Health of Older Persons team in the Central primary health organisation (PHO). The nurse practitioner had weekly scheduled time in each facility and responded to acute clinical events as needed, as well as providing Health of Older Persons services through the PHO and responding to community referrals. The nurse practitioner worked in partnership with the GPs allocated to each facility. The nurse practitioner conducted activities at the facilities such as direct care including assessing residents' levels of health independence, ordering diagnostic tests, and prescribing and reviewing medications. The nurse practitioner also provided clinical leadership for aged residential care staff and effectively advanced the team's evidence-based practice. Further information is available at: <http://workforceinnovation.hiirc.org.nz/page/43138/nurse-practitioner-role-in-aged-care/?jsessionid=AB340EF9C66FA0FBD366B1E89EA8377C?section=18375>.



### Waikato DHB

Waikato DHB's Older Persons and Rehabilitation Services has introduced a new service called Supported Transfer and Accelerated Rehabilitation Team (START), which provides intensive rehabilitation in patients' homes, enabling early seamless discharge and improved function in line with daily living.

The aim of START is to:

- provide and promote rehabilitation of patients in their home environment in collaboration with community therapy services and specialist geriatric medical care
- provide and coordinate continuing clinical assessment to recognise deterioration and need for change in nursing or medical treatment or hospital admission
- work collaboratively with long term care providers by supplying education and training to carers as appropriate and developing a care plan for long term use in the home



- provide and improve education to patients, carers and family
- undertake a collaborative and individualised programme of health promotion for each client. Particular emphasis is placed on the role of fitness and prevention of deconditioning.

More information is available here:

<http://workforceinnovation.hiirc.org.nz/page/32580/supported-transfer-and-accelerated-rehabilitation/;jsessionid=AB340EF9C66FA0FBD366B1E89EA8377C?contentType=1461&section=18375>.

## Mental health or cognitive problems



### Primary/Secondary Mental Health and Addictions Demonstration Project

A Ministry of Health project team is working with mental health and addictions implementation teams in each of five demonstration sites (West Coast, Wairarapa, Canterbury, Midlands and Alliance Health Plus) to support implementation of their primary/secondary mental health and addictions integration initiatives and to facilitate the sharing of their experience with the sector. Areas of demonstration include:

- e-notes sharing
- specialist telephone advice to GPs
- more comprehensive primary/secondary integration.

See <http://workforceinnovation.hiirc.org.nz/page/32612/primary-secondary-mental-health-and-addictions/;jsessionid=AB340EF9C66FA0FBD366B1E89EA8377C?contentType=1461&section=18375> for further information.



### Te Pou o Te Whakaaro Nui

Te Pou o Te Whakaaro Nui initiative, Equally Well, is a collaborative project aiming to improve the physical health of individuals diagnosed with severe mental illnesses. The website provides an evidence review and infographic and other useful information and can be found here: [www.tepou.co.nz/improving-services/physical-health](http://www.tepou.co.nz/improving-services/physical-health).



## Assessment tools

### **Māori and Pacific peoples**

#### Structure

Evidence of local arrangements to ensure that Māori and Pacific peoples have access to culturally appropriate diabetes.

#### Process

The proportion of Māori and Pacific people with diabetes who accessed culturally appropriate diabetes services.

---

Numerator	The number of Māori and Pacific people with diabetes who have accessed diabetes services and report satisfaction within the past year
Denominator	The number of Māori and Pacific people with diabetes

---

#### Outcome

Māori and Pacific people report satisfaction with access to diabetes services and that they are culturally appropriate.

### **Older adults and residential care**

#### Structure

Evidence of local arrangements to ensure that all older adults have collaborative yearly review of diabetes management goals where appropriate.

#### Process

The proportion of people with diabetes over the age of 65 years.

---

Numerator	The number of people in the denominator who have had a review of diabetes management goals within the past year
Denominator	The number of people with diabetes over the age of 65 years

---

#### Outcome

Partnership between health care professionals and individuals with diabetes in planning of yearly diabetes management goals where appropriate.

