Australian Government
Department of Health and Ageing

hacc
home and community care

Meeting the Food Needs of Queensland's Culturally and Linguistically Diverse (CALD) Aged Population: A Review of the Literature

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November 2011

QUT

Diversicare
Caring For People

Ethnic Communities Council of Queensland

HACC is a joint Australian Government-State funded program.

Diversicare

Diversicare is a Queensland aged care organisation that provides culturally appropriate, community based and in-home care for older people and younger people with disabilities from all backgrounds. Diversicare also provides education and training, resources and projects to support aged care service providers and cultural communities[1, 2]. Diversicare's core business is to provide 'equal access to culturally appropriate community care services to frail aged and disability CALD members of the community'[2]. Diversicare coordinates ethno-specific respite activities and also administers a range of special programs aimed at improving the access of CALD peoples to culturally appropriate aged care services[1]. These programs include:

1. **Partners in Culturally Appropriate Care (PICAC)**
2. **HACC Multicultural Advisory Service (MAS)**
3. **Community Partners Program (CPP) - Diversicare's CPP project focuses on the Vietnamese, Filipino, German-speaking and Finnish communities who reside in the Brisbane, Moreton Bay and Sunshine Coast regions.**

Queensland University of Technology

Queensland University of Technology (**QUT**) is a leading university that strives to deliver academic strength whilst engaging with professions, industry, government and the broader community[3]. Located in Brisbane, Queensland, QUT is a diverse university, teaching Australians as well as students from over 100 countries[3]. QUT's vision includes equipping students with the abilities to work in a diverse world, to deliver high-impact research and development that seeks to obtain commercial and practical benefits for the community and also to build upon strategies partnerships with both professional and broader communities.[4]

This project was funded by the Queensland Department of Communities, Home and Community Care program, who have engaged Diversicare to undertake work in meeting the food needs of Queensland's ageing CALD community. This work was carried out in conjunction with QUT School of Public Health.

Suggested citation: Millichamp, A & Gallegos, D. 2011. *Meeting the Food Needs of Queensland's Culturally and Linguistically Diverse (CALD) aged: A review of the literature*. Brisbane: Queensland University of Technology

Glossary, definitions and acronyms

Definitions

Aged **Older people**	Aged and older people are used interchangeably to refer to people aged 65 years or older, unless otherwise specified.
Culturally and Linguistically Diverse (CALD)	Culturally and linguistically diverse is a term used to capture people who were born in a country outside of Australia, whose language and/or culture are different to that which dominates in Australia.
Emerging communities	Groups which comprise small numbers in one population centre, who may have non-existent or weak support structures, lack extensive family networks and/or do not have experience and familiarity with government and mainstream services[4].
Net Overseas Migration	Comprised of offshore arrivals under the permanent migration and humanitarian programs, temporary long stay migrants (e.g. students) and subclass 457 skilled workers, as well as the movement of Australian residents and New Zealand citizens[5].
Non-English Speaking Background	People who speak a language other than English as their native tongue.

Acronyms

ABS	Australian Bureau of Statistics
CALD	Culturally and linguistically diverse
CPP	Cultural Partners Program
EER	Estimated Energy Requirement
HACC	Home and Community Care
HACC MAS	Home and Community Care Multicultural Advisory Service - a joint Commonwealth and State government funded HACC initiative (managed in Queensland by Diversicare and backed by the Ethnic Communities Council of Qld Ltd) that aims to improve the access to HACC services by CALD people who are HACC eligible.
MOW	Meals on Wheels
NESB	Non-English Speaking Background
NOM	Net Overseas Migration
PICAC	Partners in Community Aged Care – a Commonwealth Department of Health and Ageing program that aims to equip aged care providers to deliver culturally appropriate aged care to CALD older people and improve CALD communities' access to such care
RDI	Recommended Dietary Intake

Executive Summary

This literature review provides an overview of the evidence available regarding community based aged care services for culturally and linguistically diverse (**CALD**) older people living in Queensland. It will explore Australia's, and in particular Queensland's, demographic profile of CALD aged persons, existing HACC services (including a focus on food services) and their use by CALD elderly, barriers to aged care and HACC service use for CALD elderly, nutrition and food security status in community-dwelling elderly and explores examples of HACC food services that seek to meet CALD elderly cultural food needs. It will also be used to inform the development of a food assessment checklist for CALD elderly using community-based aged care food services.

Australia and Queensland have ageing populations with the majority of older people living in the community rather than in institutions. This aged population is considerably diverse with CALD older people increasing ageing faster than the Anglo-Celtic aged population. Culture has a significant role to play in the development and delivery but is a dynamic concept, associated with a wide range of beliefs and practices that impact on service usage.

In Australia, aged care services populate both a spectrum of care intensity (from basic community care through to high level residential care) and a spectrum of cultural specificity (from generic service providers through to ethno-specific services). Whilst there are national and state-based policies designed to support fair and equitable access to and delivery of aged care services to CALD elderly, it is acknowledged that CALD elderly are generally under-represented in terms of aged care service usage. In particular, the National/State and Territory funded Home and Community Care (**HACC**) program which aims to support aged and disabled people to continue living in the community is under-used by CALD elderly. Barriers limiting service uptake by CALD elderly have been identified as being poor knowledge of services, cultural inappropriateness of services, language and cultural barriers, poor communications and linkages between CALD groups and aged care service providers and limited availability of bilingual/ bicultural employees.

CALD aged and in particular, new and emerging communities and refugees have been identified as vulnerable groups who require targeted assistance to ensure optimal health and wellbeing outcomes. The increased needs of these groups, combined with the increasingly diverse cultural composition of Australia's and Queensland's aged CALD population mean that it is imperative that aged care services plan and deliver culturally appropriate services that support equitable service access and uptake.

Nutrition is an important contributor to the health, wellbeing, productivity, self-sufficiency and overall quality of life for aged people. Ageing increases nutritional requirements and can potentially limit an older person's ability to access, prepare and consume nutritious foods. Being from a CALD background may add another dimension further contributing to poor nutritional outcomes. Malnutrition is a significant public health issue within the aged population with estimates of prevalence being between 10-30%. However, these figures are largely representative of elderly in acute care or institutionalised settings. Little is known about the nutritional status of community-dwelling elderly in Australia and less still about the nutritional status of community-dwelling CALD elderly.

Nutrition screening is an important method for identifying elderly people who are at risk of malnutrition or who are malnourished. Such screening can provide impetus to direct interventions to improve nutritional status. Nutrition screening in the community setting must be quick and easy to perform and several tools have been developed for this purpose. The Malnutrition Screening Tool and the Victorian HACC Nutrition Screening Tool are recommended as they fulfil the requirements of being brief, simple and do not require measurements or calculations. These tools, however, are yet to be validated in the community-dwelling aged population. They are also yet to be validated within specific aged CALD populations. It is recommended that validation of these tools is carried out as a priority.

Limited food access and availability (food security) has been identified as a potential concern amongst all aged populations. At a population level, food security has been estimated to affect around 5% of the population; however this is known to underestimate prevalence by approximately 5% in the general population and by 20% among populations identified at risk. Little is known of the food security status of Australians from CALD backgrounds and in particular of older CALD populations in Australia. One small study of CALD elderly in Australia reported that around one quarter of participants experienced some barriers to accessing food. Further research is required to determine the prevalence and drivers of food insecurity in this group.

Food preferences are highly individual and are impacted by multiple factors, not least of which is culture. Food preferences impact food choice, which then impacts nutritional status. Some research shows that elderly people are more likely to continue to consume a cuisine that reflects their cultural traditions. However, food preferences and patterns are also known to be dependent on the level of acculturation, life experiences and cognitive function. Understanding food preferences of elderly people is essential to designing and delivering food services to meet their needs.

HACC food services are well placed to improve the nutrition and food security status of the CALD aged. Little research has been conducted locally that explores the acceptability of HACC food services amongst CALD elderly and the barriers to service uptake. There is some evidence from New Zealand that suggests that health professionals perceive that Meals on Wheels food offerings are not culturally appropriate and that older adults reported negative perceptions of the service centring on the repetitive menu cycle, lack of choice and similarity to hospital meals. In NSW and Victoria, there are examples of HACC funded food services implementing strategies to provide culturally appropriate food services. It is suggested that additional research is carried out to explore the acceptability, food service preferences and barriers that CALD elderly experience in relation to HACC food services. This can then inform the appropriate development of culturally appropriate services to meet cultural food needs.

On the whole, this review has reinforced the strong need for evidence-based research to evaluate the effect of HACC food services on CALD client outcomes and to direct future service development and delivery so that nutrition and health outcomes can be optimised within this vulnerable population.

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1. Background

Australia has a significant culturally and linguistically diverse (**CALD**) population and along with the general Australian community, this group is ageing[7, 8]. Immigration patterns mean that the aged CALD population consists of elderly who have been in Australia for a considerable period as well as new and emerging CALD communities, all of whose cultural needs need to be considered in aged care service planning and development[9].

Aged care services in Australia populate a spectrum of care ranging from rudimentary community-based aged care services through to high level residential care for those with significant physical and/or cognitive impairment. Community aged care services aim to support the independence of the elderly so as to enable them to remain living in the community rather than entering residential and institutional care[10]. Home and Community Care (**HACC**) services are the predominant way in which such aged care services are delivered.

The elderly, and in particular CALD elderly, are identified as a vulnerable group who have unique and significant needs[11] to support optimal health and wellbeing outcomes. It is understood that CALD elderly may face significant barriers to accessing appropriate aged care services[12, 13] and are not adequately represented in terms of aged care service uptake[14, 15]. The Federal Government has responded to these issues through initiatives such as Partners in Culturally Appropriate Care PICAC)[16] and the Community Partners Program (CPP)[17]. In acknowledgement of the importance of this group, engaging CALD clients in HACC services is a Key Performance Indicator (KPI) of the HACC Program[15].

Nutrition is essential to the maintenance of good health[18], and malnutrition in the community-dwelling elderly population is a serious public health concern[19]. Not only does the ageing process itself present barriers to the attainment of optimal nutrition[20], but being aged and of a CALD background presents additional barriers due to diverse factors such as communication constraints and lack of universal access to culturally sensitive aged care food services. Unfortunately, little is known about the health and nutrition status, nor the food security status, of community-dwelling CALD elderly in Australia.

This literature review informs the development of a food assessment checklist for CALD elderly using community-based aged care food services. It will explore Australia's, and in particular Queensland's, demographic profile of CALD aged persons, existing HACC services (including a

focus on food services) and their use by CALD elderly, barriers to aged care and HACC service use for CALD elderly, nutrition and food security status in community-dwelling elderly and explores examples of HACC food services that seek to meet CALD elderly cultural food needs. This review will provide an understanding of the interplay between:

1. **The demographics of Australia's and Queensland's ageing CALD community;**
2. **The diverse and dynamic health, social, cultural and nutritional needs of the ageing CALD community;**
3. **CALD usage and acceptance of HACC services (in particular food-specific HACC services; and**
4. **Evidence for the application and effectiveness of nutritional screening and food security assessment within the ageing community.**

It will make recommendations on directions for future service development, research and policy that aims to support meeting the food and nutrition needs of CALD elderly in Australia, and in particular, Queensland.

2. Methodology

A comprehensive systematic literature search was conducted exploring relevant published and unpublished (grey) literature from Australia and abroad. A range of electronic databases were searched including CINAHL, Informit, MEDLINE, Google Scholar, PSYCHinfo, EBSCOHost and PubMed. A Google Chrome search was conducted to identify any literature not already sourced. The Diversity Health Institute's Clearinghouse was also searched http://203.32.142.106/clearinghouse for relevant projects and reports. Key government, aged care service and ethnic services websites were also searched. These are listed in Table 1. Reference lists of key manuscripts were also scanned for relevant documents.

Key search terms included: (ethnic OR minority OR culturally and linguistically diverse OR non-English speaking OR Greek OR Italian OR Polish OR Indian OR); (food* OR nutrition* OR screening); (aged OR elder*) AND (aged care OR community living OR, independent OR, home dwelling OR home and community care) in combination with each other. The search was limited to English language documents published between 2000 and 2011, however, if a body of work was identified that was considered seminal or relevant that was produced prior to 2000, it was also

included. Inclusion criteria included Australian and international literature that contained information relating to one or more of the following domains:

1. **Community-based aged care services, particularly culturally appropriate aged care services**
2. **Nutrition status and/or screening of community-dwelling elderly and/or CALD elderly**
3. **Food preferences of CALD elderly**
4. **Nutritional status of community-dwelling CALD elderly**
5. **Food security of community-dwelling CALD elderly**
6. **Cultural diversity and health priorities of Australia's CALD aged**
7. **Demographic features of Australia's and Queensland's CALD aged population, including aged care service usage.**

Articles and reports were excluded if, upon review of the abstract, they did not contain information pertaining to one of the above domains. Abstracts were read by a single researcher (AM). Of note, there was little published information sourced on nutrition status, nutrition screening or food security status of CALD elderly, especially those who were community-dwelling.

