La Trobe University

Australian Institute for Primary Care & Ageing
Faculty of Health Sciences

November 2013

HACC Meals Review:
Final Report

Summary and Implications
Australian Institute for Primary Care & Ageing
Faculty of Health Sciences
La Trobe University
A body politic and corporate
ABN 64 804 735 113

The Australian Institute for Primary Care & Ageing (AIPCA) operates from within the academic environment of La Trobe University.

La Trobe University is a Statutory Body by Act of Parliament.

Postal Address

Australian Institute for Primary Care & Ageing
Faculty of Health Sciences
La Trobe University
Victoria 3086
Melbourne Campus

Level 5
Health Sciences Building 2
La Trobe University

Telephone: (61-3) 9479 3700
Facsimile: (61-3) 9479 5977
Email: aipca@latrobe.edu.au

Online

http://www.latrobe.edu.au/aipca
Acknowledgements

This report was prepared for the Australian Government Department of Health and Ageing by Professor Yvonne Wells of the Lincoln Centre for Research on Ageing, Australian Institute for Primary Care & Ageing, La Trobe University.

This project is supported with funding by the Commonwealth Government.

Thanks are due to:

- La Trobe University staff members who contributed to the previous reports on which the current report is based (Ms Barbara Parker, Project Manager; Dr Angela Herd; Ms Karen Teshuva; Dr Judy Tang; Dr John van Holsteyn; and several casual and support staff)
- Staff of the then Commonwealth Department of Health and Ageing (now Department of Social Services)
- The Meals Review Sub-Group
- Many staff members and clients of Meal Services who provided information to inform this review.

SUGGESTED CITATION

Wells, Y. (2013). Review of Meal Services under the Home and Community Care (HACC) Program: Final report – Implications for Meal Services in the Commonwealth Home Support Program. Project report prepared by the Australian Institute for Primary Care & Ageing, La Trobe University, Melbourne, for the Australian Department of Health and Ageing.
Contents

EXECUTIVE SUMMARY ........................................................................................................... 7

INTRODUCTION .......................................................................................................................... 10
Home and Community Care (HACC) services ........................................................................... 10
Policy Context ............................................................................................................................ 10

METHOD .................................................................................................................................... 12

ROLES OF MEAL SERVICES .................................................................................................... 16
The importance of providing nutritional support to older people .............................................. 16
The role of Meal Services in providing social support ................................................................. 21
Other benefits of Meal Services ................................................................................................. 24
Need for definitions, standards or guidelines ............................................................................ 25
System-level benefits ................................................................................................................ 27
Summary .................................................................................................................................... 27

CLIENTS OF MEAL SERVICES ................................................................................................. 29
Importance of a focus on clients as the centre of care ................................................................. 29
Client food preferences and satisfaction with meals ................................................................. 29
Trends ......................................................................................................................................... 32
Innovations ............................................................................................................................... 34
Summary .................................................................................................................................... 36

MEAL SERVICE PROVIDERS ................................................................................................... 38
Meal Services in Australia ............................................................................................................ 38
Challenges to equity of access ................................................................................................... 39
Sustainability of Meal Services .................................................................................................. 39
Innovations ................................................................................................................................ 40
Jurisdictional and regional differences ..................................................................................... 41
Summary .................................................................................................................................... 41

SERVICE DELIVERY: FOOD CONTENT, PRODUCTION AND DELIVERY .................................. 42
The food provided ....................................................................................................................... 42
Food production and delivery in Australia ............................................................................... 43
Trends in food production and delivery .................................................................................... 45
Food safety .................................................................................................................................. 45
Innovation in Food Delivery and Food Safety .......................................................................... 47
Jurisdictional differences in service delivery .......................................................................... 50
Summary .................................................................................................................................... 50

STAFFING, TRAINING AND USE OF VOLUNTEERS ............................................................. 51
Staff roles .................................................................................................................................... 51
Staff training ............................................................................................................................... 51
Involvement of dietitians ........................................................................................................... 52
Involvement of volunteers ......................................................................................................... 54
Innovation .................................................................................................................................... 56
Jurisdictional differences in use of dietitians and volunteers .................................................... 57
Summary .................................................................................................................................... 57
RESEARCH AND DATA ............................................................................................................. 58
Gaps in knowledge.................................................................................................................. 58
HACC MDS ............................................................................................................................... 58
Client feedback ...................................................................................................................... 59
Summary ................................................................................................................................. 59

FUNDING MODELS, COSTING AND RESOURCES ............................................................. 60
Resources and funding .......................................................................................................... 60
Innovations in resources and funding .................................................................................... 63
Jurisdictional differences in funding models, costing and resources ...................................... 64
Summary .................................................................................................................................. 64

IMPLICATIONS ....................................................................................................................... 65

REFERENCES ......................................................................................................................... 74

TABLES
TABLE 1: STANDARDS, GUIDELINES AND RESOURCES .................................................. 26
TABLE 2: SUMMARY AND IMPLICATIONS ........................................................................... 67
### Glossary

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMOWA</td>
<td>Australian Meals on Wheels Association</td>
</tr>
<tr>
<td>CACP</td>
<td>Community Aged Care Package</td>
</tr>
<tr>
<td>CALD</td>
<td>Culturally and Linguistically Diverse</td>
</tr>
<tr>
<td>CDC</td>
<td>Consumer Directed Care</td>
</tr>
<tr>
<td>CHSP</td>
<td>Commonwealth Home Support Program</td>
</tr>
<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
</tr>
<tr>
<td>DoHA</td>
<td>Department of Health and Ageing (Australian Government Department)</td>
</tr>
<tr>
<td>EACH</td>
<td>Extended Aged Care at Home</td>
</tr>
<tr>
<td>HACC</td>
<td>Home and Community Care</td>
</tr>
<tr>
<td>MAV</td>
<td>Municipal Association of Victoria</td>
</tr>
<tr>
<td>MDS</td>
<td>Minimum Data Set</td>
</tr>
<tr>
<td>MRSG</td>
<td>Meals Review Sub Group</td>
</tr>
<tr>
<td>NHMRC</td>
<td>National Health and Medical Research Council</td>
</tr>
<tr>
<td>OFS</td>
<td>Other Food Services</td>
</tr>
<tr>
<td>RDA</td>
<td>Recommended daily allowance</td>
</tr>
<tr>
<td>ROGS</td>
<td>Report on Government Services</td>
</tr>
<tr>
<td>RQF</td>
<td>Review Question Form</td>
</tr>
</tbody>
</table>
Executive Summary

The current report has two purposes:

1. To consolidate evidence compiled to date (through the literature review, data analysis, consultations and mapping).
2. To identify service delivery implications that arise from the consolidation of findings.

CONTEXT: REVIEW OF MEAL SERVICES UNDER THE HOME AND COMMUNITY CARE (HACC) PROGRAM

The main aim of the review was to develop an evidence base and identify subsequent service delivery implications to ensure Meal Services under the new Commonwealth Home Support Program (CHSP) contribute to the objectives of the program. The requirement of the project was to examine Meal Services funded by the Home and Community Care (HACC) program; namely:

- Meals – meals prepared and delivered to the clients, either at home or at a centre.
- Other Meal Services – any assistance provided during preparation or cooking of a meal at the client’s home.
- Support provided to clients by dietitians and nutritionists.¹

The focus of this review was older people, defined as people aged 65 and over and Indigenous people aged 50 and over.

Previous tasks in the Meals Review have included: a comprehensive literature review; data analysis on Meal Services in Australia; national consultations to compile evidence on variation in Meal Services, service delivery and funding models and identify innovative service models in operation; and mapping Meal Services (e.g. service types, client characteristics and funding models) by jurisdiction.

The purpose of the current component of this project is to summarise results of the project and draw out implications for the design and implementation of Meal Services within the new Commonwealth Home Support Program, including identifying how Meal Services can be supported to continue assisting older people to stay at home.

METHOD

Findings from all prior reports were examined thematically to integrate them and draw out implications for the design and delivery of Meal Services. This report sets out the main themes and implications, along with the sources of information that constitute the evidence underlying each implication.

¹ In Australia all dietitians are considered to be nutritionists; however, nutritionists without a dietetics qualification cannot take on the specialised role of a dietitian. For further details see the Distinction between dietitian and nutritionist at http://daa.asn.au/universities-recognition/dietetics-in-australia/distinction-between-dietitian-and-nutritionist/
TOPICS

Topics used to group and integrate the evidence collected were:

- Roles of Meal Services
- Clients of Meal Services
- Meal Service providers
- Service delivery – food content, production and delivery
- Staffing, training and use of volunteers
- Research and data
- Funding models, costing and resources

SUMMARY OF FINDINGS AND IMPLICATIONS

An overarching challenge for the Commonwealth Home Support Program (CHSP) is to design funding models that balance improving consistency within and between jurisdictions (on the grounds of equity) with supporting flexibility, innovation and responsiveness to local conditions and client need (on the grounds of quality and effectiveness). A further issue is access to better data on the program to support policy decisions. Learnings and implications for service delivery are summarised below, and a full table of implications is provided in the Implications section of this report.

- Meeting the nutritional needs of older people is a very important element in supporting them to continue living in the community.
- Some sub-groups of older people are at high risk of malnutrition and health problems arising from under-nutrition² that could compromise their capacity to remain living in the community.

**Implication:** These findings underscore the centrality of services that provide nutritional support in a service system intended to support older people to live in the community.

- As well as nutritional support, equally or more important for some groups of clients is the role of Meal Services in supporting older people’s social needs and providing a monitoring function.
- There is evidence of growth in wellbeing services to support individual capacity to improve nutrition and prepare food for oneself.
- The provision of Other Food Services is growing, and potential exists for this service type to contribute more to nutritional support within wellness frameworks.

**Implication:** Service models that recognise and direct funding towards the various non-nutritional functions of Meal Services may be required. These functions also represent opportunities for service integration, both within HACC and more broadly.

- Each jurisdiction has developed different patterns of service provision. Differences are apparent in the scale of services, provider mix, the use of dietitians, definitions and terms, how consumers’ needs for nutritional support are assessed, and how integrated food services are across the range of food service types and with other HACC services.

---

Clients and their nutritional needs are becoming more diverse and more challenging. Service providers are becoming more flexible and client-centred in how they deliver their service. Many providers have responded to the challenges they face by implementing a range of new strategies and innovations, some of which have been highly successful. Many providers express concern about the ongoing financial viability of delivered Meal Services.

Implication: Service systems will need to be flexible enough to respond innovatively to changes in client demographics and preferences. Funding models for Meal Services could be designed to support rather than restrict planning and innovation.

Many Meal Services have a heavy reliance on volunteer labour. This can be seen both as a strength (e.g. community involvement, high levels of personal commitment from volunteers) and as a challenge (i.e. some services are having difficulty recruiting and managing their volunteer workforce).

Implication: Service providers may need assistance to deal effectively with volunteer coordination, recruitment, retention and training. Forums for sharing strategies may need financial support.