## **Mental health or cognitive problems**

### Structure

Evidence of local arrangements to ensure that people with mental health conditions are assessed for diabetes and managed appropriately.

### Process

- (a) The proportion of people with mental health conditions on antipsychotic medication assessed for diabetes within the past year.

---

Numerator	The number of people in the denominator receiving an assessment for diabetes within the past year
Denominator	The number of people with diagnosis of mental health condition on antipsychotic medication

---

- (b) The proportion of people with mental health conditions and diabetes who have had a diabetes review within the past year.

---

Numerator	The number of people in the denominator who have had a diabetes review within the past year
Denominator	The number of people with mental health conditions and diabetes

---

### Structure

Evidence of local arrangements to ensure that people with cognitive problems are assessed for diabetes, which is then managed appropriately.

### Process

- (a) The proportion of people with cognitive problems who are assessed for diabetes.

---

Numerator	The number of people in the denominator receiving an assessment for diabetes
Denominator	The number of people with cognitive problems

---

- (b) The proportion of people with cognitive problems and diabetes whose diabetes is managed appropriately.

---

Numerator	The number of people in the denominator whose diabetes is managed appropriately
Denominator	The number of people with cognitive problems and diabetes

---

### Outcome

Appropriate management and ongoing monitoring of individuals with mental health or cognitive problems with diabetes.

## **Advanced care planning**

### Structure

Evidence of local arrangements to ensure that people approaching end of life are offered a discussion about their plans.

### Process

The proportion of people with diabetes approaching end of life who have an appropriate diabetes management plan.

---

Numerator	The number of people in the denominator approaching end of life who have an appropriate diabetes management plan
Denominator	The number of people with a diagnosis of diabetes

---

### Outcome

Partnership between health care professionals and individuals with diabetes in end-of-life care planning.

## **Individuals in prison**

### Structure

Evidence of local arrangements to ensure that all individuals on commencement of sentence are assessed for risk of diabetes and screened appropriately (unless already diagnosed).

### Process

The proportion of people commencing prison sentence with identified risk factors for diabetes.

---

Numerator	The number of people in the denominator with risk factors for diabetes commencing prison sentence
Denominator	The number of people in prison

---

### Outcome

Establish a baseline of diabetes condition in individuals commencing prison sentences.

### Structure

Evidence of local arrangements to ensure that all prisoners receive ongoing monitoring in accordance with national guidelines and locally agreed clinical pathways.

### Process

The proportion of people in prison with diabetes.

---

Numerator	The number of people in the denominator with diabetes receiving ongoing monitoring of diabetes
Denominator	The number of people in prison

---

### Outcome

Reduction of incidence of long term diabetes complications.

## Immigrants and refugees

### Structure

Evidence of local arrangements to ensure that all immigrants and refugees have access to diabetes services and with appropriate translation services as required.

### Process

The proportion of immigrants/refugees with diabetes accessing primary care services within the past year.

---

Numerator	The number of people in the denominator accessing services for diabetes care within the past year
Denominator	The number of immigrants with diabetes

---



## Resources

### **Māori and Pacific peoples**

Some helpful recommendations for **working with Māori with diabetes** can be found in the booklet prepared for the Medical Council of New Zealand by Mauri Ora Associates – *Best health outcomes for Māori: Practice implications*. It can be accessed at:

<https://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Maori.pdf>.

**Māori models of health** to promote the health of Māori:

[www.hauora.co.nz/resources/Hauora%20KeepinguptoDate3-09.pdf](http://www.hauora.co.nz/resources/Hauora%20KeepinguptoDate3-09.pdf).

Some helpful recommendations for **working with Pacific peoples with diabetes** can be found in the booklet prepared for the Medical Council of New Zealand by Mauri Ora Associates – *Best health outcomes for Pacific peoples: Practice implications*. It can be accessed at:

[www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf](http://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf).