Table 1: Significant websites and documents searched as part of this review

Government Body/Department	**URL**
Australian Bureau of Statistics	http://www.abs.gov.au/
Australian Institute of Health and Welfare	http://www.aihw.gov.au/
Queensland Health: Home and Community Care	http://www.health.qld.gov.au/hacc/
Commonwealth Government Department of Health and Ageing - Home and Community Care	http://www.health.gov.au/internet/main/publishing.nsf/content/hacc-index.htm
Commonwealth Government: Department of Health and Ageing - Aged Care	http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-whatnew.htm-copy2
Commonwealth Government Department of Health and Ageing - Partners in Culturally Appropriate Care (PICAC) Program	http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-specneed-picac.htm
Department of Immigration and Citizenship	http://www.immi.gov.au/

Government Body/Department	URL
Queensland Health: CALD Profile	http://www.health.qld.gov.au/multicultural/health_workers/hsdcald_profiles/CALD_Queensland.pdf
Queensland Health: Multicultural Policy Statement	http://www.health.qld.gov.au/multicultural/policies/multicul.pdf
Queensland Government: Queensland Multicultural Policy 2011: A multicultural future for us all	http://www.communities.qld.gov.au/multicultural/about-us/queensland-multicultural-policy-a-multicultural-future-for-all-of-us
Engaging Queenslanders: an introduction to working with culturally and linguistically diverse (CALD) communities	http://www.health.qld.gov.au/multicultural/policies/multicul.pdf
Aged Care Organisation/Body	**URL**
Aged Care Australia	http://www.agedcareaustralia.gov.au/
Aged and Community Services Australia	http://www.agedcare.org.au/
Aged Care Queensland	http://www.acqi.org.au/
Diversicare	http://www.diversicare.com.au/
National Seniors Australia Productive Ageing Centre	http://www.productiveageing.com.au/site/
Multicultural/Ethic organisations	**URL**
Ethnic Communities Council of Queensland	http://www.eccq.com.au/
Diversicare: A HACC Statistical Profile Multicultural Communities in Queensland	http://www.diversicare.com.au/upl_files/file_73.pdf
HACC Food Service Organisations	**URL**
Australian Meals on Wheels Association	http://www.mealsonwheels.org.au/Home.aspx
Queensland Meals on Wheels Services Association Inc.	http://www.qmow.org/
NSW Meals on Wheels Association	http://www.nswmealsonwheels.org.au/Home.aspx
Meals Victoria (Victorian Meals on Wheels Association)	http://www.mealsvictoria.org.au/

3. Australia's Ageing Population

This section explores the demographic characteristics of Australia's and Queensland's aged populations, including a focus on CALD populations. The potential implications of projected population growth and future cultural diversity are considered.

3.1 Australia's population

Australia's population is set to continue to grow with projections estimating that it will increase from 21 million in 2006 to between 31 and 43 million in 2056[7]. These estimates are based on assumptions that include a total fertility rate of 1.6 to 2.0 babies per woman and net overseas migration (NOM) of between 140,000 and 220,000 people per year[7]. Both fertility rate and NOM are dynamic, with the latter being heavily influenced by political policies, and therefore these projections are vulnerable to change.

Australia has an ageing population, that is, an upward shift in the population's age structure is occurring[7]. As well as a change in the population age structure, the number of aged people in Australia's population is expected to rise sharply in the short to medium term[7]. Australia's aged are not evenly distributed across geographical areas as non-capital cities tend to have a greater proportion of the population aged 65 years or greater[21] due to the preference of many aged people to retire to regional coastal areas[7]. At older ages, especially aged 80 years and over, needs for informal and formal care services increase[8] however the overwhelming majority of older people live in the community in private dwellings[22].

3.1.2 Queensland's population

There is a lack of uniformity between the states and territories in rates of population growth and age structure due to differences in fertility rates, mortality rates, NOM and internal migration[7]. In 2009, Queensland's population was estimated at 4.4 million people, having experienced rapid growth over the previous five years, making it Australia's third largest state in terms of population[23]. Queensland's population is expected to reach 8.7 million in 2056 which will likely make it the second most populous state in Australia[7].

Queensland's population, similar to the Australian population, is ageing with 12.4% of the population in 2009 aged 65 years and older, a percentage that is forecast to increase to 26.1% by 2056[23]. In the same vein, the number of people aged over 75 years will increase by greater than 400% by 2056[23].

3.2 Australia's CALD Population

Six million new settlers have arrived in Australia since the end of World War II, increasing the proportion of the population born overseas from 10% to 23%[24]. The classification of 'people born overseas' includes visitors who are working or studying in Australia for more than one year, New

Zealand citizens resident in Australia, the overseas born children of Australian citizens in addition to people who have migrated to Australia on a permanent visa[24]. Of note, people born overseas counted in the Australian Bureau of Statistics' (ABS) Census Data include people who are from English speaking countries such as the United Kingdom, the USA and New Zealand (no distinction is made between Anglo-Celtic and Maori)[24]. These groups are currently not considered to be CALD. In September 2011, NOM accounted for around 54% of Australia's population growth[6].

Table 2 depicts Australia's and Queensland's top ten countries of birth (other than Australia) and the top ten languages other than English spoken according the 2006 Census. The cultural profile of different age cohorts in Australia's CALD population is the result of multiple dynamic factors including government migration policy, international humanitarian crises and world events. Table 3 reports the top ten contributors to Australian NOM by citizenship in 2009. When compared with the top ten countries of birth in Australian and Queensland in 2006 (Table 2) it is evident that different CALD groups populate different age cohorts and that the cultural and ethnic mix of the CALD population is destined to be different in the future compared with today.

In terms of geographical distribution, it is known that migrants to Australia more often intend to settle in metropolitan areas compared to regional areas and as a result Australia's overseas born population is more urbanised than the Australian-born population[24, 25]. In 2001, most overseas born persons lived in NSW (36%), Victoria (27%), Queensland (15%) and WA (12%)[24]. Queensland has experienced an increase in the proportion of overseas born, increasing from 9% to 15% from 1971 to 2001 and in 2001, 73.2% of the overseas born population lived in major urban areas (population size > 100,000 people)[24].

Table 2: Top ten countries of birth for people born overseas and languages other than English spoken in Australia and Queensland as a percentage of their respective populations * Excludes the category 'born elsewhere' (Queensland Population: 3,904,534; Australian population: 19,855,288)

Country of birth				**Language**			
Queensland	**% Qld population**	**Australia**	**% Aust. population**	**Queensland**	**% Qld population**	**Australia**	**% Aust. population**
United Kingdom	4.94	United Kingdom	5.23	Mandarin	0.63	Italian	1.60
New Zealand	3.81	New Zealand	1.96	Italian	0.56	Greek	1.27
South Africa	0.58	China(a)	1.04	Cantonese	0.50	Cantonese	1.23
Germany	0.52	Italy	1.00	Vietnamese	0.44	Arabic	1.23
Philippines	0.48	Vietnam	0.81	German	0.38	Mandarin	1.11
Netherlands	0.39	India	0.74	Spanish	0.29	Vietnamese	0.98
China(a)	0.39	Philippines	0.61	Greek	0.28	Spanish	0.49
Italy	0.36	Greece	0.55	Japanese	0.26	German	0.38
Vietnam	0.34	Germany	0.54	Samoan	0.24	Hindi	0.35
Papua New Guinea	0.32	South Africa	0.52	Hindi	0.20	Macedonian	0.34

(a) excl. SARs and Taiwan Province

Source: Australian Bureau of Statistics, 2007, 2068.0 2006 Census Tables

Table 3: The top 10 contributors to Net Overseas Migration (NOM) by citizenship in Australia, 2009[6]

Country of citizenship	Persons	Share of total %
India	45,913	18.6
China (excludes SARs and Taiwan)	31,827	12.9
New Zealand	20,772	8.4
England	18,429	7.5
Philipppines	9,791	4.0
Vietnam	8,349	3.4
Nepal	7,453	3.0
SouthAfrica	7,097	2.9
Korea, Republic of (South)	5,874	2.4
Malaysia	5,717	2.3
Other	85,678	34.7
TOTAL	246,900	100.0

3.2.1 The Older CALD Australian Population

The 2006 Census indicates that there were more than 500,000 people (19%) aged over 65 years living in Australia that were born in a CALD country[26]. Projections based on the 1996 ABS Census estimate that by 2026 this group of people will number close to one million people[8]. The cultural diversity of older people is growing[22] and the immigrant age structure is older than that of the overall Australian population[27]. For the age group 80 and over, it was projected that in 2011 one in every five people aged 80 and over will be from a CALD background and they would increase from comprising 13% of the older Australian population in 1996 to 25% in 2026[8].

For those aged 65-79 years, the top five CALD countries of birth in 2006 were Italy, Greece, Germany, Netherlands and China[27]. For those aged 80 years and over, the largest CALD birthplace groups were Italy, Poland, Greece, Germany, and the Netherlands[27]. The top five languages spoken at home in the 65-79 year age bracket in 2006 were Italian, Greek, German,

Cantonese and Croatian[26]. For those aged 80 and over, the top five languages were Italian, Greek, German, Polish and Cantonese[26].

In the older Australian population, females outnumber males[22]. In the 2006 census there were 55 men per 100 women in the 80 and over age group[26]. However, in some ethnic groups this traditional pattern is not seen due to differences in migration between males and females[27]. For example, the sex ratio in older people aged 65-79 years from CALD countries is 102:100 males:females versus 86:100 for Australia.

More older Australians from CALD countries where English is not spoken, are married than their Australian counterparts and in line with this are more likely to be still living with a spouse or partner[27]. They are also more likely to be living with family members (other than a spouse/ partner) and are less likely to be living in a residential care facility[27]. Within the CALD group there are differences in rates of individuals living alone with living alone being less prevalent amongst people from Asian and Southern European countries than their peers from Western or Eastern European countries[27].

Ability to speak English is frequently used as a measure of social wellbeing amongst the CALD population as it facilitates interaction with Australia's wider society outside of one's own ethnic community. In Australia, 65% of females and 76% of males from CALD counties aged 65-79 speak English only or speak it well[27]. This decreases to 59% of females and 69% of males aged 80 years and over[27]. English proficiency is generally high amongst Western European, Commonwealth countries and the Philippines, but lower amongst the immigrant aged from Vietnam and China[27]. However, it should also be noted that English proficiency can decline in the event of cognitive impairment. It has been documented that CALD elderly with dementia may revert to their childhood dialect regardless of their previous English proficiency[28].

In terms of economic wellbeing, older adults from CALD countries report lower levels of education, similar rates of home ownership, lower levels of participation in paid work, lower levels of participation in volunteering and a greater need for assistance compared to other older Australians[27].

As this information shows, considerable diversity exists between CALD older adults from different countries, regions and of different ancestry[27]. Life experiences impact wellbeing, health and

quality of life[22], suggesting that cultural factors and migration experiences may exert some influence on wellbeing and the ageing experience. Culture is dynamic and provides the framework for people's lives. It is associated with a wide range of beliefs and practices which are acknowledged as impacting on service usage[29]. It is expected that the needs associated with the CALD aged will become even more diverse in the future[29]. It is widely acknowledged that there is a definite need for culturally appropriate aged care services to meet the needs of the ageing CALD community[8].

3.2.2 Queensland's CALD Population

Cultural diversity in Queensland's population is increasing and Queenslanders now come from more than 200 different cultural backgrounds, speak more than 220 languages and cite more than 100 different religious faiths[30]. In 2006, about 700,000 Queensland residents were born overseas (including English speaking countries such as the UK and New Zealand) and of that, 20% were 'recent arrivals' having arrived between 2001-2006[23]. The 2006 Census indicated that of the 1.12 million recent arrivals in Australia, 39% arrived in Sydney, 28% in Melbourne and 13% in Brisbane[21]. In the 2010-2011 financial year, this pattern was maintained although Queensland increased its share of settler arrivals to 20.3%[21].

For Queensland and Australia; however Papua New Guinea features as number 10 in Queensland, whereas it is not in the top 10 in Australia. Similarly, the top ten languages spoken in Australia and Queensland as reported at the 2006 Census are much the same, however the Samoan language and Japanese feature in Queensland's top ten but not in Australia's (Table 2). Queensland is recognised as having the highest percentage of settlement from migrants coming from the Pacific Islands.

In 2010-2011 financial year, 4.5% of all permanent additions to Queensland's population were granted Humanitarian visas and were born in North Africa and the Middle East (34.3%), Sub-Saharan Africa (19.2%), Southern Asia (17.7%), Southeast Asia (16.9%) and Central Asia (10.0%)[26, 32].