Meal Services are facing challenges including: uneven access to dietitian input and other allied health support; inability to meet the food preferences of some sub-groups of clients (e.g. some CALD groups); and difficulty delivering meals reliably to some remote communities.

Implication: Funding mechanisms could be designed to acknowledge difficulty in reaching particular client groups.

There is room for improvement in some aspects of Meal Services.

Implication: Quality indicators in community services could include better data on client satisfaction and improved evidence of having sought client feedback and mechanisms for responding effectively to client complaints.

The HACC MDS, arguably, does not collect the information most useful to designing and evaluating the CHSP, and has a lot of missing data on key variables.

Implication: The HACC MDS requires review to improve its capacity to collect meaningful data that are useful for service planning and development. There is opportunity for developing a common client record to report on individuals’ outcomes from using HACC food services, such as improved nutritional status and capacity to continue providing food for oneself.

In summary, this Review has been effective in collecting evidence to contribute to the development of policy options for the Commonwealth Home Support Program.
Introduction

HOME AND COMMUNITY CARE (HACC) SERVICES

In 2010, the Council of Australian Governments (COAG) reached a historic agreement on the future of the HACC Program. On 20 April 2010, COAG—with the exception of Western Australia and Victoria—reached an agreement to establish a National Health and Hospitals Network (NHHN). The agreement provides for transfer to the Commonwealth of current aged care services, including the HACC Program, except in Victoria and Western Australia.

Transfer of the HACC Program to the Commonwealth Government has been an important step in the development of an end-to-end aged care experience, from community care services to residential care.

Since 1 July 2012, the Commonwealth Government has funded and administered the HACC Program for all people aged 65 years old and over (aged 50 years and over for Indigenous Australians) in all jurisdictions except Victoria and Western Australia. State and territory governments will continue to administer and fund HACC services for all people under these ages.

The Commonwealth and Victorian Governments recently agreed to a transfer of HACC responsibilities for older people, in the context of the National Disability Insurance Scheme negotiations, beginning from 1 July 2015.

POLICY CONTEXT

According to the Australian Bureau of Statistics (2008), the proportion of Australians aged 65 or over is expected to almost double over the next 50 years; from 13% in 2007 to around 25% in 2056. This population shift requires innovative thinking about ways in which supports and services for older people are designed and delivered, particularly considering that the proportion of people who receive meal supports increases dramatically with age, from about 1.5% aged 65–74 to 13.6% aged 85 and over (Australian Institute of Health and Welfare, 2007).

As a consequence of population ageing, by 2050 over 3.5 million Australians are expected to use aged care services each year. In response to these trends, the Productivity Commission (2011) released the report Caring for older Australians, which emphasised the need for aged care services to focus on the wellbeing of older Australians—promoting their independence, giving them choice, and retaining their community engagement. Under recommended reforms, older Australians would receive aged care services that address their individual needs, with an emphasis on re-ablement where possible. The report identified future challenges for aged care services, which include: an increasing incidence of age-related disability and disease; rising expectations about the type and flexibility of services required; community concerns about variability in the quality of services received; a predicted shortage of volunteers and informal carers; and a need for more care workers with enhanced skills. Each of these challenges will have an impact on the delivery of Meal Services for older people.
In addition to care and support provided by informal carers, government-subsidised services are currently provided to over one million older Australians (and their carers) each year. More than half of these clients receive low-intensity support through the Home and Community Care (HACC) program. As well as Meal Services, this support includes transport, personal care, home care, and home modifications and maintenance.

Meal Services provided through HACC fall into two main categories: meals prepared and delivered to older people either at home or a community-based centre; and other Meal Services, including assistance to shop, prepare food and cook a meal at the client’s home. In addition, Meal Services are provided to older people by dietitians and nutritionists (coded under allied health assistance in the HACC Minimum Data Set). Nutritional support is also provided in a range of ways: meals may be provided as a component of centre-based day care activities; assistance with eating is available under personal care services; domestic assistance may include shopping for food; allied health care (i.e. dietitians and nutritionists) may provide education and advice; and respite care can include meal provision. Looking to the future, it is essential that Meal Services are able to adapt to consumer needs and preferences, continue to assist people to remain living at home, and respond to service production and delivery challenges.

As part of aged care reforms, a Commonwealth Home Support Program (CHSP) will be introduced in July 2015. This program proposes to bring together a range of services currently providing basic home support, including the HACC program, the National Respite for Carers program, the Day Therapy Centres program, and Assistance with Care and Housing for the Aged. These programs currently offer different services to consumers and carers through different pathways but have the same objective: to assist older people to remain living in the community.

Reviews of Meal Services, community transport, and home modification and maintenance services have been undertaken in the context of development and implementation of the CHSP. Reviews were tasked with identifying emerging patterns of client need and the diversity of funding and service delivery models in operation, and with determining how these contribute to CHSP objectives, in order to facilitate a more consistent and effective approach to providing basic support services under the CHSP.

The purpose of the review of Meal Services was to develop an evidence base and identify subsequent service delivery implications to ensure Meal Services under the new CHSP contribute to program objectives. These objectives include meeting future consumer needs and preferences, assisting people to remain living at home and responding to service delivery challenges.
Method

The current report sets out main themes and implications arising from previous reports to the Meals Review Sub-Group. Methods used in previous reports are outlined first in this section.

THE LITERATURE REVIEW

The task of the literature review component of this project was to examine the literature on: domestic and international evidence regarding the range and efficacy of service and funding models for meal preparation and provision; relationships between meal service types; trends and changes in service models (e.g. increasing focus on re-ablement and person-centred care); examples of innovative practice in Australia and overseas; challenges for the future; and lessons from international models that could be adapted to the domestic environment.

Several approaches were undertaken to compile the literature used in this review. These included:

- Accessing a database of websites and ‘grey’ literature compiled by Professor Jeni Warburton and colleagues
- Searching online databases for academic and grey literature
- Using reports provided by the Department of Health and Ageing.

Searches focused on data and reports written in English over the previous ten years, but seminal older articles were also included. References were checked and included if relevant.

The material found was analysed in two steps. The first step was to describe and summarise the content of articles, reports and websites. The material was described in a narrative style under the following headings: Older people, food choices and nutritional status; Approaches to nutritional support; Models of food services; Nutrition Outcomes; Social Outcomes; Gaps in knowledge and services; and Conclusions.

The information located was also listed in three-dimensional tables. The first level divided the material into three broad categories: Product, Logistics and Other. At the second level, each of these categories was divided into three content areas: Home-delivered meals, Congregate meals, and Meals + Services. The third level divided each content area into three sources: Articles, Reports and Websites.

The second step was to compile a selection of material in a table that summarised the strength of the evidence.

DATA ANALYSIS

The Review examined data from a wide range of sources, including the HACC Minimum Data Set. However, only data available in the public domain is quoted in this report. These data are taken from the Productivity Commission’s Reports on Government Services (2013).³

NATIONAL CONSULTATIONS

The objective of the national consultations was to augment results of the literature review and data analysis, to capture the breadth of models and service innovations currently operating. Four different consultation activities were undertaken, employing a range of data collection and analysis methods.

National workshops

All HACC-funded meal service providers, as identified by lists supplied by DoHA and the Victorian Department of Health, were mailed and/or emailed an invitation to attend a consultation workshop in one of 14 locations. Invitations for providers in WA were sent to the WA Department of Health for forwarding to appropriate services. The Meals Review Sub-Group assisted the Department through contacting peak body representatives across Australia to attend the workshops, including HACC-funded members of the Dietitians Association of Australia. Workshops were held in eight capital cities and six regional centres between 1 and 19 July 2013.

Participants at workshops were grouped at small tables and asked to record responses to the questions posed on large sheets of paper, which were subsequently compiled and summarised for each location. The questions focused on three themes: service models (including what works well); funding models; and clients.

Review Question Form (RQF)

The RQF was a one-page questionnaire designed to elicit details about providers’ service models, use of volunteers, clients, innovations and future directions.

All HACC-funded meal service providers, as identified by lists supplied by DoHA and the Victorian Department of Health, were mailed and/or emailed a copy of the RQF and invited to complete and return the form. Invitations for providers in WA were sent to the WA Department of Health for forwarding to appropriate services. The RQF was designed to supplement information gathered at consultation workshops, and enable providers who could not attend a workshop to contribute to the review.

Altogether, 419 service providers responded to the RQF. Most items were closed-ended and used a tick-box format but respondents were also invited to respond to open-ended questions. Responses were coded into themes.

Focus groups

Six focus groups were held with clients of HACC-funded centre-based meal programs in the following capital cities: Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart. Clients at each participating centre were invited by management staff to attend a focus group and provide feedback on their service needs and preferences.

Altogether, 59 centre-based meal clients from six states participated. Two programs were ethno-specific (Italian and Mandarin/Cantonese). Questions posed at the focus groups were about clients’ support with nutrition, the benefits of attending a centre for Meal Services, meal-delivery preferences; cost and affordability of meals; and how nutritional support for older people might be improved.
Client Feedback Forms

Two client feedback forms (surveys) were developed: one for delivered meals’ clients and one for Other Food Service (OFS) clients. Client ‘kits’, containing the relevant feedback form, a letter of introduction, and a reply-paid envelope, were sent to providers who had indicated previously their willingness to distribute them to clients. Clients were able to return the completed form in the reply-paid envelope, or hand them to their service provider for mailing.

Altogether, 3,511 clients of home-delivered meals and 307 OFS clients returned questionnaires. Home-delivered meal clients were asked closed-ended questions in a tick-box format about their service (how often and for how long), the benefits they derived, value for money and other sources of food. OFS clients were asked similar questions, with additional items on how useful they found the service and whether they had seen a dietitian.

JURISDICTIONAL MAPPING

The jurisdiction mapping undertaken was intended to summarise jurisdictional differences in Meal Services. Mapping relied on information collected in previous stages of the project about current meal service types and funding models in each jurisdiction.

THE CURRENT REPORT

This report summarises the information collected in all previous stages of the review and data that are in the public domain, and draws out implications for Meal Services development and delivery. The first stage of this analysis was to divide the material collected into several main topics:

- Roles of Meal Services
- Clients of Meal Services
- Meal Service providers
- Service delivery: food content, production and delivery
- Staffing, training and the use of volunteers
- Research and data
- Funding models, costing and resources

Each section of the report summarises and integrates the evidence on each topic.

CAVEATS

As with all research, none of the analyses presented in this report can be read as presenting a full picture. The literature review was conducted as thoroughly and conscientiously as possible given the short timeframe in which it was delivered, and built on previous work by a reputable research centre, but it is not known whether all possible research was located and included in the review. The other data collection undertaken is equally problematic. It is not known whether participation in the national workshops, focus groups, and surveys (of both service providers and clients) was

---

4 John Richards Initiative, AIPCA, La Trobe University
representative (i.e. whether samples accurately reflected the populations from which they were drawn).