The report '**Primary care for Pacific people: A Pacific and health systems approach**' (Southwick et al 2012) presents evidence to support improvements in primary care delivery to Pacific peoples. The full document is available here: [www.pacificperspectives.co.nz/primary-health-research.html](http://www.pacificperspectives.co.nz/primary-health-research.html) or here: [www.health.govt.nz/publication/primary-care-pacific-people-pacific-and-health-systems-approach](http://www.health.govt.nz/publication/primary-care-pacific-people-pacific-and-health-systems-approach).

**The Ministry of Health Pacific Health and Disability Workforce Development Plan** is a key resource for supporting Pacific workforce participation at all levels of the health system. It can be accessed at:

<https://www.health.govt.nz/system/files/documents/publications/pacifichealthanddisabilityworkforcedevelopmentplan.pdf>.

## **Older adults and residential care**

**Health of older people strategy** (Ministry of Health 2002) available:  
[www.health.govt.nz/publication/health-older-people-strategy](http://www.health.govt.nz/publication/health-older-people-strategy).

### **Diabetes care for aged residential care facilities in Hawkes Bay (2012)**

[www.healthhb.co.nz/wp-content/uploads/2012/11/Diabetes-Care-for-Aged-Residential-Care-Facilities-in-Hawkes-Bay-2012-Reference-Book.pdf](http://www.healthhb.co.nz/wp-content/uploads/2012/11/Diabetes-Care-for-Aged-Residential-Care-Facilities-in-Hawkes-Bay-2012-Reference-Book.pdf).

### **Diabetes care guidelines for older adults:**

[www.bd.com/us/diabetes/page.aspx?cat=7001&id=10006](http://www.bd.com/us/diabetes/page.aspx?cat=7001&id=10006).

### **Seniors living with diabetes** (American)

[www.diabetes.org/living-with-diabetes/treatment-and-care/seniors/](http://www.diabetes.org/living-with-diabetes/treatment-and-care/seniors/).

### **Diabetes control in older people** – treat the patient not the HbA<sub>1c</sub>:

[www.bmj.com/content/bmj/346/bmj.f2625.full.pdf](http://www.bmj.com/content/bmj/346/bmj.f2625.full.pdf).

### **Living healthy with diabetes** – a guide for adults 55 and up (slightly American perspective):

<http://main.diabetes.org/dorg/PDFs/living-with-diabetes/living-healthy-with-diabetes-guide.pdf>.

### **Treatment of type 2 diabetes mellitus in the older patient**

[www.uptodate.com/contents/treatment-of-type-2-diabetes-mellitus-in-the-older-patient#H1](http://www.uptodate.com/contents/treatment-of-type-2-diabetes-mellitus-in-the-older-patient#H1).

Diabetes guidelines for **elderly residents in long-term care (LTC) facilities** pocket reference (Canadian Nova Scotia):

<http://diabetescare.nshealth.ca/sites/default/files/files/LTCPocketReference.pdf>.

**Treating hyperlipidemia** in severe and very severe frailty, treating hypertension in frailty, diabetes guidelines for the frail elderly, diabetes guidelines for elderly residents in long term care: <http://pathclinic.ca/resources/> (Canadian path (palliative and therapeutic harmonisation) clinic).

### **Medical aspects of fitness** to drive

[www.nzta.govt.nz/resources/medical-aspects/docs/medical-aspects.pdf](http://www.nzta.govt.nz/resources/medical-aspects/docs/medical-aspects.pdf).

### **Food and nutrition guidelines** for healthy older people

[www.moh.govt.nz/notebook/nbbooks.nsf/o/84bbe5f068e613a5cc25764d00671d2e/\\$FILE/food-nutrition-guidelines-older-people-consultation-sep09.pdf](http://www.moh.govt.nz/notebook/nbbooks.nsf/o/84bbe5f068e613a5cc25764d00671d2e/$FILE/food-nutrition-guidelines-older-people-consultation-sep09.pdf).