3.2.2.1 Queensland's CALD aged population

Compared to the national average, Queensland has historically had a lower percentage of its aged population being of a CALD background, for example in 1996 there were close to 40,000 older persons from CALD backgrounds, comprising 10.4% of the state's older population whereas the national average was 17.8%[8]. The number of older CALD people in Queensland was projected to

increase by 61% to comprise 11.6% of all older CALD people by 2011[8]. In 2006, 23% of Queensland's CALD population were aged 60 years or older, 11.4% were aged 60-69 years, 7.6% were 70-79 years and 4% were 80 years and up[33].

In 2006, 7.8% of Queensland's total population spoke a language other than English at home[26]. Mandarin was the most common language other than English spoken at home, Italian ranked second, Cantonese third and fourth was Vietnamese[26]. Significantly, 15.6% of people who spoke a language other than English at home reported that their English language proficiency was poor[26]. The Queensland Government acknowledges that certain groups within the community are vulnerable to poor health outcomes such as new and emerging communities, refugees, Pacific Islanders and Australian South Sea Islanders[9]. Excluding English speaking countries of New Zealand and the UK, in 2006 the main birthplaces of CALD people aged 65 years and over - in Queensland were Italy, Germany and the Netherlands (Table 4)[34]. Older people from CALD backgrounds are also less likely to be proficient at English than younger age groups[26].

Emerging communities have been identified as being vulnerable and in particular need of special, targeted programs and interventions as they often lack the critical mass, advocacy, social networks and community organisation that older settlers or Australian born peoples enjoy[5]. This is especially so for migrants who settle outside of the major migrant settlement states of NSW and Victoria as CALD communities with lower numbers of people are less likely to have dedicated, culturally appropriate services (e.g. NSW and Victoria received approximately twice as many migrants from the five years to January 2011 compared to Queensland)[35]. A comparison of the top 15 countries of birth of recent arrivals to Queensland and Australia (from January 2006 to January 2011) reveals some differences between Queensland and Australia, with Japan, Zimbabwe, Ireland and Germany featuring for Queensland but not Australia (Table 5)[35].

A 2011 survey of 8500 humanitarian entrants and migrants to Australia by the Department of Immigration and Citizenship that explored settlement outcomes found that amongst humanitarian entrants only 3.5% were aged 65 years and over but this group were significantly less likely to be confident about finding out about places, organisations and services that make a difference to living in Australia when compared to younger groups[25]. Of the humanitarian entrants surveyed, 10.3% were located in regional areas as opposed to metropolitan areas and just 10.3% claimed Queensland as their state of residence[25].

Planning of necessary and appropriate aged care services requires forethought, and this is especially true for emerging CALD communities as being an older person in an emerging CALD community can impose a level of disadvantage relating to difficulty accessing mainstream aged care services[5]. Comparing the cultural mix of Australia's current CALD aged population to that of recent immigration statistics demonstrates the fluidity of Australia's aged population's cultural composition. Given this understanding, it is essential to start planning and delivering culturally appropriate and inclusive aged care services to meet the need of current and future CALD aged. New and emerging communities that do not yet have high numbers of older people but are projected to in the future include: communities from the African continent in particular Sudan, Somalia, Ethiopia, Eritrea, Democratic Republic of Congo, Liberia, Sierra Leone, communities from the Middle East including Iraq, Afghanistan, Iran; communities from South and South-east Asia including ethnic minorities from Burma (such as the Karen, Chin), the Hmong, Sri Lanka, India and Pakistan; and the Pacific Islands including Samoa, Tonga, Papua New Guinea, Maori.

Table 4: Top ten countries of birth of Queensland's aged (excluding Australian born, country not stated and born elsewhere categories)

Country of birth	65-74 years	Country of birth	75-84 years	Country of birth	85 years and over	Country of birth	Qld Total
United Kingdom	28,300	United Kingdom	16,157	United Kingdom	5,942	United Kingdom	193,060
New Zealand	7,908	New Zealand	3,604	New Zealand	978	New Zealand	148,759
Italy	3,880	Italy	3,063	Italy	706	South Africa	22,711
Germany	3,598	Germany	2,090	Netherlands	531	Germany	20,114
Netherlands	2,913	Netherlands	1,961	Germany	362	Philippines	18,712
Greece	1,074	Poland	1,032	Poland	256	Netherlands	15,262
China (a)	1,056	Ireland	677	Ireland	232	China (a)	15,061
South Africa	981	China (a)	641	China (a)	226	Italy	14,002
Ireland	960	Greece	561	India	151	Vietnam	13,084
India	852	India	519	South Africa	140	Papua New Guinea	12,589

(a) excl. SARs and Taiwan Province

Source: Australian Bureau of Statistics, 2007, 2068.0 2006 Census Tables

Table 5: Comparison of Queensland and Australia's settlers' top 15 countries of birth from January 2006 to January 2011

QUEENSLAND TOP 15					AUSTRALIA TOP 15		
	COUNTRY OF BIRTH	**QLD TOP 15**	**% TOTAL ARRIVING IN AUSTRALIA**	**AUSTRALIA - CORRESPONDING TOTALS**		**COUNTRY OF BIRTH**	**AUSTRALIA TOP 15**
1	United Kingdom	24,070	21	112,019	1	India	124,968
2	India	11,304	9	124,968	2	China - People's Republic	118,376
3	South Africa - Republic	10,844	25	43,140	3	United Kingdom	112,019
4	China - People's Republic	9,649	8	118,376	4	Philippines	43,708
5	Philippines	8,266	19	43,708	5	South Africa – Republic	43,140
6	England	4,065	23	17,389	6	Malaysia	25,595
7	Korea - Republic of	3,768	17	21,657	7	Sri Lanka	23,645
8	Japan	2,973	32	9,314	8	Korea - Republic of	21,657
9	U.S.A.	2,626	19	13,723	9	Vietnam	18,664
10	Thailand	2,560	17	15,434	10	England	17,389
11	Zimbabwe	2,226	23	9,867	11	Thailand	15,434
12	Malaysia	2,222	9	25,595	12	Indonesia	14,834
13	Ireland	2,080	18	11,257	13	Iraq	14,293
14	Germany	2,078	22	9,372	14	U.S.A.	13,723
15	Sri Lanka	2,000	8	23,645	15	Singapore	11,472

Source: Department of Immigration and Citizenship, Settlement Database, 2011. Available from: http://www.immi.gov.au/settlement/#sr=step_1

4. Aged Care Policy and Service Framework

4.1 CALD Aged Care Policy

In Australia, the needs of CALD elderly are captured by two main streams of policy – multicultural and aged care. The Commonwealth Government's *1997 Aged Care Act* seeks to ensure the planning, provision of and access to appropriate and fair aged care services for the aged population. It identifies several population groups as having special needs, including older people from NESB. Under multicultural policy, the Commonwealth Government's *A New Agenda for Multicultural Australia (December 1999) Multicultural Australia: United on Diversity – Updating the 1999 New Agenda for Multicultural Australia: Strategic Directions for 2003-2006* and the *Charter of Public Service in a Culturally Diverse Society,* aim to support a cohesive multicultural society in Australia.

At a state level, there are also policy frameworks that incorporate the needs of CALD elderly. Multicultural policies such as the *Queensland Government Multicultural Policy 2011*, and the *Queensland Health Multicultural Policy Statement 2000* supports equal right of access to services (including health and aged care). In addition, the *Queensland Government Language Services Policy* acknowledges and supports the importance of communicating in a diverse range of languages other than English to support fair and equitable access to services.

These national and state-based policies are designed to support fair and equal access to services such as health and aged care, regardless of cultural background or age. Multicultural policies are important as they acknowledge the disadvantage that some people from CALD backgrounds experience in accessing appropriate care services[5] and seek to support and/or implement strategies to overcome such barriers.

4.2 CALD Aged Care Initiatives: PICAC and CPP

Partners in Culturally Appropriate Care (PICAC) and the Community Partners Program (CPP) are two Commonwealth initiatives that aim to deliver culturally appropriate aged care. PICAC and CPP support the delivery of culturally appropriate care by supporting partnerships between aged care providers, CALD communities and the Australian Government's Department of Health and Ageing[16].

The PICAC program seeks to improve aged care services' capacity to respond to the differing needs of older people from CALD communities and funds one organisation in each state and territory to provide this support[16]. In Queensland, the PICAC organisation is the Ethnic Communities Council of Queensland.

CPP also aims to support improved access to aged care information and services by CALD communities by delivering more aged care support services that are culturally appropriate, improving access of CALD elderly to culturally appropriate services and improving the capacity of CALD elderly to make informed decisions about aged care services[17].

In Queensland, CPP organisations include Diversicare (Eastern European, Vietnamese, Filipino, German, Australia, Swiss, Italian, Finnish, Northern European, Southern European, Pacific Islanders); Co.As.It (Italian and Spanish communities); Greek Orthodox Community of St. George, Multicultural Communities Council – Gold Coast Inc., (Arabic-speaking communities, Hindi, French, Sinhalese, Spanish, Indonesian, Bahasa, Samoan, Fijian, Yugoslavian, Romanian); OzPol Community Care Association Inc. (Polish, Croatian, Czech, Russian, Slovak, Ukrainian; Tablelands Regional Council (Italian, Albanian, Greek, Hmong, Thai); Townsville Intercultural Centre (multiple CALD communities)[17].

Under the Federal Governments' National Health Reform, the Commonwealth Government will gradually take responsibility for policy and funding of aged care services (including HACC services) in all states and territories, except for Western Australia and Victoria[36]. The aim is to deliver a *'consistent aged care system covering basic care at home through to high level care in aged care homes'*[36] Full funding and policy responsibility was assumed in July 2011 and it is expected that operational responsibility will be assumed in July 2012.

4.3 Aged Care Services

4.3.1 Aged Care Services in Australia

An ageing population, as exists in Australia, has significant implications for service and infrastructure planning and the larger economy. The needs of aged people are diverse and are distinct from other population segments. A variety of service offerings are indicated along a spectrum of care that ranges from rudimentary community-based aged care services that support

elderly people to remain independent in their own homes, through to high level care in residential aged care facilities.

4.3.2 Current Aged Care Services – Culture and ethnicity

Culture and communication are essential considerations for the care of all people[37]. CALD aged are a heterogeneous group with distinct and diverse care needs[11]. Currently aged care services populate a spectrum of cultural specificity[14]. At the basic level this has been dichotomously described as ethno-specific and mainstream services[38], however a more detailed description of the spectrum includes:

1. **Ethno-specific (single community)**
2. **Ethno-specific (multiple community)**
3. **Generic (with multicultural/CALD capabilities)**
4. **Generic[14]**

A mixed service provision system is supported, that is, one that includes organisations across the spectrum of cultural specificity[14, 37]. The Aged and Community Services Australia (ACSA) National Policy position on CALD Community Care suggests that the needs of CALD elderly should be integrated into service provision rather than being sidelined as an 'add-on' or being left as the responsibility of a select few ethno-specific or multicultural providers[37].

4.3.3 The HACC Program

The HACC program is jointly funded by the Australian Government and state and territory governments and provides funding for services to support aged and disabled people to continue living at home rather than entering long term residential care facilities[10, 15]. Table 6 reports the different services that are available under the HACC program and highlights those that involve some kind of food/nutrition services. The HACC Program is legislated through the *Home and Community Care Act 1985*. *The HACC Review Agreement 2007* is the legal agreement between the Australian Government and the governments of the states and territories that considers the funding of the program. Supporting this is the *HACC Program Management Manual July 2007* and the *National Program Guidelines for the HACC Program 2007*.

Table 6: Services available under the HACC program

HACC Services	Food-related activities
Domestic assistance	Shopping
Social support	
Nursing care	
Allied health care	Dietetics and nutrition advice
Personal care	Eating
Centre-based day care	Food often provided at the centre/in relation to other activities
Meals	Delivered meals
Other food services	In-home meal preparation
Respite care	Food often provided
Assessment	Currently no standardised nutrition assessment
Client care coordination	
Case management	
Home maintenance	
Home modification	
Provision of goods and equipment	
Formal linen service	
Transport	
Counselling support, information and advocacy (care recipient)	
Counselling support, information and advocacy (carer)	

All HACC Service providers are required to collect specific data items about their clients such as their age and living arrangements, as well as the services accessed via HACC and this is collated in the *HACC Minimum Data Set (MDS)*[15]. The information for the HACC MDS is collected using the Ongoing Needs Identification (ONI) Assessment form which is available online: http://www.health.qld.gov.au/hacc/html/oni-tool.asp.

4.3.3.1 HACC Food Services

HACC Food Services fall into two service categories:

1. **Meal services: Provision of meals prepared and delivered to the clients' home or provided in a community centre,**
2. **Other Food Services: assistance with the preparation and cooking of meals in the clients' home**[10]

Of note, meals may also be provided as a component of centre-based day care activities, assistance with eating is available under personal services, domestic assistance may include shopping for food, allied health care may provide dietetic and nutrition advice, and respite care includes meal provision[10].