The method used to consult service providers in a workshop format and gather information from groups has inherent strengths and limitations. The major strength of the method was the engagement of a large number and wide range of people in the consultation process. A limitation is that it is not possible to determine how much agreement was reached in each group on the key points, nor what workshop participants had in mind when they wrote their comments. Sometimes participants’ comments appear contradictory—it was entirely possible for participants at different workshops, different tables, or even the same table, to record completely different views on a topic or issue. A further caveat for the service models nominated by participants as ‘working well’ is that not everything will work well in all places and for all clients.

Data quoted in the Reports on Government Services (ROGS) rely on the HACC MDS and are also subject to limitations. The HACC MDS collection comprises data about all individuals receiving HACC-funded assistance from service providers located in Australia. Clients are not included in the HACC MDS collection where they are not known to a service provider as individuals (e.g. clients helped anonymously through general telephone enquiries or where advocacy work is conducted on behalf of clients in general rather than for specific individuals). Clients may also ‘opt out’ of having their personal information recorded in the MDS.

The HACC MDS has no reporting requirement to record the quality of meals provided or the number of special diets provided, or whether the client ate or enjoyed the meal. Meals provided at centres are only counted in the MDS when they are the primary reason for the client being there or they are the primary service the client receives while there.

Nutritional services provided by allied health staff are funded by HACC but are difficult to explore. Data on nutritional support provided by dietitians is identifiable only through some state data repositories.

While improvements of data quality and comprehensiveness are an ongoing and integral part of the data collection process, various jurisdictions are not fully consistent in their reporting against HACC MDS items. Missing data (and the fact that not all providers reliably submit data) is still an issue. In addition, trends may be identified only since MDS Version 2 has been used nationally.

Despite this range of caveats, methods used in the national consultations have been effective in collecting evidence to contribute to the development of policy options for the Commonwealth Home Support Program.
Roles of Meal Services

This section covers:

- The importance of providing nutritional support to older people
- The role of Meal Services in providing social support to older people
- Other benefits of Meal Services
- Need for definitions, standards and guidelines
- Jurisdictional differences
- Summary

THE IMPORTANCE OF PROVIDING NUTRITIONAL SUPPORT TO OLDER PEOPLE

Adequate nutrition is vital in maintaining good health and functional independence throughout the lifespan. The purpose of the HACC program is to enable older Australians to remain living in the community as long as possible, and in this context Meals on Wheels (MOW) plays an important role in helping older people remain healthy and functionally independent (Luscombe-Marsh, Chapman, & Visvanathan, 2013).

International evidence confirms that older people are at higher risk of malnutrition and disease than their younger counterparts (Chwang, 2012). Malnutrition is linked with poor health outcomes in the longer term (e.g. Leggo et al., 2008).

Importantly, although older people typically eat less than their younger counterparts, their requirements for vitamins and minerals remain the same or increase in some cases; for example, higher micronutrient intakes are recommended for vitamin D, calcium, riboflavin and Vitamin B6 (NHMRC, 2005).

Risk factors for poor nutrition in older people

Research suggests that demographic factors such as gender, age and living arrangements, social factors such as number of friends and closeness of relationships with family and friends, and economic factors such as level of income and access to transport, all affect people’s diet and health (Hughes, Bennett, & Hetherington, 2004; Locher et al., 2009; Wiggins, Higgs, Hyde, & Blane, 2004). As people grow older, many of these factors change and affect people’s relationship with food and food-related satisfaction. In addition, because healthy diets cost more than unhealthy ones (Drewnowski & Barratt-Fornell, 2004), low levels of economic resources are associated with increased risk of hunger and food insecurity (Lo, Chang, Lee, & Wahlqvist, 2009; Quinn, Johnson, Poon, Martin, & Nickolson-Richardson, 1997). Low income can affect the quality and quantity of food purchased by older people (e.g. Herndon, 1995) and can also restrict the nutritional quality of food purchased (Sharpe, Huston, & Finke, 2003).

Access to transport to and from food retailers can be a barrier to obtaining adequate food (Hendy, Nelson, & Greco, 1998). Lack of nearby supermarkets with adequate selection of healthy foods and access to programs such as Meals on Wheels can also act as constraints to healthy eating for older people, particularly those in rural and remote areas.
Chronic problems with oral health and digestion, the need for modified diets, disease states and polypharmacy can all affect older people’s capacity to eat a healthy diet (Brownie, 2006; Quandt & Chao, 2000). Physical disabilities such as difficulty walking might limit grocery shopping and preparing food, which restricts the amount and types of food available. Similarly, missing, decaying or loose teeth or ill-fitting dentures make it hard for older people to eat an appropriate variety and quantity of food (Brennan, Singh, Liu, & Spencer, 2010). Problems chewing and swallowing can have similar results. Sensory losses, including poor vision, diminished hearing and decreasing taste, can affect eating behaviours (Brownie, 2006), and altered mental states such as confusion and memory loss can make it difficult for some older people to remember what and when they have eaten.

Rothenberg, Bosaeus, and Steen (1993) examined whether differences in cooking skills might be a factor in health differences and found disparities between sexes, age groups, income, and social class, with the most variations apparent in gender. Lack of motivation, knowledge, and skills for meal preparation—particularly in older men—may result in less healthy food choices and more restricted diets.

Increasingly, older people are less likely to be living with family members and more likely to live alone (Australian Bureau of Statistics, 2013). However, living alone is linked with various health-related disadvantages in older people (e.g. Kharicha et al., 2007) and affects older people’s eating arrangements and their ability to share a meal with others.

Impact of providing Meal Services

Some research has shown that providing home-delivered meals improves the nutritional intake of older people (e.g. Keller, 2006; Millen et al., 2002; Roy & Payette, 2006); however, this does not necessarily mean that receiving home-delivered meals prevents nutritional deficiencies (Roy & Payette, 2006). Traditionally, most Meals on Wheels (MOW) meals set out to provide only a proportion of the daily required nutritional intake (Millen et al., 2002; O’Dwyer et al., 2009).

Studies in the US and Canada have reported that older people receiving Meal Services experience improved nutritional status (Millen et al., 2002) and a decrease in nutritional risk (Keller, 2006). In particular, a US study (Millen et al., 2002) comparing ambulatory and homebound Elderly Nutrition Program (ENP) clients with a matched sample of non-clients found that ENP clients were better nourished. In addition, the study found that ENP meals (both home-delivered and congregate) provided 75% of older people’s daily energy requirements and between 30% and 50% of their daily nutrient intake, and that ENP clients’ mean daily nutrient intake approached or exceeded the recommended daily allowances for 11 of 16 nutrients examined.

Similarly, a stringent experimental study (Roy & Payette, 2006) showed that new MOW clients who were initially nutritionally at risk experienced an increase in nutrient intake after an eight-week period. Compared with a control group, clients benefited from significant increases in energy, protein and thiamine intake. Despite this, the program did not fully prevent nutrient deficiencies and

---

1 In 2011, a quarter of older people in Australia lived alone in a private dwelling, making this the most common living arrangement after living with a partner. It is much more common for women than men to live alone – 32% compared with 17%. For both men and women the proportion living alone increases with age to 25% of men and 41% of women aged 85 years and over and living in private dwellings. [Australian Bureau of Statistics](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2071.0main+features602012-2013)
the researchers recommended a more intensive intervention to address such deficiencies (Roy & Payette).

O’Dwyer et al. (2009) examined the nutritional content of meals in an Irish MOW service and found that levels of vitamin C, vitamin D, folate, and calcium were below one-third of the recommended daily allowance. They found that MOW meals provided between 35% and 45% of older people’s energy requirements. Further, it was found that 39% of clients were malnourished or at risk of malnutrition. The study concluded that Irish clients may not be receiving adequate nutrient intakes from MOW, and the researchers recommended clients might benefit from legislation that sets out minimum standards for nutrient levels of meals delivered by MOW (O’Dwyer et al., 2009).

Some studies have shown that using programs such as Meals on Wheels can reduce nutritional risk but may not result in improved life satisfaction (Keller, 2006), especially for women and people who have been recently widowed (Shahar, Schultz, Shachar, & Wing, 2001). Widowhood is a particularly vulnerable time in older people’s lives where, among other changes, the quality and variety of food consumed may suffer.

Client views on nutritional support

The importance of Meal Services in providing nutritional support was supported by evidence gathered during this review. From the clients’ perspective, a nutritious meal was clearly seen as the most important benefit of having delivered meals (66% of people who returned the Client Feedback Form rated this as very important), and more important than having someone check on them (35% very important), or having a chat (33% very important). The importance of nutritional support was particularly strong among clients who received only home-delivered meals (72% very important), rather than centre-based meals or a combined service.

Clients of Other Food Services (OFS) who returned the Client Feedback Form said the most common kind of assistance they received was help with making meals (30%), followed by advice on nutrition (22%). Over one-half of respondents said they received support once a week or more (56%), compared with 10% for twice a month and 12% for once a month or less often (with 22% missing data on this item).

The usefulness ratings of various kinds of support received by OFS clients were compared. Of the 64 clients who said they only received help with making their own meals, 84% rated this help as Very useful, compared with 79% of those who received only advice on food handling, 68% of those who received only advice on shopping and 61% of those who received only advice on nutrition. Clearly, assistance with making their own meals was rated most useful by clients. In contrast, the most highly rated benefit of OFS was: ‘Knowing how to look after my health better’ (42% of respondents rated this as very important, compared with only 18% for ‘New skills in cooking for myself’).

Focus groups in all states identified something they valued about centre-based meals; that they were wholesome or nutritious, tasty, culturally specific, varied, balanced, and fresh. Some participants said there was more variety in their diet than if they were cooking for one at home. In contrast, in some states, the need for fresher and better quality food to improve nutrition was noted.

The relative unimportance of nutritional support to centre-based meal clients also emerged from focus group discussions. Only a few participants felt their nutrition had improved as a result of meals...
obtained at a centre. Some participants in three states emphasised that they were still able to eat healthily at home, with many in the Hobart group saying they did not care whether or not the food provided at the centre was healthy.

**Provider confidence in providing nutrition care to clients**

Most service providers who responded to the Review Question Form said they could meet clients’ dietary needs (92%). Providers with a focus on home-delivered meals were the most likely to say they met clients’ special dietary needs (95% compared with 79% of centre-based meal providers).