## **Mental health or cognitive problems**

**Mental health** – Refer to Te Pae Kaiawha, the Ministry of Health-commissioned mental health website designed for DHBs PHOs and primary mental health practitioners to access information about the primary health services delivery models and tools being used in different parts of New Zealand. Te Pae Kaiawha: [www.primarymentalhealth.org.nz/](http://www.primarymentalhealth.org.nz/).

### **Emotional and psychological support and care** in diabetes 2010:

[www.diabetes.org.uk/Documents/Reports/Emotional\\_and\\_Psychological\\_Support\\_and\\_Care\\_in\\_Diabetes\\_2010.pdf](http://www.diabetes.org.uk/Documents/Reports/Emotional_and_Psychological_Support_and_Care_in_Diabetes_2010.pdf).

**The use of antipsychotics in residential aged care** – clinical recommendations developed by the RANZCP Faculty of Psychiatry of Old Age (New Zealand):  
[www.bpac.org.nz/a4d/resources/docs/RANZCP\\_Clinical\\_recommendations.pdf](http://www.bpac.org.nz/a4d/resources/docs/RANZCP_Clinical_recommendations.pdf)

**Te Pou o Te Whakaaro Nui (the National Centre of Mental Health Research, Information and Workforce Development)** has published two documents pertaining to disability in New Zealand. The first is a review of literature and the second is a report commissioned by Health Workforce New Zealand and the Ministry of Health Disability Support Service group to progress the ‘Disability Support Services Workforce Action Plan’. Both documents can be accessed from here: [www.tepou.co.nz/library/tepou/improving-access-to-primary-care-for-disabled-people](http://www.tepou.co.nz/library/tepou/improving-access-to-primary-care-for-disabled-people).

### **Advanced care planning**

**The Conversation Project** focuses on advanced care planning:  
<http://theconversationproject.org/>.

The starter kit has great tips for starting the discussion around end-of-life care:  
<http://theconversationproject.org/starter-kit/intro/>.

**A New Zealand film** on advanced care planning, ‘Living for today planning for tomorrow’:  
[www.advancecareplanning.org.nz/healthcare/](http://www.advancecareplanning.org.nz/healthcare/).

**Advanced care planning:**  
[www.advancecareplanning.org.nz/](http://www.advancecareplanning.org.nz/).

‘**A good death**’ is a film about end-of-life care and advanced care planning:  
<http://agooddeath.co.nz/>.

Best Practice Advocacy Centre (BPAC) NZ (2006) **Providing palliative care to Māori** available at: [www.bpac.org.nz/resources/campaign/palliative/palliative\\_Maori.asp](http://www.bpac.org.nz/resources/campaign/palliative/palliative_Maori.asp).

BPAC NZ (2011) **Treatment for the dying patient:** The Liverpool Care Pathway available at: [www.bpac.org.nz/BPJ/2011/june/lcp.aspx](http://www.bpac.org.nz/BPJ/2011/june/lcp.aspx).

BPAC NZ (2011) **End-of-life care for patients with chronic disease:** The need for a paradigm shift available from: [www.bpac.org.nz/BPJ/2011/november/end-of-life.aspx](http://www.bpac.org.nz/BPJ/2011/november/end-of-life.aspx).

**Hospice NZ Standards for Palliative Care** (2012). The purpose of this document is to ensure the best possible care for all people in New Zealand as they approach the end of their life and die. Available here: [www.southerncancernetwork.org.nz/file/fileid/45559](http://www.southerncancernetwork.org.nz/file/fileid/45559).

Ageing and indigenous health in Aotearoa New Zealand (Australian and New Zealand Society for Geriatric Medicine 2013):  
[www.anzsgm.org/documents/PositionStatementNo24AgeingMaoriHealthinAotearoa.pdf](http://www.anzsgm.org/documents/PositionStatementNo24AgeingMaoriHealthinAotearoa.pdf).

## Individuals in prison

A **HealthEd leaflet** made available in hard copy to all men's prisons in New Zealand in 2013 is available online here: <https://www.healthed.govt.nz/system/files/resource-files/DC1306.pdf>.