There is currently no national standard or guidance on the nutritional requirements of HACC delivered meal services. Under the Federal Government's National Health Reforms, the National HACC Program Manual will guide administration and delivery of HACC services in all states and territories except for Victoria and WA. The National HACC Program Manual is currently available in draft format and makes no reference to nutrition standards or food quality, but does require service providers to meet relevant state and territory regulations for food safety[39]. Similarly, the Community Care Common Standards Guide, to which all HACC services throughout Australia must comply, require that HACC services must deliver appropriate services that meet the needs of service users and their target population and comply with food safety regulations but fail to include specific nutrition standards for meals[40].

At a state and territory level, several guidelines exist pertaining to the nutrient content of a HACC funded meal, although most have not been updated to be in line with the National Health and Medical Research Council's (NHMRC) 2006 Nutrient Reference Values and are therefore not providing adequate calcium (A. Mahlberg, personal communication, March 7, 2012). Although not in line with current NHMRC Nutrient Reference Values, the Victorian[41] and Queensland[42] guidelines detail the nutrient composition of a delivered/MOW meal and the Queensland MOW nutrition guidelines are currently under review (A. Mahlberg, personal communication, March 7, 2012). NSW Meals on Wheels Association's *Destination: Good Nutrition* stipulates the minimum portion sizes of specific meal components and indicates the need for variety and culturally

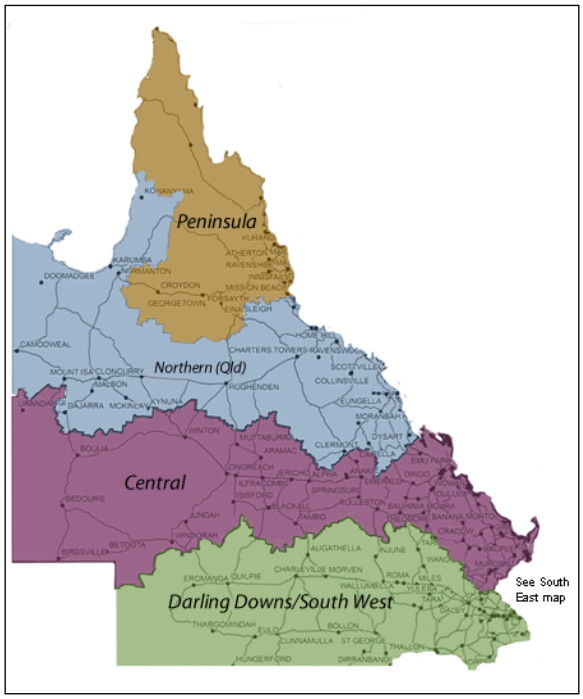
appropriate offerings, although this too, having been published in 2002, is not current[43]. The Western Australian Meals On Wheels Association has a menu planning and assessment guide that details recommended serves of core food group[1] foods to include in a MOW meal[44].

A HACC subsidy of $2.55 per delivered meal is made available to organisations which provide delivered meals to clients. In Queensland, this subsidy has been indexed at five cents per year.

4.3.4 HACC Services in Queensland

Queensland's population is one of the most decentralised in Australia, a factor which impacts both the delivery of, and access to, health services[23]. Queensland is divided into seven HACC Service regions. Four are regional: Peninsula (13 meal services), Northern (23 meal services), Central (19 meal services) and Darling Downs/South West (23 meal services) (Figure 1) and three are in the South East of the state: West Moreton/South Coast (6 meal services), North Brisbane (13 meal services) and South Brisbane (4 meal services) (Figure 2)[45].

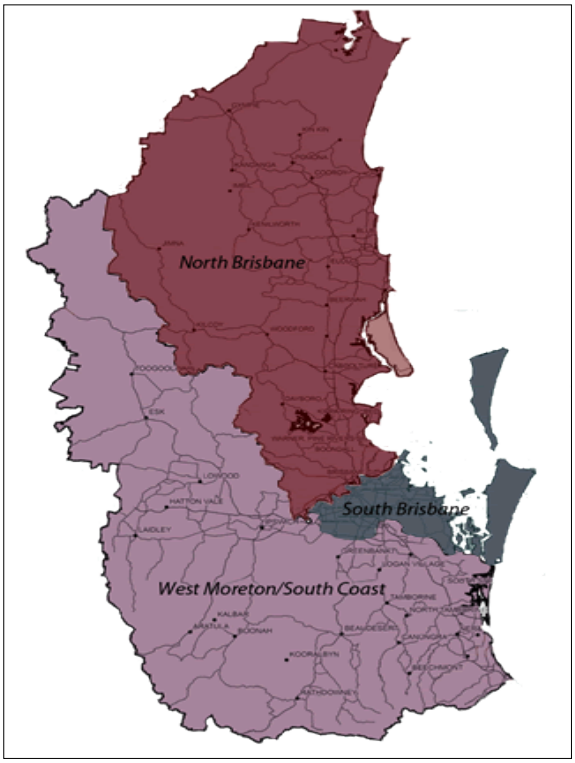
Figure 1.0 Regional HACC Service Regions – Queensland



Source: Queensland Health, HACC Service directories, 2011. Available from: http://www.health.qld.gov.au/hacc/serviceprov-info/directories.asp

[1] Core Food Groups is a classification system of foods developed by the NHMRC in 1994 that classifies foods into five groups based on the major nutrients that they provide. The core food groups are meat & alternatives, dairy, fruit, vegetables and breads & cereals. The 1994 document was rescinded in 2000 and the classification is currently under review. (Cashel & Jefferson, 1994, http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/n16.pdf, accessed March 2012).

Figure 2.0 South East Queensland HACC Service Regions – Queensland



Source: Queensland Health, HACC Service directories, 2011. Available from: **http://www.health.qld.gov.au/hacc/serviceprov-info/directories.asp**

4.3.5 HACC Services in Victoria – A comparison

Victoria hosts a greater proportion of Australia's CALD population[24] and therefore it is appropriate that in the past few decades, there have been several initiatives and developments that have focused on the delivery of appropriate (HACC) services to CALD elderly. Haralambous, Moore and Tait provide a concise summary of the Victorian policy context for elderly CALD people in the 2007 report titled *'HACC Social Support for people from Culturally and Linguistically Diverse (CALD) Backgrounds'*[46]. A summary of relevant policies and service developments is included in Appendix 1. Most recently in 2008 the *Culturally Equitable Gateways Strategy* was evaluated and found to have been effective in improving uptake of HACC core services amongst the CALD elderly target group, improving the collection of CALD specific data, sustained advocacy of CALD elderly as a high priority for aged care service development as well as the tailoring of HACC promotion activities to meet the language and cultural needs of CALD elderly[47].

4.4 HACC clients who are CALD

A Key Performance Indicator (KPI) of the HACC program attempts to ensure that the needs of the CALD aged community are being met (KPI 3: *Percentage of culturally and linguistically diverse*

people as a proportion of this group within the target population)[15]. Several recent literature reviews have explored the delivery and use of community-based aged care services in Australia and provide recommendations for the delivery of such services to CALD groups[29, 38, 48]. Whilst an in-depth review of all community aged care services to CALD people is beyond the scope of this review several key points follow.

The majority of HACC CALD clients use services provided by mainstream agencies who possess a range of cultural orientations[29] and it is generally accepted that a range of service providers with different degrees of cultural orientation are required[14, 29, 38]. However, it has been reported that mainstream HACC services are not currently able to meet all of the diverse needs of older CALD people[38] and that HACC services are not adequately engaging CALD elderly[14, 15].

Older people from CALD backgrounds may find it more difficult to access culturally appropriate aged care services[13]. Barriers to service use reported in the literature include:

1. **Poor knowledge of services**
2. **Cultural inappropriateness of services**
3. **Language barriers**
4. **Cultural barriers**
5. **Poor communication and linkages between service providers and CALD groups**
6. **Poor availability of bilingual employees[38, 49]**

A recent study commissioned by the Spiritus HACC Multicultural Program (2011) explored the aged care needs of eight emerging communities in the greater Brisbane area and found that these communities generally lacked information on aged care services, that language was a major barrier to access and awareness of aged care services and, that preferences for receiving information on aged care services and the way aged care services themselves were delivered are heterogeneous between communities[49].

This study also acknowledged the prevalent expectation that family meet aged care needs as an important barrier limiting the acceptability and use of aged care services amongst many CALD communities as turning to outside, professional aged care assistance was associated with shame or loss of face within the community[49]. It was noted that the Australian culture often created a situation whereby the capacity for families to provide such care was reduced and significant

sensitivity is required by aged care services when offering assistance (for example by framing the offer as a result of the Australian way of life rather than due to familial inability to carry out their caring obligations)[49]. A significant issue evident in the research within these communities was that of isolation amongst the aged[49]. This was impacted by multiple factors such as families leaving older parents at home whilst they were at work/school, language barriers (not speaking or reading English well, their grandchildren not speaking their traditional language) and lack of transport[49]. Many of the communities in the study expressed a preference for receiving aged care services from workers who were of the same cultural background and who spoke the same language and noted the importance of developing rapport and trust with workers (although different cultures were noted to develop such rapport and trust in distinct ways)[49].

A study in metropolitan Victoria found that older people who spoke a language other than English at home were one third as likely to use a HACC service when compared to their English speaking counterparts (Black et al, 2004 in[29]). Similarly, Ward et al. found in a study of HACC users in a rural part of Victoria that clients who were born overseas and did not speak English used less hours of HACC hours compared to those who were born overseas but spoke English and Australian-born groups[50]. Overseas-born clients were also found to have low levels of delivered meal service usage which was thought to potentially be due to the cultural inappropriateness of available food offerings[50]. Of note, in Victoria, Howe acknowledges that multicultural approaches are commonplace amongst meal services in that they frequently cater for cultural preferences and dietary restrictions[29].

Looking further afield, a study of the use of health and home and community based services by older Taiwanese people in the USA used found that structural (living alone), cultural (preference for same culture professionals) and functional factors (functional limitations and arthritis) impacted the likelihood of using community-based care services in the home[51].

In addition, the impact of geographical distribution of CALD clients has been suggested to give rise to two distinct challenges for HACC Service providers:

1. **Ethno-specific agencies may have difficulty reaching members of their communities who are spread across a number of local government areas (LGAs); and**
2. **It is potentially easier to respond to the needs of CALD clients who are concentrated in metropolitan LGAs than it is to respond to the needs of a small number of CALD clients who are spread across more remote areas.[29, 52]**

The study commissioned by Spiritus HACC Multicultural Program, discussed above, made recommendations that included:

1. **The need for implementation of community development and communication strategies to build awareness of HACC services in emerging ageing communities,**
2. **Consider the development of a model of care that supported bilingual/bicultural workers being trained in aged care and employed by HACC services,**
3. **Develop relationships and build capacity of existing CALD community groups to deliver appropriate services,**
4. **Engage CALD consumers to provide advice to HACC services, and**
5. **Consider initiating projects that support links across older and younger generations.**

4.4.1 Queensland CALD HACC Clients: Numbers, Distribution and Service Usage

The 2008-09 HACC Annual report identified that 57.8% of Queensland HACC clients are located in a major city, 25.4% in an inner regional area, 13.2% in an outer regional area and 3.3% in remote and very remote areas[15]. These figures are not dissimilar to the national averages of the HACC population[15].

Diversicare commissioned a report in 2007 that used 2006 ABS Census data to create a HACC Statistical Profile of multicultural communities in Queensland[33]. This analysis found that the South Brisbane region has the largest number of Queensland's CALD population but was also the 'youngest' CALD region with the highest proportion people from CALD backgrounds in the 0-44 year age group. The West Moreton/South Coast had the second largest proportion of older people from CALD backgrounds and the North Brisbane region ranked third. Together, in 2006, these three regions made up more than four-fifths of Queensland's total aged CALD population[33]. The Central region had the oldest CALD population overall, due to it claiming the largest share of both the 60-69 year age group and also the 70-79 year age group whilst the Northern Region had the largest share of the oldest population group (≥80 years).

Based on 2006 ABS Census data, the Statistical Local Areas with a high proportion of CALD background people were in Brisbane, Ipswich, Gold Coast, Sunshine Coast, Mareeba, Mount Isa, Burdekin, Hinchinbrook, Cardwell, Johnstone, Eacham, Atherton, Cairns and Douglas[33].

In 2008/09 20.8% of Queensland HACC clients were born outside Australia and of these, less than 40% were identified as CALD, having been born in a non-English speaking country[15]. In Queensland, the proportion of HACC clients from a CALD background (9.0%) is less than expected based on the proportion of people in the target population that are identified as being from a CALD background (9.5%)[15]. The pattern of potential under-servicing of CALD HACC clients was true for the nation also in 2008/09 (16.7% vs. 16.9%)[15].

4.4.2 Cultural Diversity of Queensland's HACC Services

The Queensland HACC Program Multicultural Services Development Strategy acknowledges the important role ethno-specific service providers have in contributing cultural expertise and supporting capacity building across generic services and delivering and appropriate care to CALD clients[37]. The strategy supports an ongoing commitment to funding service providers along the continuum of CALD specificity[37].