Most providers at the national workshops were either confident or somewhat confident about the ability of their service to provide nutritional care to clients. The reasons participants gave for having this confidence varied and included:

- **Assessment** – using a nutrition risk assessment as part of the initial assessment (e.g. the Victorian HACC nutrition risk assessment tool)
- **Dietitians** – involvement with HACC-funded dietitians and nutritionists, having them on staff, buying in their expertise, attending food skills training and cooking workshops provided by a dietitian, or (in Queensland) obtaining advice through the Meals on Wheels peak body, which has ready access to a dietitian
- **Sourcing meals** from places that were deemed reputable, such as a hospital or commercial suppliers that met nutritional guidelines
- **Positive feedback** from clients, indicating they were getting the kinds of meals they wanted
- **Employing staff** who were seen as qualified (e.g. a chef or registered nurse) or had been working for the service for a long time
- **Training** – having volunteers who were trained to recognise changes in clients, and obtaining training in nutrition for staff and volunteers
- **Using guidelines** (such as the QMOW guidelines)
- **Software and support** – using software to assess the nutritional value of meals, and having good internal support systems, policies and practices.

However, some participants were not confident that the meals they provided would meet nutritional requirements of individual clients, particularly those with chronic illness. Many providers noted that they can only control the nutritional value of the one meal they provide, not nutritional intake over the whole day, and that there is a need for GP involvement as well; several participants suggested that the nutritional content of a delivered meal is not as important as taste and presentation.

Input from dietitians or nutritionists was recognised as essential to support assessing and meeting client needs. Several participant groups expressed the need for culturally specific, or more culturally aware, dietitians.

In some remote areas, workshop participants suggested that greater access to fresh produce for services in remote areas would improve their confidence in the nutrition provided, but recognised that this would require significant improvements to infrastructure (e.g. roads and freight carriers).

Other support suggested by workshop participants to assist them to support their clients’ nutritional needs included:
- Screening (risk) assessment at point of entry into HACC services and follow-up with clients to ensure needs are met
- Working in partnerships with CALD agencies to meet culturally specific food needs
- Education for clients to assist them to choose appropriate meals
- Ongoing review of all aspects of meal delivery.

**Food Insecurity**

Food insecurity has been defined as difficulty accessing food due to resource, physical, and other types of constraints, and excludes voluntary fasting or dieting (Frongillo et al., 2010a). Low financial resources are associated with increased risk of hunger and food insecurity (Lo, Chang, Lee, & Wahlqvist, 2009; Quinn, Johnson, Poon, Martin, & Nickolson-Richardson, 1997). Drawing from interviews conducted with a large sample of older people receiving MOW services in New York, Frongillo et al. (2010b) found that 18% of these clients cannot afford the right kinds of foods for health, while 11% cannot afford enough food, and almost 4% report hunger because they cannot afford food.

Food insecurity is also imposed by physical barriers. Frongillo et al. (2010b) indicated that physical restrictions and disability characterise those in receipt of meals programs in New York. In particular, half the participants reported difficulty walking, and one-third had vision problems. The researchers concluded that the dominant theme regarding those receiving MOW is their strong need for assistance overall. These findings are echoed in other literature, which has found that for those people receiving home-delivered meals there is a link between increased functional disability and increasing levels of nutritional risk (Sharkey & Haines, 2002), and that most (77%) of homebound meal service recipients have difficulty performing one or more Activities of Daily Living, including shopping for food (Millen et al., 2002).

Lee, Frongillo, and Olson (2005) investigated the perspective of providers in the Older Americans Act Nutrition Program (OAANP) on the food and nutrition problems of older people. Providers described older people with limited food use due to psychosocial factors such as depression, limited food affordability, and limited access to food due to functional impairments.

In order to alleviate the risk and presence of food insufficiency, Sharkey (2003) emphasised the need to add measures of food sufficiency\(^6\) status as an integral component of program assessment and evaluation.

**Innovation in nutrition**

The need for intensive interventions to address specific nutritional deficiencies has been the focus of some emerging innovative practices within MOW and other meals programs. In the USA Kretser and colleagues (2003) conducted a study to test the feasibility of two models of MOW services with malnourished and at-risk clients. They compared a traditional MOW service with a new MOW service that included 21 frozen meals (instead of the usual seven) and 14 snacks requiring some preparation. This service met 100% of the daily required allowance. The researchers measured nutritional risk and status at baseline, at three months and at six months. The new MOW group

\(^6\) Food insufficiency is defined as an inadequate amount of food intake due to a lack of resources. The term food insecurity may also be used.
gained significantly more weight between baseline and three months, and between baseline and six months, than the traditional MOW group. Mini-Nutritional Assessment scores improved faster in the new MOW than with traditional MOW. The researchers concluded that this innovation introduced a restorative, comprehensive meals program that improved nutritional status, although it was also noted that both models were well-accepted by participants (Kretser et al.).

One extension to the existing MOW delivery program is grocery shopping with the client (Age UK, 2012; Marino, Imiola, & Remig, 1998). Another innovation by Age UK—a network of more than 160 local partners throughout England—is to establish a personal budget for clients to spend at their own discretion. Clients have the choice to dine at a local restaurant and can spend the equivalent amount to what they would have spent on delivered meals consumed at home alone.

An Australian innovative program based on the MOW model involves the provision of snacks five times a week in addition to the usual MOW order (Charlton et al., 2013). Pre–post changes in dietary intake were assessed using a diet history and food frequency questionnaire. At post-intervention a trend was found for increased energy and protein intake. Mini-Nutritional Assessment scores significantly increased and the proportion of respondents assessed as malnourished or at risk of malnutrition decreased significantly. However, only half of participants took an interest in continuing with this program, as many of them did not feel the need for extra food (Charlton et al., 2013).

In Australia, Kenwood (2013) has urged service providers to collaborate with government and businesses to develop technological applications for the home environment to enable older people to stay at home longer. Some of these applications have been developed to ease meal preparation through near-field communication (Siira & Haikio, 2007) or touch-based interaction (Isomursu, Haikio, Wallin, & Ailisto, 2008). Both these applications are based on the connectivity of mobile phones and microwave ovens.

Participants at the national workshops listed a range of strategies to improve older clients’ nutritional status, including: nutritional risk screening; trialling new approaches to sourcing fresh ingredients (such as tapping into fresh local foods and community gardens); adding a nutritious snack or providing breakfasts for clients on low incomes; providing ‘emergency meals’ in times of flood; providing advice to service providers (e.g. the Community Nutrition Unit in Tasmania); and setting up education and advice for clients (e.g. the ‘Cooking-for-One’ program and other cooking classes, and training clients, especially men, in the use of microwaves).

THE ROLE OF MEAL SERVICES IN PROVIDING SOCIAL SUPPORT

A link has been noted between social isolation and poor nutritional status (Millen et al., 2002) and loneliness contributes to poor nutrient intake (Payette & Shatenstein, 2005). A recent review of MOW services in English-speaking western nations (Winterton, Warburton, & Oppenheimer, 2013) identified increasing social isolation as a challenge that MOW programs could address.

These findings are particularly important in light of the fact that so many meal program clients live alone. For example, Frongillo et al. (2010b) found that 73% of those receiving MOW services live alone.
Relatively little research or evaluation has been conducted on the social aspects of MOW and other meal delivery services. One US study (Millen et al., 2002) compared a nationally representative sample of Elderly Nutrition Program (ENP) clients with a matched sample of non-clients. They found that, compared with non-clients, clients experience 17% higher average monthly social contacts, and this is true whether clients are ambulatory or home-bound.

In Ireland, Timonen and O’Dwyer (2010) noted that the extent of social contact varies across services, delivery staff, and individual MOW clients. Importantly, gender differences were found in the degree of social interaction, with women more likely than men to develop friendships with the meals deliverer and feeling that these relationships add meaning to their lives. An Australian report (Grant & Jewell, 2004, cited in Herne, 2009) found two out of three clients value the social interaction with the deliverer as much as the meal itself and a New Zealand study received positive feedback from clients on their social contact with meal deliverers (Wilson & Dennison, 2011).

The degree of older people’s reliance on this incidental kind of social contact was illustrated by Henry (2006), who examined MOW in New York (Bronx) and found that although respondents do not usually know the driver’s name and exchange few words, it is nevertheless the only social contact some respondents have during weekdays. Conversely, a telephone interview conducted by Frongillo et al. (2010) with clients of MOW in New York discussed reasons for clients not ‘chatting’ with deliverers. They found that, of the 53% of clients who reported they do not interact with the deliverer, 61% stated the deliverer is in a hurry or not friendly, 29% said there is nothing to talk about or they have no desire to talk to the deliverer, and 13% said the deliverer speaks a different language. Overall, for some clients the social contact with the meals deliverer is incidental and may not be sufficient to alleviate problems of loneliness and isolation in older people.

Myer (2004) observed that a stimulating environment combined with the integrated social and nutrition services improves the quality of life for older people. A series of case studies (Keller, 2007) illustrated the important relationship between social connectedness and malnutrition, providing anecdotal evidence that older people who are previously malnourished and isolated show an overall improvement after joining a congregate dining facility. Similarly, Burke et al. (2011) found through qualitative analysis of interviews with older people that eating in a community setting, such as a luncheon club, plays a part in providing opportunities for social interaction and support. In addition, analysis of food diaries revealed that nutrient intake is higher on days clients eat with the lunch group than on other days.

The social objectives of meal delivery would appear to be in conflict with the goal of providing an efficient delivery service. Some new delivery models are designed to provide meals in minimal time with maximum efficiency (e.g. Bräysy, Nakari, Dullaert, & Neittaanmäki, 2009; Yildiz, Johnson, & Roehrig, 2012) to minimise risk of food-borne illness (Almanza, Ismail, Namkung, & Nelson, 2007), and facilitate less frequent delivery (Kretser et al., 2003). Such efficiencies could reduce the time for volunteers to provide social contact, and a balance may be needed.

Client views on opportunities for social contact

In the current review, focus group participants in all groups said that social interaction was the main benefit of attending meals at centres. In three of the states, the centre was even described as being a ‘second home’ or ‘like home’. One participant in Perth said the centre made them feel safe. Those
in Melbourne identified a ‘community spirit’ and were enthusiastic about the opportunities the centre provided for social contact, saying that it was important they were able to socialise with people their own age, especially at Christmas and Easter time when clients might otherwise be alone at home.

In contrast, clients who returned a Client Feedback Form rated having a chat as the least important benefit of receiving meals, and much less important than having a nutritious meal. The social contact that the Meal Service provided was most important to clients who received both home-delivered and centre-based meals (48% Very important), followed by clients who received their meals only at a centre (42% Very important), and then by clients who received their meals only at home (31% Very important). Centre-based meal clients were also asked about the main benefit of eating at a centre rather than at home. The most commonly nominated benefit by far was sharing a meal with others (76%), followed by someone else cooking (18%), while the least common response was that the quality of the meal was better than at home (7%).

Provider views on social support
At the national workshops, current models of centre-based Meal Services were reported to enable social interaction and relieve social isolation. Some providers believe that the benefits of eating with others had greater importance than the meal itself.

Clients of OFS providers reportedly value significantly the social component interwoven with the provision of nutritional support. Other Food Service providers in Western Australia stated that clients had reported the social contact provided is as important as the food.