'This diabetes leaflet encourages readers to find out more about diabetes and whether they are at risk of having diabetes. It provides information for prisoners, their families and Corrections staff about diabetes, including who is most at risk, possible symptoms, and the treatment of diabetes.' <https://www.healthed.govt.nz/resource/do-i-need-find-out-about-diabetes-o>.

The American Diabetes Association has put out a position statement about diabetes management in correctional institutions (American Diabetes Association 2014a).

## Immigrants and refugees

**Refugee health care** is a handbook for health professionals:

[www.health.govt.nz/system/files/documents/publications/refugee-health-care-a-handbook-for-health-professionalsv2.pdf](http://www.health.govt.nz/system/files/documents/publications/refugee-health-care-a-handbook-for-health-professionalsv2.pdf).

**Information for visitors and immigrants to New Zealand** – what are the diabetes services like in New Zealand?:

[www.diabetes.org.nz/about\\_diabetes/information\\_for\\_visitors\\_and\\_immigrants\\_to\\_new\\_zealand](http://www.diabetes.org.nz/about_diabetes/information_for_visitors_and_immigrants_to_new_zealand).

**Diabetes prevention education programme** (Australian) for immigrant and refugee women:

[www.mcwh.com.au/downloads/2010/Oct10/Diabetes\\_Healthy\\_Living\\_Project\\_Final\\_Report.pdf](http://www.mcwh.com.au/downloads/2010/Oct10/Diabetes_Healthy_Living_Project_Final_Report.pdf).

**Evidence based clinical guidelines for immigrants and refugees** (a Canadian document): [www.ncbi.nlm.nih.gov/pmc/articles/PMC3168666/pdf/183e824.pdf](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3168666/pdf/183e824.pdf).



## References

Allen K, Frier B, Strachan M. 2004. The relationship between type 2 diabetes and cognitive dysfunction: Longitudinal studies and their methodological limitations. *European Journal of Pharmacology* 490: 169–175. doi: 10.1016/j.ejphar.2004.02.054.

American Diabetes Association. 2014a. Diabetes management in correctional institutions. *Diabetes Care* 37(S1): S104–S111. doi: 10.2337/dc14-S104.

American Diabetes Association. 2014b. Standards of medical care in diabetes – 2014. *Diabetes Care* 27(S1): S14–S80. doi: 10.2337/dc14-S014.

Australian Diabetes Educators Association. 2003. *Guidelines for the Management and Care of Diabetes in the Elderly*. Weston, ACT, Australia: Australian Diabetes Educators Association.

Balhara Y. 2011. Diabetes and psychiatric disorders. *Indian Journal of Endocrinology and Metabolism* 15(4): 274–83. doi: 10.4103/2230-8210.85579.

Center for Persons with Disabilities. nd. *Cognitive Disabilities*. Retrieved from <http://webaim.org/articles/cognitive/>.