In 2006, in Queensland, there were 19 HACC funded service providers that were delivering services targeted at CALD clients, of which nine were ethno-specific (single community) providing services to Greek (2 services), Finnish/Scandinavian, Islamic, South-East Asian groups, Chinese, Italian, Polish and Australian South Sea Islander groups, one provided education and information services across regions to improve service delivery to CALD populations and the others targeted more than one CALD population[14]. The expansion of existing ethno-specific services to deliver services to small and emerging communities that have no, or only limited, access to HACC services is supported by the Queensland Government[14]. However, when determining the optimal way to deliver aged care services to these communities, it is important to consider the findings of recent research with emerging ageing communities in Brisbane which found that frequently these communities have existing informal, non-funded grass-roots community organisations that are attempting to meet aged care needs and that these organisations highly value autonomy and self sufficiency and may be resistant to agencies from outside their own culture organising activities for them[49].

5. Nutrition and Food Security

5.1 Nutrition in the elderly

Nutrition is an important contributor to the health, well-being, productivity, self-sufficiency and overall quality of life for aged people, regardless of whether they are fully independent or

dependent upon high level support services[18]. By supporting better health and potentially delaying institutionalisation, good nutrition in older age reduces health care costs and benefits society as a whole[18, 53].

A focus on the attainment of good nutrition in older age is important not only because of the basic role nutrition plays in supporting life itself, but also because the ageing process can present some barriers to achieving optimal nutrition. Factors associated with the ageing process that negatively impact nutrition can include:

1. **reduced appetite**
2. **reduced energy and nutrient intake**
3. **reduced food variety**
4. **problems with dentition**
5. **swallowing difficulties**
6. **gastric atrophy**
7. **reduced taste perception and physical disabilities impacting on ability to procure, prepare and consume appropriate foods[20]**

In addition, chronic disease is more common in older age and whilst it can often be associated with years of poor nutrition and lifestyle decisions it also prospectively impacts on the ability of some sufferers to attain adequate nutrition[20]. Impacting on the food preferences of older adults are not only lifetime food habits and physiological changes, but also factors such as living arrangements, finances, transport options and disability[54]. Social factors such as isolation, bereavement and psychological problems can also negatively impact nutrition status[20].

Malnutrition is a significant health concern in the elderly, with studies demonstrating that a percentage of elderly people receiving home-care do not consume adequate amounts of macro and micro-nutrients[55, 56] or are at risk of malnutrition[57-60]. In the community setting, limited data is available on the prevalence of risk of malnutrition and malnutrition[61] however prevalence of malnutrition has been estimated as being between 10-30% and it is thought to be under-recognised and under-diagnosed[19]. A recent Australian study of 1145 HACC eligible clients in Brisbane, Australia, that used a modified screening tool (MST – see section 5.3 below) identified 15% of participants as being at risk of malnutrition with subsequent nutrition assessments placing the figure between 5 and 11%[61]. Visvanthanen et al. found that in a study of 250 functionally-dependent

community-dwelling elderly who were receiving domiciliary services in Australia, the prevalence of malnutrition using a nutrition screening tool (MNA – see Section 5.3 below) was 5% with almost 40% being at risk of malnutrition[62]. This study excluded people who did not speak English and therefore is unlikely to represent the CALD elderly population.

Internationally, a pooled analysis of 4507 older adult participants from 12 countries found that amongst those who were community-dwelling 5.8% were malnourished and 32% were at risk of malnutrition[60]. In a Japanese study, of 138 healthy elderly people living in Tokyo who were assessed for risk of malnutrition using the MNA, 12.6% were found to be at risk of malnutrition and this was associated with depression, lower self-efficacy, poorer attitudes toward health and difficulty with meal preparation[57]. A New Zealand study of 152 community living older people found that using a validated and reliable screening tool (SCREEN II: Seniors on the Community: Risk Evaluation for Eating and Nutrition, Version II) that 23% of participants were at nutrition risk and 31% were at high nutrition risk[59]. Using the MNA amongst an elderly community-dwelling group of 42 people in El Salvador, 13 (31%) were classified as being at risk of malnutrition[58].

Poor nutrition amongst the aged has been identified as precipitating:

1. **Increased risk of falling**
2. **Higher needs for assistance and more complex assistance needs**
3. **Increased complications such as infections, pressure sores, and skin ulcers**
4. **More frequent and lengthier hospitalisations**
5. **Reduced capacity to live independently**[63]

Dementia is also a significant health issue for the aged in both the general Australian and CALD communities with 16-18% of the dementia population in Australia being of a CALD background[64]. Physiological changes associated with dementia may negatively impact nutritional status[20]. In fact, the presence of at least one abnormal eating behaviour was estimated to affect a majority of dementia patients in one study[65]. In addition, factors that can directly and indirectly impact on CALD dementia sufferers nutritional status include the loss of their most recently acquired language (often English) and reversion to their original language therefore hindering communication, difficulties with diagnosis (CALD dementia sufferers frequently present later than Australian-born sufferers) and social isolation[28]. There are anecdotal reports that in the case of

dementia when there is reversion to the language spoken in childhood, food preferences also shift regardless of the level of acculturation.

5.2 Food Preferences and Nutrition in CALD elderly

An appropriate diet must not only provide adequate nutrition in terms of energy and the other nutrients, but must meet one's personal needs and wants which are often associated with their culture. Culturally sensitive food and nutrition services are important components of the continuum of care[18] and the National HACC Program Guidelines specify that providers of specific HACC services must determine a client's individual service requirements, for example dietary preferences[66].

Food preferences drive specific food choices and whilst it is acknowledged that the interrelationship between food preferences, food choice and nutrition behaviour is complex[67], little is known about how food preferences in old age directly impact nutritional status. It is recognised that understanding the social context of food choices is very important due to the role food plays in demonstrating cultural identify[68].

Food frequency questionnaires can be used to determine food preferences and to facilitate comparisons between different cultural or ethnic groups[68]. '*A World of Food*' is a comprehensive resource that has been previously published and distributed to aged care service providers that attempts to facilitate the provision of healthy, culturally appropriate foods for the elderly by aged care service providers[69]. This manual comprises a large, A4 sized folder with laminated information sheets that contain information on foods and meal preparation techniques, food frequency lists and recipes, for selected cultures. The large size of the resource and the large amount of detail it contains has anecdotally hindered its usability in the day-to-day aged care setting (D. Gallegos, personal communication, November 2011).

Immigration has a direct impact on nutritional intake in a variety of ways, for example the range of foods available are different, foods are often labelled and marketed in different ways, the shopping environment is often different, language may be a barrier to understanding food labels and the new society may promote different cultural norms associated with food intake and body shape (e.g. preference for a lean body shape in the western world) [70, 71]. Such impacts have been reported, for example, amongst Greek immigrants to Australia[71], immigrants to Australia from Sub-Saharan Africa[70] and Koreans living in the USA[56].

Elderly people may be more inclined to continue to consume a cuisine that is in line with their cultural traditions[71] whilst others report that cultural subgroups demonstrate food-related behaviour that is distinct from both their culture of origin and the culture of their current place of residence[56]. A study of the dietary patterns of 202 Koreans who had spent approximately 16 years living in America confirms the coexistence of different cultural practices of ethnic homelands and newer country of residence, study participants continued to consume more than two regular meals per day that were consistent with a 'Korean food pattern' and only 0.5 meals a day which were consistent with the 'American food pattern'[56]. In this study, in addition to finding distinct food intake patterns, poor nutrient intakes were also noted as 63% of participants consumed less than 75% of the 'Recommended Dietary Allowance' for energy, 71% fell short on folate, 93% were short of calcium and 99% consumed inadequate dietary fibre[56].

Differences in acculturation and the heterogeneity in culture, life experiences, social and economic wellbeing and health (alongside other factors) amongst CALD elderly translates into a diverse array of food patterns and preferences. It is important that services acknowledge this individual variation and strive to be client-centred.

5.3 Nutrition screening

As noted above, malnutrition is a significant health concern in the aged population. Nutrition screening involves identifying those people at nutritional risk of malnutrition or who are malnourished. Where nutrition screening indicates that a person is at risk of malnutrition, a more thorough nutrition assessment is indicated to confirm the diagnosis and determine appropriate nutrition and medical interventions[18]. Nutrition screening of elderly in the community setting presents unique challenges as there is frequently limited ability to perform anthropometrical or biochemical measures and calculations and time may be at a premium. Ideally, a nutrition screening tool for use in the community setting must be easy to understand, brief and avoid the requirements of measurements and calculations. The inclusion of BMI in nutrition screening tools in particular has been criticised as not being appropriate for use in screening elderly individuals with the suggestion that weight change over time combined with clinical judgement are preferable prognostic measures[72].

Nutrition screening contributes to maintaining the independence and well-being of community-dwelling older adults[18] and systematic and structured nutrition screening programs are recommended as a means for detecting malnutrition early so as to prevent a decline in health

status[60].. It has been suggested that aged care services, such as home based domiciliary care, offer potential for screening community-dwelling elderly for nutrition risk[62].

In Australia, evidence based guidelines for the management of malnutrition in adult patients across the care continuum were published in 2009.[19] These guidelines use NHMRC grades of evidence[73] to support:

1. **The identification, treatment and actions required to reduce the prevalence of malnutrition in Australia (Grade B recommendation)[2],**
2. **Routine malnutrition screening is indicated in the rehabilitation, residential aged care and community setting to facilitate the identification of nutrition risk (Grade D recommendation)[1],**
3. **A valid malnutrition screening tool that is relevant to the target population should be used (Grade B recommendation)[2]**

There are multiple nutrition screening instruments available for use. When choosing a tool for use, it is important to consider whether or not the tool has been assessed for validity and reliability within the target population[74]. In addition, the sensitivity, specificity and acceptability of the tool are also pertinent considerations[74]. Some tools that have been applied in the community-dwelling elderly population include the Malnutrition Universal Screening Tool (MUST)[75], the Mini-Nutritional Assessment (MNA)[76] and the Malnutrition Screening Tool (MST)[77].

The MUST[75] was designed primarily for use in the community setting, has high reliability, content validity and practicability (Appendix 2)[78]. However, whilst it has been recommended by the European Society for Enteral and Parenteral Nutrition for use within the community setting[78], it has been criticised as not being able to properly represent change in body shape due to a low Body Mass Index (BMI) [weight in kg/(height in m)^2] cut-off of 18.5 kg/m^2[60]. In addition, the application of the MUST in community-dwelling elderly may not be appropriate as it is not a geriatric specific tool and has been found to under-predict risk of malnutrition when compared to the MNA[79].

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[2] NHMRC Levels of Evidence:

Level A – Body of evidence can be trusted to guide practice
Level B – Body of evidence can be trusted to guide practice in most situations
Level C – Body of evidence provides some support for recommendation(s) but care should be taken in its application
Level D – Body of evidence is weak and recommendation(s) must be applied with caution.(66)

The MNA[76] is an 18 item nutrition assessment tool which was originally designed for use in older people. It has high specificity, sensitivity and reliability[80]. Further, it shows *'prognostic significance with regard to morbidity, mortality, and adverse outcomes in elderly people'*[81]. It has been suggested to be an appropriate tool for the screening and assessment of older individuals who are community-dwelling[81, 82] however, it has also been identified as being too complex with the need to complete multiple fields leading to increased subjectivity[83]. There are two distinct versions of the MNA: a long form MNA that takes between 10-15 minutes to complete, and a short form MNA (SF MNA) which takes just 4 minutes to complete (refer to Appendix 3) [80]. If the SF MNA indicates risk of malnutrition, the LF MNA should then be completed[80].

The MST is a brief nutrition screening tool that has been validated in the acute and outpatient settings[61]. This tool is included in the Health Behaviours Profile of the Queensland HACC ONI tool that is the official evaluation form used by Queensland Health HACC staff at the initiation of HACC services[84]. In its original form (and as it appears on the ONI) the MST consists of two questions dealing with recent unintentional weight loss and poor appetite/reduced food intake (Appendix 4) [85]. Advantages associated with the MST are that it does not necessitate anthropometrical measurement or calculations and is simple to apply. Leggo et al. modified the MST for application in the community setting by adding an additional question:*"Client appears very underweight or frail?"* with *"Yes"* response triggering referral to a dietitian in an attempt to capture chronic malnutrition that may exist in community-dwelling HACC clients[61]. Upon implementation in one research study, this modified MST was found to be a practical tool for use in the community setting however further research is required to confirm validity and reliability within the community-dwelling elderly population[61] and within the CALD elderly population.

The Victorian HACC Program has developed a Nutrition Screening Tool for all vulnerable adult clients who are receiving community services to assist them to continue to live independently[63]. This tool is a ten item list (Appendix 5) where answering yes to any of the item indicates nutrition risk exists and triggers two weeks of simple interventions (prescribed in the Resource Manual e.g. suggest three small meals and three snacks per day, increase energy intake with extra sugar, milk, margarine, thick soups and cream) followed by review and subsequent referral to a specialist if the situation has not improved/resolved[63]. This tool is practical in the community setting as it does not require the collection of any anthropometric measures. This screening tool was undergoing validation in 2004-05, the results of which have not yet been made available. It has been suggested that ideally all Victorian HACC Food Service clients should have the nutrition risk screening profile completed within a week of starting to receive meal deliveries[12].