Innovation in social support
In the last decade some innovative meal programs have focussed on improving the social connectedness and nutritional status of disadvantaged and older people. One example of this in Australia is the Social Café Meals Program, developed in 2002, with the aim of reducing food insecurity and social exclusion by providing eligible homeless participants with access to subsidised meals in various local cafés (Allen et al., 2012). Although this program is mainly aimed at homeless people, potential exists for this model to be applied within the context of meal programs for older people.

An innovative program called Outings to Your Taste was implemented as a pilot project in Montreal, Canada, over a twelve-month period, with the aim of improving both the social connectedness and nutritional status of older people receiving home-delivered meals (Richard et al., 2000). The program comprised: 1) offering people two additional meals with a maximum of seven meals per week; and 2) inviting clients to eat out in a restaurant in the company of peers and volunteers once a fortnight. An evaluation of the program revealed that clients responded favourably to invitations to participate in restaurant outings—more than 25% of clients participated in at least one-third of outings offered to them. Two variables were found to be strong, independent predictors of participation: poor vision; and dissatisfaction with social relationships (Richard et al., 2000).

Congregate meals have been provided in a range of innovative settings and programs, including licensed clubs (Weber, Dick, Wen, & Amanatidis, 2002), cafés (Doljanin, 2004), outings including a meal (Richard, Gosselin, Trickey, Robitaille, & Payette, 2000), and an activity program that includes
nutrition (Kruger, Thompson, McKenzie, & Naccarella, 2007). Supplementing Meal Services provided by traditional providers such as councils, meal programs are now provided by a range of organisations and interest groups, including Probus and National Seniors Australia.

Participants at the national workshops conducted as part of this review identified several innovative responses to incorporate social contact and participation in their Meal Services, including: providing meals at different times of the day (e.g. breakfast, morning tea club, and dinner dance or barbecue boat); integrating meals with social groups (e.g. with a Planned Activity Group, or Men’s Shed); providing food in a different format (e.g. a casual food service café; providing meals to clients who come to the centre to pick up meals and take them away); providing food to specific groups (e.g. CALD-specific picnics; men-only and women-only groups; meal groups for people who are vision-impaired); providing a ‘lunch buddy’ for home-delivered meals, especially for clients with dementia; and partnering with local cafés and restaurants using meal vouchers.

OTHER BENEFITS OF MEAL SERVICES

Monitoring. The literature emphasises the additional benefits that Meal Services and Other Food Services may have for clients, including monitoring the clients’ meal acceptance and consumption, food safety, general health status, and social, emotional and physical wellbeing (Albrecht & Larvick, 2007; Cates et al., 2009; Davis, 2008; Krassie, Goodwin-Moore, & Singleton, 2010; Krassie, Smart, & Roberts, 2000; Lirette et al., 2007; Meals Victoria, 2009).

Meals Victoria (2009) has noted that MOW is well-placed to monitor clients’ social and physical wellbeing. A recent survey of 48 mainstream Victorian HACC providers of domestic assistance and personal care services (MAV, 2013) indicated that most providers encourage direct care staff to undertake tasks involved in meal preparation, and to use this contact with clients to monitor nutritional status and observe changes in clients’ weight.

Education. Brownie (2013) suggested that older people might benefit from access to information about nutrient-dense foods and the provision of quick and easy recipes that meet the nutritional needs of their age group. Various nutrition education programs have been created and delivered through newsletters (Fey-Yensan, English, Museler, & Caldwell, 2002), group programs (Bobroff et al., 2003; McClelland, Bearon, Fraser, Mustian, & Velazquez, 2001), or computer programs (Lichtenstein, Rasmussen, Yu, Epstein, & Russell, 2008). The MAV (2013) survey referred to above showed that over half of the providers who participated encourage direct care staff to demonstrate and teach meal preparation techniques, equipment, and routines.

Provider views on other benefits

The consistent message in all locations from service providers who attended workshops was that they deliver ‘more than a meal’. Most participants believe their current model provides a valuable opportunity to monitor clients’ health and safety informally, particularly in the home setting, as well as providing social support, and a link back to the community. Service providers said their service models give clients a sense of security, as well as encouraging client independence and empowerment, improving self-worth, and assisting with wellbeing. One provider noted that ‘food is the foot in the door’, giving clients an acceptable way to accept help and monitoring. Support with medication was also mentioned.
Providing education, information and advice is a benefit that centre-based Meal Services in particular can deliver. Strategies that were reported to work well include:

- Providing clients with a mix of home-based and centre-based meals and meal preparation
- Providing cooking demonstrations and healthy eating options at meals centres
- Cooking groups that demonstrate cooking for one or two; participants eat together afterwards
- Distributing newsletters, in which a nutritionist provides information and education
- Providing booklets to clients on how to enhance or fortify meals
- A health worker visiting day centres to test blood sugar levels before or after meals.

**Client views on other benefits**

Clients who returned the Client Feedback Form in general rated ‘Having someone checking on how I am’ not as highly as being provided with nutritious food. However, the group of clients who received meals both from a centre and at home rated ‘Having someone checking on how I am’ highest of the benefits listed (49.3% rated it *very important*).

OFS clients were also asked to rate the importance of a range of benefits, including: ‘New skills in cooking for myself’; ‘More independence’; ‘Confidence in safely storing and handling food’; ‘Knowing how to look after my health better’; and ‘More confidence in shopping for myself’. OFS clients gave the highest importance ratings to knowing how to look after their health better, with 42% of OFS clients rating this benefit as *very important*, followed by increased independence (36% *very important*). The least important benefit was learning new skills in cooking for themselves (18% *very important*).

**NEED FOR DEFINITIONS, STANDARDS OR GUIDELINES**

One study of Irish MOW clients found that they may not be receiving adequate nutrient intakes from MOW, and as a result the researchers recommended legislation that sets out minimum standards for nutrient levels of meals delivered by MOW (O’Dwyer et al., 2009). Charlton and McMahon (2013), reporting on a small pilot MOW study of 12 participants (mean age 85 years) in New South Wales, recommended that Meal Services’ guidelines allow providers to produce smaller, more nutrient-dense meals to meet the needs of their clients.

A number of guidelines for Meal Services have been developed in Australia. One of the first was published by the Commonwealth Department of Health in 1977. National guidelines produced by the National Health and Medical Research Council (NHMRC) in 1999 were rescinded and replaced with guides that are not age-specific. Further guides were later developed, as set out in the following table. While these guidelines provide useful frameworks at the jurisdictional level, with the advent of the Commonwealth Home Support Program, it may be timely to consider the need for national standards with a focus on nutrition, quality, and the needs of older clients.
Table 1: Standards, guidelines and resources

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Resource</th>
</tr>
</thead>
</table>

Provider views on guidelines and standards

Evidence from the national workshops indicated that some providers already use guidelines or standards. Some MOW providers in Queensland are aware of the work that Queensland Meals on Wheels (QMOW) does with dietitians and reported having access to the manual developed by QMOW. Other participants reported using the Australian HACC Guidelines (2004), Nutrition Australia’s Guidelines for nutrition for over 60s, or the Australian and New Zealand standards for ‘at risk’ clients. In Tasmania, Community Nutrition Unit dietitians provide clear guidelines, including the ‘Appetite for Life’ manual.

Many providers who attended the workshops believe that a definition of a funded meal would help to standardise what is provided to clients. However, most noted the need for any definition of a meal to be flexible, in order to meet client needs. The potential for any definition to restrict service provision was a concern raised by several participants. Some participants emphasised that many clients, especially those with dementia, need to be able to ‘graze’ rather than eat full meals.
Providers differed on whether national guidelines or standards would improve client outcomes. Many workshop participants initially questioned whether having national standards would improve client outcomes. Questions were raised about the intended focus of nutrition standards; for example, whether they would be about the level of calories and protein.

Perceived benefits of having standards included improved consistency of nutrition for all clients and uniformity in the standard of a meal. Some participants believed that making meal providers more accountable may be a way to improve outcomes, but noted a fundamental difference between providing nutrition and getting the older person to eat the food provided. One dietitian participant felt that ‘clearly defined and agreed dietary standards and definitions are needed along with greater involvement from dietitians in the delivery of the range of food services, to ensure more reliable nutritional outcomes and client monitoring’.

In most locations, the preference appeared to be for national guidelines rather than standards. Most support was expressed for having guidelines that are flexible enough to support service innovation and the wide range of clients’ needs rather than formal standards. Several CALD community providers reported that standards would have an impact on their ability to deliver the types of food their clients want, cooked in authentic ways.

Participants suggested that any guidelines be age-appropriate, adaptable to suit individual clients, and flexible enough to support differences between service types, consumer-directed care (CDC) and a holistic approach. Guidelines might include a minimal standard for meal size.

**SYSTEM-LEVEL BENEFITS**

Investment in Meal Services may also accrue to the service system. One study (Buys et al., 2012) found that states which direct a greater proportion of their long-term care expenditures in general to home and community-based services appear to benefit by a reduction in their rates of nursing home use. A more recent analysis from Brown University found a negative correlation between expenditure on Meal Services and expenditure on low-level care, implying that the more spent on nutritional support for older adults with low care needs, the less is required to be spent on residential care (Thomas & Mor, 2013). Unfortunately, both studies summarised here rely on correlations, and causation should not be inferred.

**SUMMARY**

- Adequate nutrition is vital for older people if they are to remain living in the community.
- Older people are at higher risk of malnutrition and disease than their younger counterparts.
- Meal Services are critically important in supporting older people’s nutritional status.
- Meals for older people may need to be more nutrient-dense than those for younger people.
- In addition to nutritional support, Meal Services may deliver benefits such as social contact and support (especially for centre-based meal clients), education and information provision, and health and wellbeing checks.
- National guidelines (rather than standards) might be useful to assist providers to ensure that Meal Services are contributing maximally to the nutritional status of clients at a nationally
consistent level. Several states are already using guidelines, but these vary in terms of currency, nutrient values recommended, and level of practical guidelines offered to providers.

- Investment in home-delivered meals is negatively correlated with admissions to low-level residential aged care and may also reduce demand for low-level care in the community.
Clients of Meal Services

This section of the report covers:

- The importance of a focus on clients
- Client food preferences and satisfaction with meals
- Trends
- Innovations
- Summary

**IMPORTANCE OF A FOCUS ON CLIENTS AS THE CENTRE OF CARE**

The literature review identified papers that discussed re-ablement in general terms rather than referring specifically to Meal Services. In Australia, the Active Service Model has been described as a capacity-building or restorative approach to service provision, a holistic person-centred approach to care, and the provision of more timely, flexible and targeted services to maximise clients’ independence (Ryburn, Wells, & Foreman, 2008). Rabiee and Glendinning (2011) defined re-ablement as ‘services for people with poor physical or mental health to help them accommodate their illness by re-learning the skills necessary for daily living’ (p. 495). The practical outcome of re-ablement is that older people can stay longer in their own homes. O’Dwyer and Timonen (2008), in Ireland, urged that Meals on Wheels should be a client-centred service, following best-practice standards.