- Centers for Disease Control and Prevention. 2014. *Minority Health*. Retrieved from [www.cdc.gov/minorityhealth/populations/atrisk.html#Other](http://www.cdc.gov/minorityhealth/populations/atrisk.html#Other).
- Central Cancer Network. 2012. *Vulnerable Populations and Palliative Care*. Retrieved from [www.centralcancernetwork.org.nz/page/pageid/2145877460/\\_2012\\_Vulnerable\\_Populations\\_and\\_Palliative\\_Care\\_](http://www.centralcancernetwork.org.nz/page/pageid/2145877460/_2012_Vulnerable_Populations_and_Palliative_Care_).
- Chief Ombudsman Beverly Wakem, Ombudsman David McGee. 2012. Investigation of the Department of Corrections in relation to the provision, access and availability of prisoner health services. Wellington: Office of the Ombudsman.
- Constantino MI, Molyneaux L, Limacher-Gisler F, et al. 2013. Long-term complications and mortality in young-onset diabetes: type 2 diabetes is more hazardous and lethal than type 1 diabetes. *Diabetes Care* 36(1): 3863–9. doi: 10.2337/dc12-2445.
- Coppell KJ, Mann JI, Williams SM, et al. 2013. Prevalence of diagnosed and undiagnosed diabetes and prediabetes in New Zealand: findings from the 2008/09 Adult Nutrition Survey. *The New Zealand Medical Journal* 126(1370): 5555.
- Department of Corrections. nd. *Health Care*. Retrieved from [www.corrections.govt.nz/working\\_with\\_offenders/prison\\_sentences/being\\_in\\_prison/health\\_care.html](http://www.corrections.govt.nz/working_with_offenders/prison_sentences/being_in_prison/health_care.html).
- Diabetes Clinical Advisory Group. 2012. *Diabetes Care for Aged Residential Care Facilities in Hawke's Bay*. Hawke's Bay: Health Hawke's Bay and Hawke's Bay District Health Board.
- Diabetes UK. 2010. *Good Clinical Practice Guidelines for Care Home Residents with Diabetes*. United Kingdom: Diabetes UK.
- Disabled World. nd. *Cognitive Disabilities Information*. Retrieved from [www.disabled-world.com/disability/types/cognitive/](http://www.disabled-world.com/disability/types/cognitive/).
- Foliaki S, Pearce N. 2003. Prevention and control of diabetes in Pacific people. *British Medical Journal* 327(7412): 437–9. doi:10.1136/bmj.327.7412.437.
- Fox C, Richardson K, Maidment ID, et al. 2011. Anticholinergic medication use and cognitive impairment in the older population: The Medical Research Council Cognitive Function and Ageing Study. *Journal of the American Geriatrics Society* 59(8): 1477–83. doi: 10.1111/j.1532-5415.2011.03491.x.
- Harwood M, Tipene-Leach D. 2007. Diabetes. In Robson B, Harris R (eds) *Hauora: Māori Standards of Health IV. A study of the years 2000–2005* (pp 160–7). Wellington: Te Roopu Rangahau Hauora a Eru Pomare. Retrieved from [www.otago.ac.nz/wellington/otago067748.pdf](http://www.otago.ac.nz/wellington/otago067748.pdf).
- Henderson A. 2004. *The Settlement Experiences of Immigrants (excluding Refugees) in New Zealand: An overview paper completed for the Auckland Regional Settlement Strategy*. Palmerston North, New Zealand: International Pacific College.
- International Diabetes Federation. 2013. *Managing Older People with Type 2 Diabetes: Global guideline*. Brussels, Belgium: International Diabetes Federation.
- Kingi TR. 2007. The Treaty of Waitangi: A framework for Māori health development. *New Zealand Journal of Occupational Therapy* 54(1): 4–10.
- Llorente M, Urrutia V. 2006. Diabetes, psychiatric disorders, and the metabolic effects of antipsychotic medications. *Clinical Diabetes* 24(1): 18–24. doi: 10.2337/diaclin.24.1.18.
- Mauri Ora Associates. 2008. *Best Health Outcomes for Māori: Practice implications*. Retrieved from <https://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Maori.pdf>.