5.3.1 Nutrition screening in CALD aged populations

There is limited literature on the application of nutrition risk screening tools and outcomes in community-dwelling CALD elderly. The MNA has been validated in diverse elderly populations across a range of settings including the community-dwelling population[60] and has been identified as being appropriate for implementation in populations distinct to that for which it was originally intended[82]. The MNA has been translated into 20 languages, and despite its strong performance on cross validation measures,[82] it has been suggested that the MNA should be modified for use in different ethnic/cultural groups[86]. Modified versions of the MNA have been created for China[86] and the MNA and MUST have been adapted for Taiwan[79]. Tsai et al. made population-specific modifications to the short form and long form MNA and MUST for the elderly Taiwanese population[79]. They found that using population-specific anthropometric cut-offs for BMI improved the ability of the SF and LF MNA and the MUST to correctly classify community-dwelling elderly and that substituting calf circumference for BMI did not alter the tools' predictive abilities[79].

5.4 Food Security in the CALD aged

Food security was defined at the World Food Summit in 2009 as existing 'when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious foods to meet their dietary needs and food preferences for an active and healthy life'.. Four pillars of food security have been identified as including availability, access, utilisation and stability[87].

Research on food security in Australia and Queensland, in particular in relation to the severity of food security, is limited[88]. Food security in Australia is typically monitored via the National Health Survey with the most recent survey incorporating the food security question being conducted in 2004[89]. This survey identified that approximately 5% of Australians are food insecure. This survey uses a single question which is not sensitive, has been described as simply a measure of risk[90] and is thought to underestimate the prevalence by approximately 5%. In more at risk groups, including those on low incomes, using the more sensitive USDA FSSM tool (see below) prevalence is estimated to be one in four.

The U.S. Department of Agriculture's (USDA) Food Security Survey Module (FSSM) has been used extensively to assess food security[91]. The FSSM includes 18 items relating to the affordability and ability to purchase foods and a question that captures whether or not the survey participant had access to 'appropriate foods' – this question is a way of attempting to understand

whether or not the food available was the food that was actually desired and considered appropriate to the respondent[91]. A shorter, six item version of the USDA FSSM tool is available however and has been validated to be as sensitive as the longer version.

This adapted version of the USDA FSSM module was found to be a valid tool for assessing food security in Latin American and the Caribbean (ELSCA) (Appendix 6)[92]. Modifications included a simplification of the grammatical structure and 'healthy and varied diet' replaced 'balanced diet'[92]. It is foreseeable therefore, that similar adaptations will likely be required to deliver valid results amongst CALD groups.

The FSSM tool and its adaptation for Latin America and the Caribbean, categorise food security into four categories:

1. **Food secure**
2. **Food insecure without hunger**
3. **Food insecure with hunger**
4. **Food insecure without hunger**

It is proposed that vulnerable groups such as the elderly, those from CALD backgrounds and refugees may be at increased risk of food insecurity[90, 93]. Whilst the true extent of food insecurity amongst the elderly population in Australia is not known, it has been suggested that the prevalence of food insecurity in the Australian population is at least 5-10% and that amongst vulnerable groups this may increase to 30-50%[94].

Radermacher et al. explored food security amongst 37 older Australians from different cultural backgrounds and found that approximately one quarter of respondents indicated that they experienced barriers to accessing food that were related to cost, health and physical capacity, transport, food preferences and the availability of preferred foods[95]. In this study, participants spoke about how their desire for culturally specific food items contributed to reluctance to use local meals on wheels services and their concern about the meals available in residential aged care facilities not being able to meet their specific cultural food needs[95]. Looking further afield, greater prevalence of food insecurity has also been found in the US amongst minority elderly compared to the non-minority elderly population[93, 96].

Interestingly, Temple reported that using the 2004 National Health Survey data (which measures food insecurity in terms of financial attribution only), that people born overseas and those who were older were less likely to experience food insecurity than Australian born and younger people, respectively[88]. Note that the tool used to measure food security in this instance fails to assess all dimensions of food security and therefore results may not be truly indicative of the level of food insecurity, particularly within the CALD population. In line with Temple's finding, however, a decreasing incidence of food insecurity in older age has been also been reported in the U.S[93].

HACC food services such as meals on wheels and in home meal preparation are well placed to improve food security of CALD clients. Yet, is foreseeable that the chances of this positive effect being realised are likely to be increased by meeting, not only nutritional needs, but cultural food needs. The impact food preferences have on help-seeking in relation to meal preparation and sourcing was demonstrated in a study of Italian, Greek and Chinese Australians[97]. Of all the different types of services surveyed, acceptance was lowest for Meals-On-Wheels for all groups except for the first-generation Chinese group with subsequent participants reporting that pre-cooked food to be 'unpalatable'[97].

6. Food Services and Community-dwelling CALD Elderly

As noted above (Section 4.3.3.1), HACC Food Services comprise delivered meal services and other food services. Food services also occur indirectly as part of other HACC services such as centre-based day care (meal provision), personal care (assistance with eating), domestic assistance (food shopping) and respite Care (meal provision)[10].

In the development of the Queensland HACC Program Multicultural Development Strategy, meal services were not identified as being of high relevance to CALD background clients and in line with this only one meal service was funded in 2004/05, attracting 0.1% of funding[14]. Three service providers were funded to deliver 'other food services' in the same period, attracting 0.6% of funding. Services attracting a greater level of funding included centre-based day care, domestic assistance, social support and counselling support which were supported in the consultation phase as being of greater relevance to clients from CALD backgrounds[14].

6.1 The effectiveness of delivered meals

There is evidence in the literature from the United States to support positive nutritional status outcomes of delivered meals programs to independently living, but nutritionally at risk, elderly people[98-100]. Gollub et al. conducted a cross sectional study of 381 community-dwelling frail elderly with poor functional status and found that during a six month intervention that participants who were provided a delivered breakfast and lunch consumed significantly more energy, macronutrients and certain micronutrients than those who received only lunch[98]. Millen et al. found similarly better intakes of essential nutrients in those who received the Elderly Nutrition Program's congregate and delivered meal services compared to matched non-participants[99]. In a comparison of two different Meals on Wheels service models ('traditional' = five hot meals per week vs. 'new' = three meals and two snacks per day) amongst elderly who were malnourished or at risk of malnutrition, Krester et al. found that the 'new' model resulted in significantly more weight gain and a more rapid improvement in MNA score[100].

No Australian studies exploring the effect of delivered meal programs on CALD community-dwelling elderly were located. Evidence-based research is required in Australia to explore the effect of HACC Food Services on client outcomes across different cohorts (including CALD) as this will help to identify those users who will benefit from the services the most[12].

6.2 Delivered meals in Australia – Meals on Wheels

Meals on Wheels (MOW) in Australia is a delivered meals service targeting the needs of frail elderly who wish to remain in their homes, young people with disabilities and their carers[101]. The Australian Meals on Wheels Association represents state and territory associations, acting as a national body. Each State and Territory also has a peak organisation which represents the individual MOW services[101]. Many MOW services are voluntary groups that are run by committees with some employing a paid coordinator to manage the service. A subsidy of $2.50 per meal is received from the HACC Program but the service is heavily reliant upon volunteers[101]. Clients pay for each delivered meal and can be self-referred, referred by a hospital, General Practitioner or a wide range of other avenues. Volunteers are an essential component of the services MOW offer, contributing significantly to the MOW resources[102]. MOW is not organised in a consistent manner between the states and territories. For example, in Victoria, MOW is largely delivered by local government[103] whereas in Queensland and NSW, MOW services are individual incorporated community managed organisations[104].

In Queensland in particular, MOW is the major HACC funded provider of delivered meal services and is organised in a decentralised way whereby all the MOW branches are separately incorporated entities.

MOW acknowledges the value inherent in the frequent client contact that their staff and volunteers make, and is encapsulated in their motto *'more than a just a meal'*[105]. Client interaction with the food service organisation constitutes social support that can deliver companionship, social contact, enhance the eating experience and encourage actual consumption of the meal, therefore supporting clients' nutritional status[106].

6.2.1 Meals Victoria (Meals on Wheels) – Statewide Survey[107]

A 2008 survey of all 96 HACC funded Meals Victoria agencies is the only one of its kind that has been completed in Australia. Although MOW is organised differently to Queensland MOW, many of the findings are interesting in terms of how MOW operate and the barriers and enablers they face in meeting the cultural food needs of CALD HACC clients. Significant findings include:

1. **20% of service providers used their own kitchens to cook meals, whilst 80% used a supplier with metropolitan providers being more likely to cook their own meals (28%) compared with regional providers (15%)**
2. **Of those who use a supplier, around two thirds (65%) use a single supplier only**
3. **When asked to rate their own kitchen or supplier in terms of overall satisfaction, food quality, choice of meals and service to others (if supplying to others) or service to you (by supplier) providers with their own kitchens rated higher across all four categories**
4. **The average numbers of meal options provided were 1.2 soup options, 3.0 main options, 1.7 dessert options and 1.6 juice options with metropolitan and large scale providers offering more choices on average**
5. **Most menus were rotational, rotating weekly or four weekly, with seasonal adjustments**
6. **More than half of providers indicated that some food items were freshly cooked (e.g. 63% of mains were cooked fresh whilst 39% indicated mains were also cooked-chilled)**
7. **Service providers main concerns included the level of funding per meal, issues with volunteer recruitment and sustainability of the MOW model (for example, due to**

cost, volunteer numbers, legislative changes that have put them under more pressure to meet individualised dietary needs and cultural preferences)

8. **Just over three quarters of service providers (77%) reported catering for CALD needs but the extent to which this was actually achieved was very diverse (for example, as a standard menu item, on a one-on-one basis, limited selection only and only if purchased in bulk)**
9. **Interestingly, many service providers reported that there was no demand for a supply of CALD meals**
10. **More than three quarters (82%) of providers use volunteers**
11. **More than three quarters (77%) of providers indicated that their volunteers' age, gender and ethnicity reflected that of the area's population**
12. **When asked to name the tool used for client assessments, 6% indicated that they do not use a tool, 11% were unsure of the tool used and the majority (82%) named a tool, with the Scotini[108] tool being the most frequently named (69%)[3]**
13. **One third (39%) of providers reported assessing all referrals prior to service commencement, with 75% reporting that it usually occurs prior to service commencement but may occur afterwards in urgent cases**
14. **Half (50%) of assessment officers reported using the DHS nutritional assessment tool (described above), 22% reported not using the tool and 24% were unsure as to whether this tool was used because the assessment was the responsibility of someone else (usually council)[107]**

6.2.2 Victoria - HACC Food Services Review

In 2004 a review of Victorian HACC food services was conducted, finding:

1. **66% of providers contract out meal production, mainly to health service providers in rural areas and private contractors in metropolitan areas**
2. **Only 25% of food service agencies cooked their own meals**

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[3] 'Scotini' refers to the Service Coordination Tool Templates (SCoTT), used by Victorian service providers to enable service coordination and information sharing between services within a Primary Care Partnership. This includes an initial contact template form that collects basic demographic and social information of clients, as well as additional profiles, templates and a service planning template.(103)

3. **Respondents thought that for 18% of clients, the contact was more important than the food itself, for 60% they were equally important and for 22% the food was the most important factor**

4. **There was a need for ongoing training and resources related to nutritional risk screening**

5. **The trend in food provision was towards providing chilled meals rather than hot meals (except for to high risk clients) as this enables easier compliance with food safety requirements and more flexible delivery time-frames**

6. **There were two specialist CALD food service providers but 25% of all respondents indicated that they provided ethnic meals**

7. **Menu integration was reported as being the preferred model for meal provision, rather than ethnic-only models, due to its financial implications[12]**

6.2.3 Meals on Wheels – Barriers and Awareness

There was little Australia research identified that explored the acceptability, uptake and perceptions of CALD aged relating to Meals on Wheels (or other HACC food service). In a study of HACC clients living in a rural area of Victoria, Ward et al. (2005) reported low levels of use of delivered meals amongst overseas born (both English speaking and NESB) compared with those who were Australian born[50]. It was postulated that the lack of culturally appropriate meals available was a key driver of this discrepancy[50]. A report exploring the needs and preferences of the Sri Lankan aged community in Monash, Victoria found that Sri Lankan elderly find it difficult to eat the predominantly Australian style food that is available through HACC food services, residential aged care and other aged care services[109]. A recent study in New Zealand explored the knowledge and perceptions of 36 health professionals and 61 older adults in relation to the MOW service[110]. Health professionals indicated that the current menu did not meet the cultural needs of older adults and 21% of the older adults had never heard of MOW, with those who were non-European being less likely to be aware of MOW. Older participants reported positive aspects of the service to include social contact and the high nutritional value of the meals whilst negative themes centred on the repetitive menu cycle and similarity to hospital meals. Barriers identified included lack of knowledge, feeling embarrassed, loss of independence and for CALD participants in particular, and not having any choice over the menu[110].