Kruger et al. (2007) described the Well for Life program—a program in Victoria that focuses on improving nutrition and physical activity to promote healthy ageing. This program uses a person-centred approach that aims to improve participants’ health and wellbeing.

Clients of different food services are likely to display different characteristics and to have different nutritional requirements. For example, a Canadian study found that participants in centre-based meal programs were generally less vulnerable than people receiving deliveries at home (Keller, 2001). The 2004 Victorian review of the HACC Meal Services (HDG, 2004) recommended the conduct of a market segmentation trial to better understand the diversity of clients and to tailor the service delivery through specialisation rather than a one-size-fits-all approach.

**CLIENT FOOD PREFERENCES AND SATISFACTION WITH MEALS**

Edfors and Westergren (2012) concluded from their small qualitative study of MOW participants in Sweden that people’s previous habits and experiences determine their perspectives on current eating practices. However, food preferences change as people get older. In a longitudinal study in the US, Holt, Nordstrom, and Kohrs (1988) found that over a period of 10 years, older people living in senior centres had changed their preferences towards softer food with less fat and protein. One recently published study explored older people’s views about how getting older has influenced their

---

7 In the UK, the term ‘re-enablement’ has also been used (e.g. Young & Forster, 2007).
food choices and eating behaviours (Brownie, 2013). In Northern New South Wales, a focus group study found that older people may not be clear about appropriate food choices after lifelong exposure to changing and often-conflicting messages about food and nutrition. Nevertheless, the majority of participants believed that the maintenance of their health and wellbeing was linked to their dietary practices and that fresh, nutritious food that was tasty and easy to prepare was the basis of a sustainable and healthy diet. Most participants reported that getting older was associated with a reduced need for and intake of food. This is of concern in light of guidelines on older people’s nutritional intake (NHMRC, 2005).

One of the key objectives of MOW programs is to provide meals that clients can fully consume (Krassie, Smart, & Roberts, 2000). Krassie et al. (2000) described two Canadian studies on food utilisation (Fogler-Levitt, et al. 1995; Owen, 1992, cited in Krassie et al., 2000): one showed that meal utilisation in terms of energy of the consumed portion was 81%, and the other that the mean consumption of all nutrients examined was 75%.

Food utilisation is closely related to the issue of meal satisfaction insofar as the greater the degree of satisfaction with meals the more likely they are to be consumed. Krassie et al. (2000) cited two older Australian studies (i.e. Pargeter, Briggs, Lo, & Wood-Bradley, 1986; Northern Sydney Area Health Service, 1993) that assessed client satisfaction with MOW using questionnaires, and found that between 84% and 86% of clients reported meals were ‘good’ or ‘excellent’ and that they ‘usually’ or ‘always’ enjoyed the MOW meals. A more recent report (Fletcher & Read, 2012) indicated clients are overwhelmingly positive about both the meals delivered and interactions with staff and volunteers.

Findings from these Australian studies are in line with those in more recent studies from the USA and Canada. The majority of participants in a survey of New York MOW reported satisfaction most of the time with meals’ taste, variety, ease of preparation, healthfulness, and cultural appropriateness (Frongillo et al., 2010a). Similarly, between 72% and 88% of clients of a Canadian MOW program providing hot meals were satisfied with meals’ taste, texture, value, and portion size (Lirette et al., 2007). However, about 25% of these clients expressed dissatisfaction with specific foods, such as meat being too tough and vegetables too firm. Interestingly, Frongillo et al. (2010a) found that clients receiving hot meals are more satisfied with the program than those receiving frozen meals.

However, clients may not want to criticise their Meal Service. Interviewees in an Irish study on the role of MOW in their lives were reluctant to complain about the service as it did not cost much and was delivered by volunteers (O’Dwyer & Timonen, 2008). Authors of a Canadian study (Lirette et al., 2007) made a similar observation.

Some client dissatisfaction may be due to the fact that clients are not able to choose the kinds of foods they want. For example, 65% of clients in the US survey by Frongillo et al. (2010a) reported their meals service does not allow them to choose their own foods.

Frongillo et al. (2010a) also asked participants what they do with MOW leftovers and found that 60% of clients have no leftovers, 16% save them for later that day, 8% save them for later in the week, 4% give them away to someone else, and 11% throw them away. Other research (Roy & Payette, 2006) has shown that 95% of clients may not consume the entire meal in one sitting, but put aside a portion for later in the day. In Australia, Krassie et al. (2000) reported that general reasons given for under-utilisation of home-delivered meals include dislike of food due to poor taste, dislike of cooking
method, or dislike of texture. Research has also recommended assessment of client food needs and preferences in order to minimise waste and maximise nutrient intake.

In Australia, Fletcher and Read (2012) found that while clients’ opinions about ‘hot’ versus ‘frozen’ meals varied, it was clear that efforts were being made to accommodate needs of individuals within the boundaries of what was possible in a home-delivered meal service. Nutrition and taste were regarded as the most important aspects of the meal by both clients and staff.

US researchers Spark and Frongillo (2002) speculated on the perspectives of future potential clients from the baby-boomer generation, who are widely seen as more health- and nutrition-conscious than members of previous generations. The authors forecast an increase in demand for wellness-related products including nutrient-fortified foods. Choice among services, promotion of independence and diversity in what is provided are also widely assumed to be critical to baby boomers.8

Client satisfaction with Meal Services

Clients who completed a Client Feedback Form as part of the current review were asked to indicate whether they enjoyed their meals a lot, a little, or not much. Most clients (70%) said they enjoyed their meals a lot, while 17% said a little, 5% said not much, and 9% did not respond to this item. Overall, ratings were highest in Queensland, where 80% said they enjoyed their meals very much. When missing data were removed, the proportion of home-delivered meal clients who enjoyed their meals a lot was 78%, compared with 70% for centre-based clients.

Similarly, the majority of focus group participants praised the service provided by their centre, especially flexibility and choice. They liked having a wide choice of alternatives; a regularly changing or seasonal menu; flexibility in the number of courses; options for serving size; and being able to choose their meal on the day or at the time of serving. Perth participants enjoyed the “restaurant feel” of their centre, and said any complaints were responded to well. Most focus group participants felt their dietary needs were catered for and some expressed their appreciation for their centres’ efforts to cater for everyone’s needs.

In contrast, at some locations, focus group participants complained about the quantity of food provided (i.e. not enough for the number of clients) and food quality, including food appearing unappetising, salads being too small, and vegetables being soggy or too soft. Other issues included having to order food several weeks ahead of time, or having to queue for food, which meant that hot food would be lukewarm by the time it was consumed.

Greater promotion and awareness of meal centres and their services was one of the most commonly recommended improvements. Suggestions included: advertising in doctors’ offices and local libraries; encouraging group members to bring someone along; linking with groups such as University of the Third Age; and increasing the activities provided by the centre to enrich the experience of attendees and attract more people (e.g. book exchange, cards, quizzes, music and sing-alongs). Another common suggestion was to increase information and education about nutrition, such as through newsletters and talks on nutrition and other health topics.

---

Other suggestions included: making transport more affordable; canvassing clients’ opinions using a suggestion box or questionnaire; greater assistance with shopping; greater monitoring of clients’ health and wellbeing by those delivering or serving food; and increased use of technology both to assist with monitoring older people at risk in their homes and to improve communication.

Attrition

In one of the few studies of clients who discontinued their meal deliveries, Choi (1999) reported reasons for discontinuation are largely associated with deteriorating health. Other reasons for discontinuing include dissatisfaction with meals (O’Dwyer & Timonen, 2008) and loss of appetite. McAuley, McCutcheon, Travis and Lloyd (2006) studied attrition from a 36-week home-delivered meal program. In contrast with clients who remained in the program, those who withdrew voluntarily were more mobile, ate less often, and enjoyed the taste of the meals less often.

TRENDS

Trends covered in this section of the report are quantitative (i.e. trends in service use and numbers of clients) and qualitative (i.e. trends in client demands and preferences).

Trends in service use and numbers of clients

Krassie, Smart, and Roberts foreshadowed in 2000 and in a later report (Krassie, 2005) an expected growth in the demand for meals because people live longer, seek to live independently longer, or live alone. However, in Australia the number of clients and meals has been steadily declining in the last five years. In a 2010 report (Krassie, Goodwin-Moore, & Singleton, 2010), the following reasons for the decrease were given: availability of alternatives from supermarkets and commercial meal-delivery companies; marketing drives by clubs and restaurants to provide senior meals; older people staying healthier and more mobile than in previous generations; and the use of MOW only as a last resort for customers with limited resources. Some potential clients view home-delivered meals as a low quality alternative to commercially available or home-cooked meals.

The Report on Government Services\(^5\) (ROGS: Table 13.A.48) indicates that the number of meals provided per 1000 older people (i.e. aged 65 years or over or Indigenous and aged 50–64) was 3,012 in 2011-12. This represents a decrease from 3,248 in 2010–11.

The population denominator that the Productivity Commission uses in the ROGS for calculating rates has shifted (from 70 years to 65 years of age for non-Indigenous Australians). Rates using the old denominator have been decreasing since 2007–08, but this decrease may reflect changes in what is counted in the Minimum Data Set as much as real changes in demand. With this caveat, in this period, while rates have decreased over 5 years in the order of 18–26% for meals in major cities and regional areas, rates have actually increased slightly in remote areas (1%) and increased substantially in very remote areas (32%).

Trends in client needs and preferences

The key shifts in client needs and preferences reported by national workshop participants and in the RQFs are summarised below.

Food choices and dietary requirements

Overwhelmingly, the most common change in clients’ preferences noted by providers who returned an RQF was their demand for a range of food choices, followed by demand for a range of delivery options. Shifts commonly reported by participants included increasing client demand for greater variety of meal types (e.g. breakfast, snacks) and choice of meals and flexibility in portion sizes. Clients are reportedly becoming more educated and more demanding. They have higher expectations of the quality and variety of meals provided and are willing to pay more to access that quality and choice.

Increasing diversity within CALD communities and an increasing need to meet the requirements of CALD communities were reported by many participants. The need for a greater understanding of the diversity within religious and ethnic groups was also reported (e.g. that Muslims come from a variety of cultural backgrounds).

Most participants commented on an increase in the need to respond to more special dietary requirements (medical or allergy-related), as well as the needs of increasing numbers of malnourished, obese clients. Greater need for modified meals was also reported, as well greater variety in modified and special diets.

Some participants noted that clients are increasingly accessing commercial meals, and some clients seem to be mixing MOW and supermarket meals to access greater choice. Some private companies are also providing a ‘dial a meal’ service.

Delivery options

The second most common change in clients’ preferences was demand for a range of delivery options, noted by providers who returned an RQF as well as many workshop participants. The need for flexibility in the timing of deliveries was noted, and some providers reported that for CALD and Indigenous communities the timing of deliveries was particularly important. An increasing need for flexible modes of delivery was also noted, including vouchers, frozen and cooked food delivery, and meal preparation in the home. Another key shift related to service delivery is an increasing need to meet short-term needs (e.g. due to transitional care).