- Mauri Ora Associates. 2010. *Best Health Outcomes for Pacific Peoples: Practice implications*. Retrieved from [www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf](http://www.mcnz.org.nz/assets/News-and-Publications/Statements/Best-health-outcomes-for-Pacific-Peoples.pdf).
- Mallery L. 2009. Diabetes guidelines for elderly residents in long-term care (LTC) facilities. *Diabetes Care in Nova Scotia* 19(1): 1–2. Retrieved from <http://diabetescare.nshealth.ca/sites/default/files/files/LTCBackground2010.pdf>
- Mayo Foundation for Medical Education and Research. 1998–2014. *Mental Illness – Definition*. Retrieved from [www.mayoclinic.org/diseases-conditions/mental-illness/basics/definition/con-20033813](http://www.mayoclinic.org/diseases-conditions/mental-illness/basics/definition/con-20033813).
- McCrimmon R, Ryan C, Frier B. 2012. Diabetes and cognitive dysfunction. *Lancet* 379: 2291–9. doi: 10.1016/S0140-6736(12)60360-2.
- McLaren L, Quinn T, McKay G. 2013. Diabetes control in older people: treat the patient not the HbA1c. *BMJ* 346. doi:10.1136/bmj.f2625.
- Merriam-Webster. 2014. *Online Dictionary and Thesaurus*. Retrieved from [www.merriam-webster.com](http://www.merriam-webster.com).
- Ministry of Health. 2002. *Health of Older People Strategy*. Retrieved from [www.health.govt.nz/publication/health-older-people-strategy](http://www.health.govt.nz/publication/health-older-people-strategy).
- Ministry of Health. 2009. *Towards Optimal Primary Mental Health Care in the New Primary Care Environment: A draft guidance paper*. Wellington: Ministry of Health.
- Ministry of Health. 2012. *Refugee Health Care: A handbook for health professionals*. Wellington: Ministry of Health. Retrieved from [www.health.govt.nz/system/files/documents/publications/refugee-health-care-a-handbook-for-health-professionalsv2.pdf](http://www.health.govt.nz/system/files/documents/publications/refugee-health-care-a-handbook-for-health-professionalsv2.pdf).
- Ministry of Health. 2014. *Residential Care Questions and Answers: What is residential care?* Retrieved from [www.health.govt.nz/our-work/life-stages/health-older-people/long-term-residential-care/residential-care-questions-and-answers](http://www.health.govt.nz/our-work/life-stages/health-older-people/long-term-residential-care/residential-care-questions-and-answers).
- Mortensen A. 2011. Public health system responsiveness to refugee groups in New Zealand: Activation from the bottom up. *Social Policy Journal of New Zealand* 37. Retrieved from <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj37/09-mortensen.pdf>.
- Munshi M, Grande L, Hayes M, et al. 2006. Cognitive dysfunction is associated with poor diabetes control in older adults. *Diabetes Care* 29(8): 1794–9. doi: 10.2337/dc06-0506.
- Roberts R, Knopman D, Przybelski S, et al. 2014. Association of type 2 diabetes with brain atrophy and cognitive impairment. *Neurology* 82: 1132–41.
- Sinclair A, Morley J, Rodriguez-Manas L, et al. 2012. Diabetes mellitus in older people: position statement on behalf of the International Association of Gerontology and Geriatrics (IAGG), the European Diabetes Working Party for Older People (EDWPOP), and the International Task Force of Experts in Diabetes. *The Journal of Post-Acute and Long-Term Care Medicine* 13(6): 497–502.
- Southwick M, Kenealy T, Ryan D. 2012. *Primary Care for Pacific People: A Pacific and health systems approach*. Retrieved from [www.pacificperspectives.co.nz/primary-health-research.html](http://www.pacificperspectives.co.nz/primary-health-research.html).
- Statistics New Zealand. nd. *Health and Pacific Peoples in New Zealand*. Retrieved from [www.stats.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/pacific\\_peoples/pacific-progress-health/overall-health.aspx](http://www.stats.govt.nz/browse_for_stats/people_and_communities/pacific_peoples/pacific-progress-health/overall-health.aspx).

Te Pou o Te Whakaaro Nu: The National Centre of Mental Health Research Information and Workforce Development. 2013. *Improving Access to Primary Care for Disabled People*. Auckland: Te Pou.

Williams R, Riley P. 2006. The year of the disadvantaged and the vulnerable. *Diabetes Voice* 51(1): 30–3. Retrieved from [www.idf.org/sites/default/files/attachments/article\\_401\\_en.pdf](http://www.idf.org/sites/default/files/attachments/article_401_en.pdf).

World Health Organization. 2013. *Mental Health: A state of well-being*. Retrieved from [www.who.int/features/factfiles/mental\\_health/en/](http://www.who.int/features/factfiles/mental_health/en/).