6.3 Examples of HACC food services meeting CALD food needs

There are several HACC Food services from other states in Australia that have made changes to their services to better meet the needs of the CALD population in their service catchments. These case examples are included to demonstrate how different changes in service delivery can seek to meet the cultural food needs of HACC clients.

6.3.1 NSW- Western Sydney HACC Food Forum

The Western Sydney HACC Food Forum (WSFF) has been established to 'develop and maintain a coordinated and strategic approach to food issues for the Home and Community Care (HACC) target group across Western Sydney'[111]. The WSFF is part of the Western Sydney Community Forum which covers the eight Local Government Areas of the Cumberland-Prospect and Nepean region in NSW and supports sharing of resources and information and provides a forum for HACC funded food services in Western Sydney to support each other and tackle common issues[112]. The forum aims to improve equity of access to quality food services and improve the representation of CALD groups in HACC funded food services in the region, to strengthen connections between food services and the NSW MOW Association, to engage in advocacy activities and to identify new models of food service delivery[113]. For example, specific culturally appropriate food service solutions in the community day care setting that have been delivered successfully include one targeting the Korean community, and one targeting the Maltese community[113]. The Korean targeted service delivers Korean food from a local restaurant to the centre using a hot-box and the Maltese targeted service coordinates the delivery of a Maltese meal at a Maltese community centre.

6.3.2 NSW – Hunter New England

In 2005, the Hunter New England area conducted a review exploring the effectiveness of existing HACC funded food services and options for new models that supported long term sustainability[106]. Several trends were identified as being likely to drive changes in the HACC food service sector in coming years such as:

1. **changing client expectations that would drive suppliers to offer more choices in meals**
2. **better meal presentation**
3. **easier access to services**
4. **a shift away from delivering a hot meal to offering a range of options such as chilled, frozen, hot to meet clients wants and needs**
5. **a forecasted increased demand for ethnic [CALD] food offerings**[106]

The difficulty that food services face in delivering 'authentic' ethnic meals was acknowledged, especially considering the need for texturally appropriate meals and the fact that some foods/meals do not freeze well[106]. It was noted that the concept of a 'food service' may need to shift from one that focuses on 'food' delivery to one that focuses on 'service' delivery to meet changing client needs and that the delivery format used by many HACC food service organisations, in particular those delivering hot meals, allowed little time for client interaction[106]. The report explored different organisational models and the implications that such changes would have for existing food service organisations[106].

Significant progress has been made in implementing the Hunter Central Coast Future Food Project by NSW MOW. A Future Food Model has been developed which comprises Customer Services (existing MOW services) and Distribution Centres (Central Coast operational in November 2011 and Newcastle scheduled for operations in February 2012)[105]. Customer services store and deliver meals to clients, whilst frozen and chilled meals are ordered through the nearest Distribution Centre[105]. With a focus on person-centred care, coordinators have been trained in narrative techniques to assist in client assessments[105]. Proposed benefits of this innovative approach include consolidation of administrative tasks, consideration of both client food needs and social support needs and aims to facilitate Customer Services in delivering an improved individualised meal service that aims to support clients' nutritional and social wellbeing[105].

6.3.3 NSW – Rockdale Meal Services

Rockdale Meal Services was recognised in the 2009 NSW MOW Annual report for its' work with the NSW Multicultural Food Network to offer a range of multicultural meals to meet the cultural food needs of CALD people living in the area[114]. Cultural meal offerings now include dishes of Vietnamese, Chinese, Greek, South American, Spanish, Filipino and Ukrainian cuisines[114]. No information, however, is provided on how these meals are provided.

6.3.4 NSW – Illawarra Ethnic Communities Council

The Illawarra Ethnic Communities Council Ethnic MOW services worked with the local ethnic communities in the region to train food preparation staff in the preparation of Asian and European cuisine[114]. Training was achieved by having the food preparation staff observe community members prepare cultural foods in a commercial kitchen[114]. This has resulted in an increase in the number of CALD clients engaging with the MOW service[114].

6.3.5 NSW – Nepean Food Services

In response to the identification of a gap in the variety of reasonably priced CALD meals, particularly Halal meals, a non-funded distribution centre was established to make Gourmania meals from Western Australia accessible to surrounding MOW services[105]. Corporate sponsorship was obtained for an off-site bulk cold storage facility where the minimum half-pallet order could be stored and then transported to the newly purchased commercial freezer at Nepean Food Services[105]. This project continues to grow, with Nepean Food Services now providing Halal certified meals to several adjoining services[105].

6.3.6 NSW – Fairfield Food Services

Recognised for innovation in the NSW MOW Annual Report 2010-2011, Fairfield Food Services have improved the quality of their service offerings through various actions[105]. These include: implementing a three choice menu with CALD specific choices; developing cold finger-food packs specifically for clients with dementia; providing 900 meals per week to more than 45 local groups based on offering 150 options that include dietary and culturally appropriate options from a master menu in frozen and cook-chill formats; and, working with CALD groups and agencies in the area to promote flexible options that the service is capable of providing[105].

6.3.7 VIC - Community Chef, Altona

Community Chef is the name of a production company that was formed between 20 councils in Victoria to produce meals to councils for their delivered meal services (Meals on Wheels) [115]. The kitchen will produce up to 2.2 million meals per year and offers local council food services six daily menu choices, including culturally appropriate choices. Councils order meals from the production kitchen and coordinate the delivery of the meals to their own clients. The Community Chef model has been designed to be responsive to community members needs, and seeks to deliver cost savings whilst preserving quality, variety and nutritional quality[115].

It should be noted the major difference between NSW, Victoria and Queensland relates to critical mass. Many of the local areas in Victoria and NSW have a significant number of clients from CALD backgrounds making the provision of CALD-specific meals a viable option based on the current funding model. With populations highly dispersed and fewer overall numbers often, in Queensland, there is not a critical mass of any one CALD community making provision of CALD-specific meals challenging.

7. Conclusion

Australia's, and Queensland's, populations are growing and ageing, and at the same time cultural diversity is increasing. CALD elderly are identified as a special needs group at the state and federal government level and policies exist to support the creation and the delivery of culturally appropriate HACC services. As a result, aged care services in Australia and Queensland operate along a spectrum of cultural specificity.

However, there is evidence to suggest that CALD elderly face a range of barriers to accessing culturally appropriate aged care services and that fail CALD elderly are under-represented in terms of access to HACC services. Multiple factors unique to an individual impact food preferences and hence, impact food choice. In particular, there is evidence to suggest that elderly people prefer to consume food that reflects their cultural traditions and therefore where culturally appropriate delivered meals are not available, service uptake may be less than optimal. There are several examples of HACC Food Services that have successfully used service innovation and/or modification to better meet the cultural food needs of their target populations.

Studies support that up to one third of community-dwelling elderly may be at risk of malnutrition; this translates into increased risk for poor health, reduced quality of life, higher hospitalisation rates and increased healthcare costs. A brief nutrition screening tool, such as the MST or the Victorian HACC Nutrition Screening Tool should be considered for use in community-dwelling CALD elderly, however their use requires validation.

Whilst it is highly likely that supporting improved nutrition amongst community-dwelling CALD elderly by offering culturally appropriate food service options that provide appropriate levels of nutrition, and making use of food security screening and nutrition screening to direct intervention services will support better health, higher quality of life and independence and reduced healthcare costs, there is a strong need for evidence-based research to evaluate the effect of HACC food services on CALD client outcomes.

8. Key Recommendations

1. **There is an urgent need to conduct high quality research into the barriers to HACC food service usage amongst a diverse range of CALD aged populations**
2. **It appears that CALD elderly, both nationally and in Queensland, are underrepresented in terms of HACC service usage**
3. **Barriers have been suggested to explain this underutilisation, however the diversity of the CALD aged population and the importance of nutrition as a driver of optimal health outcomes warrants in depth exploration of barriers to uptake of HACC food services amongst a range of CALD groups**
4. **It is important that HACC Food Services gain a good understanding of the cultural food needs of their existing clients and targeted clients and whether their current services are meeting these needs**
5. **Little is known about the cultural food needs of HACC food service clients as this information is not routinely collected or reported**
6. **The underrepresentation of CALD elderly in HACC services implies that in some way current services are not meeting their needs or that barriers exist to accessing such services**
7. **An audit of HACC food services is indicated to determine the extent to which they are achieving in delivering culturally appropriate food services. Consultation with HACC food services is also indicated to determine the barriers and enablers that they face in achieving this**
8. **Understanding the operational constraints of HACC Food services is essential to designing and implementing appropriate strategies and service delivery programs**
9. **Research into CALD elderly preferences relating to food service delivery (including service type, structure, and food offerings) is required to determine how HACC services can respond and deliver culturally appropriate food services**
10. **Understanding the cultural food service needs of the CALD elderly community is essential to informing the design of food services and strategies that will break down barriers to support optimal service usage**
11. **By building on existing knowledge of the preferences that emerging ageing communities have for aged care service delivery, gaining additional understanding of**

these communities' preferences for food service delivery will assist in the efficient and effective planning of relevant food services

12. **Nutrition standards that are in line with current nutrition recommendations are required at a national level to guide HACC food services in the provision of nutritionally adequate meals**

13. **Nutrition standards at a national level will prevent duplication of efforts at state and territory levels, and will facilitate HACC food services in the planning and delivery of nutritionally appropriate meals that will support optimal nutritional wellbeing**

14. **Options should be explored for ways to incorporate the screening of nutrition risk screening and food security into existing HACC aged care service assessments**

15. **Malnutrition is a public health concern amongst community dwelling elderly. HACC-funded food services may be well-placed to complete screening for nutritional risk and food security with appropriate support and training**

16. **A review of the organisational structure of MOW in Queensland would help to ensure that MOW is well placed to deliver meals that are of a consistently high quality, are culturally appropriate, and affordable for CALD and non-CALD clientele in the future. Financial longevity and community engagement of each MOW service is important to consider in such a review**

17. **The current organisational structure of MOW in Queensland is such that it is difficult to ensure consistent high level of meal quality as well as posing barriers to the implementation of uniform procedures and practices state-wide**

18. **Meeting the cultural food needs of Queensland's CALD elderly is an important advocacy issue. It requires promotion at all levels of government to raise awareness and promote effective change**

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APPENDIX 1: HACC CALD Policy in Victoria: Excerpts from 'HACC Social Support for people from Culturally and Linguistically Diverse (CALD) Backgrounds'[46]

In Victoria, there have been several initiatives and developments that have focused on the delivery of appropriate services to CALD elderly. Haralambous, Moore and Tait provide a concise summary of the Victorian policy context for elderly CALD people in the 2007 report titled *'HACC Social Support for people from Culturally and Linguistically Diverse (CALD) Backgrounds'*[46].

1. **The HACC Access and Advocacy Service in 1988 (in 1994 this became known as the Program Development and Access Service (PDA)**
2. **HACC Ethnic Policy Statement in 1993 that aimed to ensure that HACC services were considerate of the needs of NESB clients**
3. **A Ministerial Reference Group on HACC Ethnic Services in 1991 recommended that attention was required to improve HACC service utilisation rates of ethnic consumers**
4. **The HACC Cultural Planning tool 1996 was created by the Action on Disabilities within Ethnic Communities (ADEC) to help develop benchmarks and performance indicators to improve and plan mainstream services that meet the needs of CALD clients**
5. **In 1997, Victorian HACC implemented a *Cultural Planning Strategy* with the aim of HACC services respond to the needs of CALD peoples[116]**
6. **In the 1990's HACC Service Development Grants were made a formal part of the HACC program, some of which resulted in changes to service delivery models to culturally diverse communities and supported new connections between services**
7. **A state-wide consultation in 2003 identified various issues such as service flexibility and quality, volunteers and improved resource allocation that required targeting to enhance service provision, with frail older people from CALD backgrounds being identified as a key target group**
8. **A priority area identified in the *Strategic Framework for 2003-2006* to guide allocation of HACC growth funds included improving quality and quantity of HACC Basic services to CALD peoples**
9. **In 2003 the *Culturally Equitable Gateways Strategy (CEGS)* was introduced, funded by the Minister for Aged Care from 2004 to 2007, whereby funding was made available to support ethnic agencies and local governments joint efforts to improve HACC service provision to CALD elderly**