Some providers reported that clients increasingly want volunteers to spend time with them when making deliveries. It was noted that clients with dementia often need extra time for assistance with re-heating, opening containers, and reminding or encouragement to sit down and eat when the meal is delivered.

Economic issues

Some providers have seen an increase in the number of financially disadvantaged clients (e.g. in Launceston, where a centre-based breakfast program has been implemented), but at the same time the number of financially secure clients has also increased. It was also suggested that double-income families who are time-poor may be happy to pay for services for their parents.
Food security was raised as an issue in rural areas, where food is typically more expensive, and, as a result, clients are coming to MOW for their meals. The capacity to pay for meals was noted as being an issue by some providers, with some clients reportedly reducing the number of meals they have delivered due to their financial situation. Food security was also reported as an issue in some locations, particularly the Northern Territory, where staff are sometimes unable to deliver a meal to the door due to risk factors, and reportedly younger family members who collect the food eat it, rather than giving it to the client.

Complex needs

An increase in numbers of clients with complex needs, including chronic disease and dementia, was noted by providers. Increases in clients with obesity, mental health or drug and alcohol issues, living in boarding houses, or in poverty were also reported. Some providers suggested that current HACC clients are ‘staying longer’ on HACC due to a reluctance to move to packaged care (e.g. EACH). In some remote locations, complex needs are compounded by lack of electricity.

Among providers who returned an RQF, home-delivered meal providers generally noted more changes in client needs and preferences than centre-based meal providers. The exceptions were clients’ complex health issues and social needs, which were particularly apparent to centre-based meal providers.

Future client needs

Discussion on the anticipated needs of future clients commonly focused on increasing client complexity and frailty due to chronic diseases, and more complex dietary requirements or preferences. Client groups identified as likely to be increasing in the future included: malnourished and obese clients; clients with diabetes; clients with dementia; clients with food allergies and sensitivities; multicultural groups; and family carers requiring support and respite. An increase in the number of clients seeking OFS for support to cook in their own homes was also anticipated.

A shift in service provision due to the anticipated needs and preferences of Baby Boomers was mentioned by many providers, who expect this cohort to be more demanding. In country areas in particular, it is expected that more clients will demand fresh, organic, local produce.

INNOVATIONS

Providing choice in response to shifts in client needs and preferences was commonly reported by providers who attended the workshops. Many services try to vary their menus seasonally or to rotate their menus, on schedules varying from weekly to yearly. Where frozen meals are provided, greater client choice is typically possible. However, due to cost factors, providing choice is not an option for some providers.

Some participants reported providing food types that clients want, such as bush tucker, damper and stews, but modifying it to make it healthier.

An increase in the amount of support provided to clients, both written and verbal, was reported by many workshop participants. Support provided ranged from brochures and pamphlets to cooking classes and regular information sessions with guest speakers on a variety of topics related to health.
and nutrition. Other responses included providing bilingual information, and a translator and

counsellor for assessments.

Many providers who returned an RQF also reported that they are attempting to implement greater

flexibility in their service delivery, in terms of both timing and frequency of meal deliveries, and the

methods of delivery. Some providers suggested that working closely with other agencies to deliver

to meals allows for greater flexibility.

**Future service responses to shifts in client needs and preferences**

Workshop participants listed several strategies to meet the diverse needs of clients groups in the

future. Some wanted to see more support for innovation, and others wanted more opportunities to

share ideas.

Some suggestions were organisational. Some participants saw the value of creating collaborations

between large meal providers and CALD community groups to facilitate the production and delivery

culturally appropriate meals. They wanted to link and collaborate with other services to ensure a

good range of local options.

Some participants had suggestions for innovative ways to satisfy unmet needs, such as training

people to cook for their neighbours in remote areas. Training volunteers to sit with clients while they

eat their meal was also suggested.

It was recognised that Meal Services need to be promoted, and some suggested changing the image

of MOW through marketing or advertising, or even changing the name of MOW, to avoid negative

connotations. Better recognition of MOW as ‘more than just a meal’ (as promoted in a recent

national campaign) and emphasising the importance of other aspects of Meal Services (such as social

contact and wellbeing checks) was seen as important.

Some suggested responses to shifts in client needs and preferences were financial—some

participants wanted an increased ability to subsidise services for special groups. Others suggested a

new funding model that would support the diversity of future clients by allowing clients to contract

the services they want. Increased funding was suggested to support a range of activities and

functions; these would include: case management; overall assessment of clients’ needs; increased

client choice; increased output; and reimbursement of board members to attract people with better

qualifications.

**Special needs groups**

**Ethnicity**

Several Meal Service providers have developed initiatives to cater for a range of clients. For example,
services have developed service options such as outings to local ethnic restaurants, CALD-specific

menus, picnics and evening events, and have also promoted their services to CALD communities.

Fifty-four respondents (17%) to the Review Question Form (RQF) said they catered for all

nationalities. The most frequently specifically mentioned nationalities were Chinese (11%) and

Italian (8%), followed by Indigenous (6%) and Indian (4%). A large range of nationalities was catered

for by small numbers of services, including Greek, German, Filipino, Dutch, Polish, Spanish, Maltese,

Finnish, Armenian, Latvian, and Bhutanese.
**Indigeneity**

Six per cent of respondents to the RQF stated that they catered for Indigenous food preferences. Workshops documented attempts to provide appropriate services to Aboriginal groups. In more remote locations the benefit of using seasonal local produce was highlighted, particularly when fresh produce delivered from other sources was an issue due to floods/wet season. For Torres Strait Islander communities, the use of local produce to supplement supplies is significant, including the use of locally donated fish and other produce. In Western Australia, one provider reported a cross-generational, group-based educational initiative involving a dietitian.

Volunteers are largely absent from services in the Northern Territory run by Indigenous groups, which is a challenge for sustainability. Of the six respondents to the RQF, four had no volunteers at all among production or delivery staff.

**Dementia**

Clients with dementia are a special needs group, but are not identifiable in the HACC MDS. At the provider workshops, many participants indicated that they had noticed an increase in the numbers of clients with a range of chronic conditions, including dementia, and had designed initiatives intended to provide special nutritional support to such clients.

It was noted that clients with dementia often need extra time for assistance with re-heating, opening containers, and reminding or encouragement to sit down and eat when the meal is delivered. Special support includes paying a staff member or volunteer to sit with clients with dementia to encourage them to eat (e.g. a lunch buddy) and providing food in special formats, such as a grazing plate and finger food packs. Targeted training for staff and volunteers on dementia has also been implemented.

**SUMMARY**

- Service models now being adopted are putting clients at the centre more, and increasing numbers of providers are trying to respond better to clients’ expressed needs.
- Models of care and support that place the client in control of what they receive and how they receive it are likely to become even more important.
- Clients have become both more diverse and more demanding, and are likely to be even more so in the future.
- Clients are presenting with more complex health needs including chronic disease and dementia, and many services support clients recently exiting hospital who have specific dietary requirements.
- Currently about two-thirds to three-quarters of clients of Meal Services say that they enjoy their meals a lot.
- Meal Services recognise the need to address individual clients’ tastes and preferences and provide enough choice and variety to keep older clients interested in food and eating.
- Clients may not be very interested in social contact as an aspect of their home-delivered meal service – the nutritional support they receive is what they value most.
- Ratings for ‘Having a chat’ and ‘Someone checking on how I am’ are higher for clients of centre-based than home-delivered meals, and the most important benefit of having a meal at a centre is sharing it with others.
- Some clients are not happy with the food they are getting.
- Access to food and nutritional support may be compromised by low incomes and poor transport.
- Older men are particularly likely to lack skills in accessing and preparing food.
- Meals for older people need to take into account their special dietary needs and to be more nutrient-dense than meals for younger people.
- Trends in Meal Services indicate decreasing numbers of meals in comparison with the growing target population; some of this decrease may be due to shifting reporting requirements.
- The most highly rated benefit of OFS is ‘Knowing how to look after my health better’.
Meal Service providers

Sections covered by this topic include:
- Meal Services in Australia
- Challenges to equity of access
- Sustainability of Meal Services
- Innovations
- Jurisdictional differences
- Summary

MEAL SERVICES IN AUSTRALIA

In Australia, Meal Services funded by the Home and Community Care (HACC) program include:
- HACC service group 6 – Meals: meals prepared and delivered to the clients, either at home or at a centre
- HACC service group 1 – Other Food Services: any assistance provided during preparation or cooking of a meal at the client’s home
- HACC service group 3 – Allied health: specifically support provided to clients by dietitians and nutritionists.  

Meals are also provided as part of other HACC-funded services, such centre-based day care; however, this review focused on services specifically funded to provide meals.

Responses to the Review Question Form indicated that most services provide three-quarters or more of their meals to clients’ homes (80%) and only a small proportion of providers (13% altogether) deliver more than half of their meals in a group setting.

Similarly, the number of Client Feedback Form respondents included many more clients of home-delivered Meal Services than centre-based Meal Services. The majority of respondents (n = 2764, 79%) said they had meals delivered to their homes; 16% said that meals were delivered at a centre (n = 556); 2% said they received meals from both (n = 67); and 4% had missing data on this item (n = 124).

Service providers who returned a Review Question Form indicated whether they provided services to capital cities, regional centres, or rural areas, and could tick more than one option. Altogether, 303 services provided meals to a capital city (72%), 301 to a regional centre (72%), and 210 to a rural area (50%). Several services provided meals across more than one location.

Of the 321 services that indicated how many clients they had, the range was from 1 to 5,000, with a mean of 166 and a median of 68. The large difference between the mean and the median indicates a heavy skew in numbers—a large number of services had small numbers of clients (one-third of

Footnote 10: In Australia all dietitians are considered to be nutritionists; however, nutritionists without a dietetics qualification cannot take on the specialised role of a dietitian. For further details see the Dietitians Association of Australia webpage [Dietitians Association of Australia](http://daa.asn.au/universities-recognition/dietetics-in-australia/distinction-between-dietitian-and-nutritionist/)
services [33%] had 34 clients or fewer), while on the other hand, very few services had a lot of clients (only 6 services said they had more than 1000 clients).

There were no significant differences between states in the number of clients per provider. However, there were very significant differences by location of the service. Services that provided meals to capital cities had a higher number of clients (median = 145 clients) than those which provided meals to regional centres (median = 100 clients) and both were much higher than the median for providers to rural areas (median = 31 clients).

**Number of meals and duration of service**
Data from clients via the Client Feedback Forms indicated that 30% had 1–3 meals per week, 43% had 4–6 meals per week, 16% had 7 or more meals per week, and the remainder, 11%, had missing values on this item.