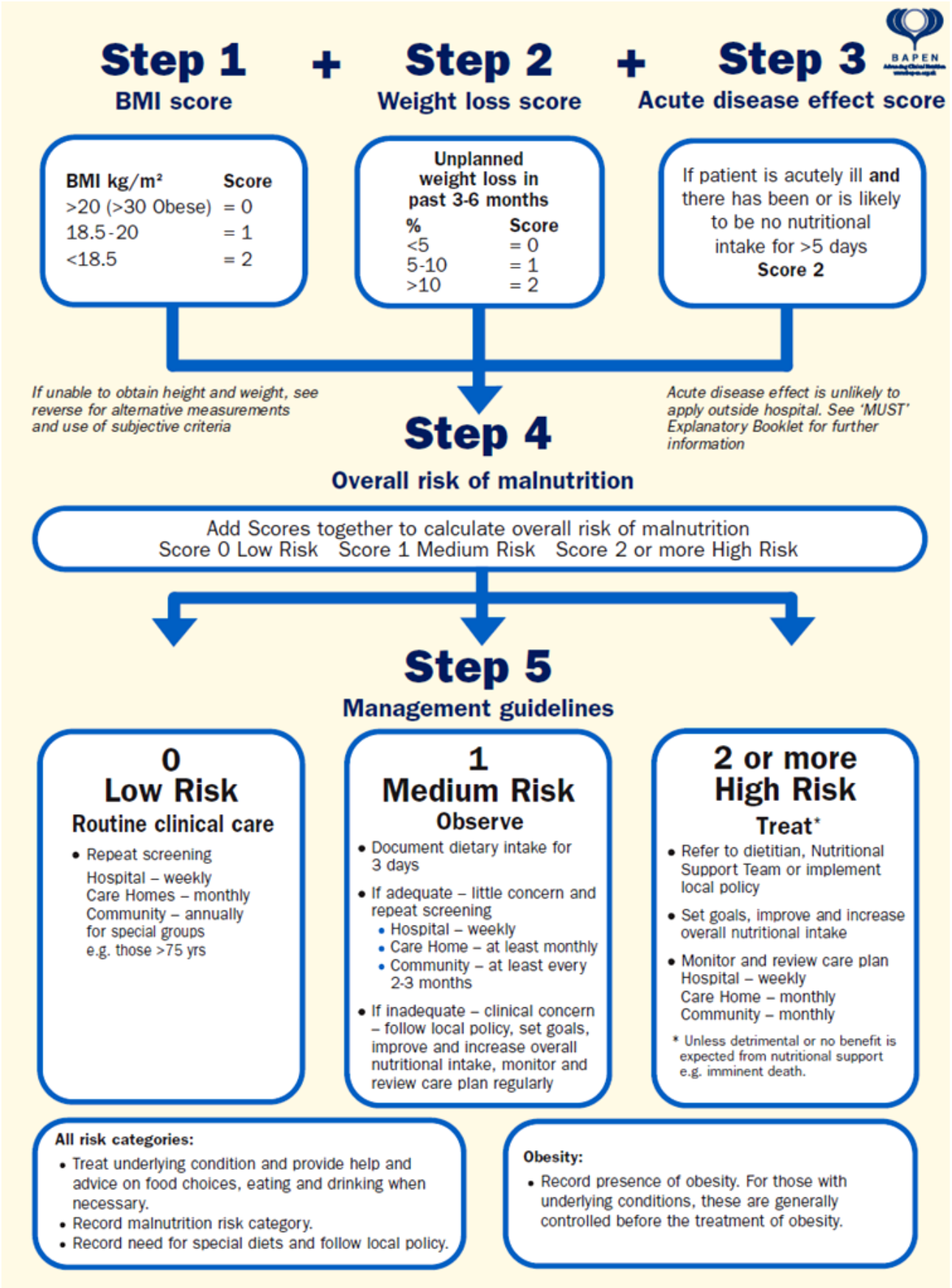
10. **An evaluation of the Victorian HACC *Cultural Planning Strategy* was conducted in 2007, finding that the strategy's greatest achievement was embedding the cultural action planning concept within organisations but acknowledged that evaluation was hampered due to poor availability of data[116]**

11. **A 2007 the Municipal Association of Victoria conducted a HACC Workforce Bilingual Audit and found that within the metropolitan region, 25% of HACC workers spoke a language other than English (LOTE), covering 69 LOTE's, matching the percentage of the metropolitan areas elderly CALD population[117]**

12. **Pursuant to the 2007 evaluation of the Victorian HACC *Cultural Planning Strategy*, a renewed strategic population planning initiative has been devised, known as *Diversity planning and practice.*[118]. Aiming to facilitate HACC service delivery that is person-centred, wellness promoting and enabling, this policy details a quality improvement strategy based on an active service model[118]. People from CALD backgrounds are one of the five special needs groups identified in the policy. For more detailed information, refer to the policy document available at http://www.health.vic.gov.au/hacc/downloads/pdf/diversity_policy.pdf**

13. **In 2008 the *Culturally Equitable Gateways Strategy* was evaluated and found to have been effective in improving uptake of HACC core services amongst the CALD elderly target group, improving the collection of CALD specific data, sustained advocacy of CALD elderly as a high priority for aged care service development as well as the tailoring of HACC promotion activities to meet the language and cultural needs of CALD elderly.[47]**

APPENDIX 2: Malnutrition Universal Screening Tool (MUST)[75]



APPENDIX 3: Short-Form Mini Nutritional Assessment (SF MNA)[119]

Mini Nutritional Assessment
MNA®

Last name: First name:

Sex: Age: Weight, kg: Height, cm: Date:

Complete the screen by filling in the boxes with the appropriate numbers. Total the numbers for the final screening score.

Screening

A **Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?**
0 = severe decrease in food intake
1 = moderate decrease in food intake
2 = no decrease in food intake ☐

B **Weight loss during the last 3 months**
0 = weight loss greater than 3 kg (6.6 lbs)
1 = does not know
2 = weight loss between 1 and 3 kg (2.2 and 6.6 lbs)
3 = no weight loss ☐

C **Mobility**
0 = bed or chair bound
1 = able to get out of bed / chair but does not go out
2 = goes out ☐

D **Has suffered psychological stress or acute disease in the past 3 months?**
0 = yes 2 = no ☐

E **Neuropsychological problems**
0 = severe dementia or depression
1 = mild dementia
2 = no psychological problems ☐

F1 **Body Mass Index (BMI) (weight in kg) / (height in m^2)**
0 = BMI less than 19
1 = BMI 19 to less than 21
2 = BMI 21 to less than 23
3 = BMI 23 or greater ☐

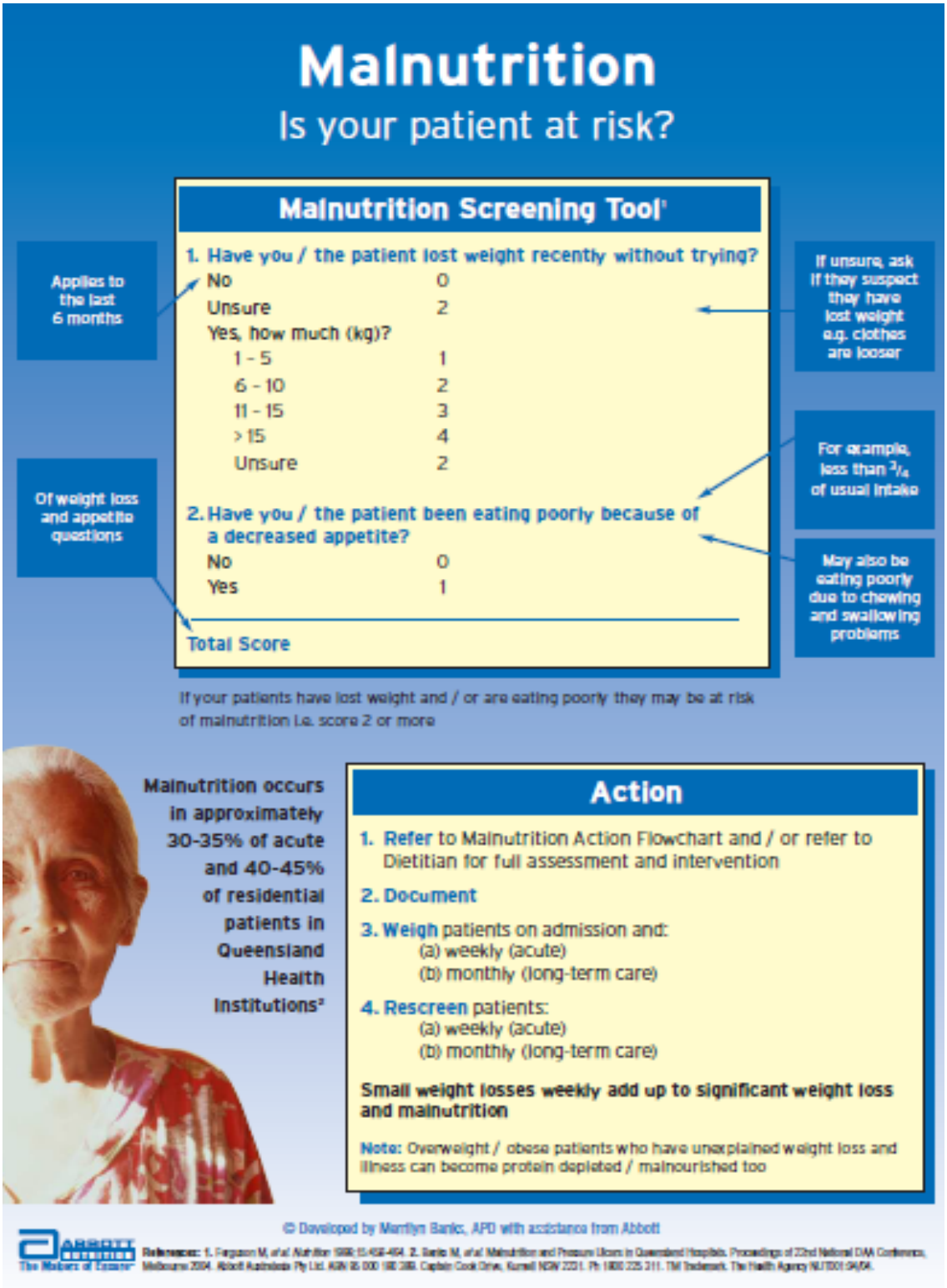
IF BMI IS NOT AVAILABLE, REPLACE QUESTION F1 WITH QUESTION F2.
DO NOT ANSWER QUESTION F2 IF QUESTION F1 IS ALREADY COMPLETED.

F2 **Calf circumference (CC) in cm**
0 = CC less than 31
3 = CC 31 or greater ☐

Screening score ☐☐
(max. 14 points)

12-14 points: Normal nutritional status
8-11 points: At risk of malnutrition
0-7 points: Malnourished

APPENDIX 4: Malnutrition Screening Tool (MST)[77]



APPENDIX 5: Victorian HACC Nutrition Screening Tool[63]

NUTRITIONAL RISK SCREENING AND MONITORING TOOL

CLIENT: DATE:

INSTRUCTIONS:

Fill in the client's name and the date you use the tool: tick the box when the answer to your observation is YES

☐	Obvious underweight-frailty?
☐	Unintentional weight loss?
☐	Reduced appetite or reduced food and fluid intake?
☐	Mouth or teeth or swallowing problem?
☐	Follows a special diet?
☐	Unable to shop for food?
☐	Unable to prepare food?
☐	Unable to feed self?
☐	Obvious overweight affecting life quality?
☐	Unintentional weight gain?

SIGNATURE: POSITION:

OUTCOME:

- YES to one or more questions means that nutritional risk exists
- Nutritional risk increases when the person is affected by an increasing number of general needs assessment factors
- In particular, deterioration in health and loss of independence can result from under-nutrition and perhaps malnutrition

ACTION:

- Try TWO weeks of simple intervention strategies (less time if severe weight loss); if no response refer to a specialist
- Monitoring at monthly intervals (or more frequently) by a team member is required to ensure that nutritional risk has decreased through the most effective intervention

APPENDIX 6: ELCSA FOOD SECURITY SURVEY TOOL[92]

In the last 3 months:

1. Were you worried that you would run out of food before being able to buy or receive more food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
2. Did you run out of food before having money to buy more?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
3. Did you run out of money to have a healthy and varied diet?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
4. Did you have to consume just a few foods because you ran out of money?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	

5. Were you unable to offer your children/adolescents a healthy and varied diet because you didn't have enough money?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
6. Did any of the children/adolescents not eat enough because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
7. Did you or any adult in your household ever reduce the size of meals or skip meals because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
8. Did you ever eat less than what you thought you should because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	

9. Did you ever feel hungry but didn't eat because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
10. Did you lose weight because you didn't have enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
11. Did you or any other adult in your household ever go without eating for a whole day or have just 1 meal in a whole day because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
12. Did you ever reduce the size of meals of your children because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	

13. Did your children/adolescents ever have to skip a meal because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
14. Were your children/adolescents ever hungry but you just couldn't buy more food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	
15. Did your children ever go without food for a whole day because there wasn't enough money to buy food?	
1 ☐ Yes →	**How often did this happen?** 1 ☐ Almost every day 2 ☐ On just a few days 3 ☐ Only on 1 or 2 days 4 ☐ Don't know/ don't want to answer
2 ☐ No	
3 ☐ Don't know	