The number of meals per week delivered to clients differed significantly between points of delivery, and was much lower for clients who received their meals at a centre. While 19% of clients of home-delivered meals received seven or more meals per week, this proportion was only 2% of clients of centre-based meals.

In terms of how long respondents had been receiving meals, the most significant difference was in the proportion of clients who had been receiving meals for less than one month; 16% of clients of centre-based meals compared with only 6% of clients of home-delivered meals.

**CHALLENGES TO EQUITY OF ACCESS**
Difficulties in delivering services were reported at the national workshops for several client groups. For some providers, responding to special dietary needs is difficult and expensive. Some providers cannot cater for allergies (e.g. to nuts, aluminium, and plastic). Responding ‘authentically’ to requirements of clients from CALD backgrounds is also an issue. Other clients whose needs cannot always be met include people with disabilities, mental illness, or no carer.

Frozen meals are typically the only option for rural clients in many locations, and delivery is often facilitated through the use of family members or community nurses. Victorian workshop participants reported that some rural and remote areas cannot be reached by a delivered meals service or can be reached infrequently, particularly in winter. In the Northern Territory, participants said that clients at outstations may not be reached at all, due to a lack of transport and staff. In Queensland, particular threats to the viability of services were reported to include remoteness, threat of bushfire, and places which require ferry crossing.

**SUSTAINABILITY OF MEAL SERVICES**
Challenges to the meals delivery model in the US include inadequate financial and staffing resources, waiting lists, rural delivery, and misconceptions about the program (Lee et al., 2008). Keller (2001) added the challenge of providing sufficient nutrition in the meal. In New Zealand, the image of the program has been identified as an issue, as some meals may resemble hospital meals (Wilson & Dennison, 2011).
The 2008 Meals Victoria Service Provider survey (Meals Victoria, 2009) suggested that the current model of service would not be sustainable in future because of: difficulty in recruiting new volunteers; availability and affordability of prepared meals in local supermarkets; variation in ways of providing nutritional support, such as a direct care workers assisting clients to prepare their own meals; higher expectations from clients; and natural attrition due to clients being transferred to a residential aged care facility or improved mobility, which might obviate the reason for ordering delivered meals. Millichamp and Gallegos (2011) stressed that, in addition to the challenges posed by Australia’s many ethnic communities overall, each state and jurisdiction has a different ethnic profile.

MOW Tasmania (MOW Tasmania, 2013) has explicitly attempted to counter a decline in demand for its services through a proactive marketing campaign that stresses benefits of the service, including engagement between volunteers and clients and the camaraderie that develops.

Some workshop participants noted other evidence of challenges to Meal Services in Australia, such as a decreasing number of meal providers in rural areas and the increasing impact of Food Act legislation. Some noted that Meal Services were undervalued by agencies that conducted client assessment and screening.

INNOVATIONS

Many of the challenges listed above have already been addressed by providers through additions to their existing service. In reviewing HACC services in Victoria, HDG Consulting Group (2004) tabled nearly fifty innovative approaches in: meal choice and food content; packaging; meals venues; volunteering; monitoring; delivery; assessment and screening; payment; and increased use of home care staff (and funding) to facilitate assistance with shopping and cooking.

National workshop participants listed a range of innovations, many of which are more relevant to other sections of this report. Administrative innovations in the area of promotions, marketing and communication include:

- Rebranding / marketing with MOW (vehicles/brochures)
- Changing the perception of MOW and reducing stigma
- Promoting MOW and wellness as a partnership to ‘unpack the client’s needs’
- Presenting to groups (e.g. Probus) to educate the community
- Up-selling (promotion) in conjunction with local businesses
- Approaching the younger generation to encourage their parents to use meal deliveries
- Making sure assessors are aware that a short-term service is available after hospital admission
- Promoting to CALD communities (e.g. translated information)
- Using a Facebook page – posting pictures and stories of outings
- Using a website that provides a central link to all services provided, assists with queries and has a FAQs section
- Distributing newsletters and advertising (e.g. doctors’ surgeries, local papers).

Other examples of innovation in organisations provided on RQF forms included: amalgamating services; purchasing new equipment and redesigning the meals preparation area; organising new
payments systems, such as direct debit for clients (to reduce administrative costs); and introducing online ordering.

**JURISDICTIONAL AND REGIONAL DIFFERENCES**

The Report on Government Services\(^{11}\) (Table 13.A.48) indicates that the number of meals provided per 1,000 older people (i.e. aged 65 years or over or Indigenous and aged 50–64) was 3,012 in 2011–12.

Rates for 2011–12 differed between jurisdictions, from a low of 1,679 in the ACT to a high of 9,979 in the Northern Territory. Rates were relatively low for Western Australia, New South Wales and Victoria (2,451, 2,577, and 2,960 respectively), close to the average for Tasmania and Queensland (3,081 and 3,285 respectively), and relatively high for South Australia (4,544).

Provision rates also differed between location, with the highest rates for people in very remote areas (16,399), followed by remote areas (6,520), outer regional areas (3,991), inner regional areas (3,142) and major cities (2,609).

Another dimension on which jurisdictions differ is the balance between a centralised versus an integrated system of HACC services. Queensland and Tasmania both provide centralised resourcing, while Victoria has emphasised integration through local government.

**SUMMARY**

- There is a great deal of variation across and between jurisdictions in how Meal Services are organised, who provides meals, and how the service is resourced.
- The characteristics of providers and the services provided vary hugely between and within jurisdictions.
- The vast majority of meal service clients receive home-delivered meals rather than centre-based meals or Other Food Services.
- Some challenges to equity in Meal Services exist (e.g. provision to some CALD groups; for some dietary needs; and in some geographical areas).
- Provision rates (i.e. number of meals per 1,000 older people aged 65 and over or Indigenous aged 50 and over) are lowest in the major cities (2,609) and increase with remoteness to a high of 16,399 in very remote areas.
- Highly targeted centre-based Meal Services have emerged to meet the needs of groups of older people from CALD backgrounds who have particular food preferences and dietary needs.
- Meal Services face a range of challenges to their sustainability.
- Many providers have successfully implemented a range of innovations to address the issues they face.
- Where services have responded to local needs with local initiatives, they are well-supported by their communities.

Service delivery: food content, production and delivery

Sections covered by this topic include:

- The food provided
- Food production and delivery in Australia
- Food safety
- Innovations
- Jurisdictional differences
- Summary

THE FOOD PROVIDED

Evidence from the literature review indicates that older people have special dietary needs. Older people typically eat less than the general population, although their requirements for vitamins and minerals remain the same or increase in some cases (NHMRC, 2005). Nowson (2007) highlighted reductions in appetite with increasing age, which underscores the challenge to make meals both appetising and nutritious. A small study in New South Wales suggested that some recipients of prepared meals may benefit from receiving smaller, more nutrient-dense meals (Galea, Walton, Charlton, & McMahon, 2013).

In Australia, Charlton and colleagues noted than many providers have added a range of nutritional snacks to the meals-only delivery (Charlton et al., 2013) to ensure that clients, especially those with a low level of dementia, have access to an extended range of sources of nutrition. However, only half of clients with access to snacks see any benefit in consuming these snacks (Charlton et al.).

Provider reports on food provided to clients

Most providers who returned a completed RQF as part of this review said they respond to clients’ special dietary needs (92%). In addition, clients can commonly choose how many meals they receive per week (85%). Most services provide a three-course meal (85%) and over half add juice (56%).

Providers of home-delivered meals are more likely than providers of centre-based meals to say they meet clients’ special dietary needs, that clients can choose the number of meals per week, that they provide three courses in a meal, and that a dietitian has oversight of the menu.

Relatively few RQF respondents (38%) can provide culturally specific meals, though this proportion is higher for centre-based providers (51%) than for home-delivered meal providers (35%). Some services claim to be able to meet the cultural expectations of all nationalities (n = 54, 17%). The most common meal types provided are Asian/Chinese, Italian and Indigenous. The most common dietary needs met by service providers are for a diabetic diet and soft or pureed food.

Participants at most of the national workshops noted that the ability to provide choice to clients, both in terms of meal content and mode (i.e. frozen, fresh), is both working well and important, as ‘a
one-size-fits-all approach doesn’t work’. In addition to developing menus with more choice, being able to rotate menus frequently to provide variety is also valued. In terms of meal content, the types of choice commonly noted included: choice of main course; choice in number of courses; choice in portion size; culturally specific options; and meeting individuals’ preferences (e.g. replacing a disliked vegetable). Many providers added that they are able to cater for modified diets and provide specialised meal choices, including options for cancer patients and diabetic clients.

In more remote locations the benefit of using seasonal local produce was highlighted, particularly when fresh produce delivered from other sources is an issue due to floods or the wet season. For Torres Strait Islander communities, the use of local produce to complement supplies is significant, including the use of locally donated fish and other produce.

**FOOD PRODUCTION AND DELIVERY IN AUSTRALIA**

Information on what is provided in Australia comes from the RQF and the provider workshops. In response to questions on the RQF, a majority of both the home-delivered meal providers (62%) and almost all of the centre-based meal providers (94%) provide predominantly cooked fresh meals. However, one-third of the home-delivered meal providers provide predominantly frozen meals. Over half of the respondents (59%) said that clients had a choice between having frozen/chilled or hot food delivered. The majority of services that provide only home-delivered meals are able to give clients a choice in whether meals are delivered frozen/chilled or hot (71%). Centre-based meals, not surprisingly, are more likely than home-delivered Meal Services to say they deliver only hot meals (35%).

Two-thirds of services deliver meals five days per week and just over half of the respondents purchase from another provider. Not surprisingly, centre-based providers are most likely to produce meals in their own kitchen, though this is not universal, and a substantial minority use meals purchased from another provider or produced in a leased or rented commercial kitchen. Home-delivered meal providers rely most heavily on meals purchased from another provider, though nearly as many used their own kitchens.

When asked what works well, many national workshops’ participants mentioned responding to client choice in production and delivery of Meal Services. The ability to be flexible and respond quickly to demand was seen as important by many participants.

Purchasing meals from an external provider was reported to work well for some providers, particularly where these providers had quality processes in place to ensure nutritional content. In Victoria, Community Chef (a joint initiative of 20 Victorian local governments) supplies meals from a state-of-the-art food production facility for distribution by Councils to meal recipients. In the ACT, the ability to ‘cherry-pick’ meals from a variety of accredited suppliers was seen as supporting choice in general, as well as the ability to cater for specific dietary needs. Other services also commented that the wide menu choice available through external suppliers enabled a broader response to cultural and dietary needs than would otherwise be possible. In the Northern Territory, food for clients is purchased from roadhouses at times, in remote areas or because of staffing issues.
For providers who prepare their own meals, access to an industrial kitchen, on-site kitchens, and the use of trained chefs is working well. In the Northern Territory, the ability to share a stainless steel kitchen with the School Nutrition, EACH and CACP programs has been a successful strategy.

Some providers appreciate having the flexibility to prepare meals, as it allows them to utilise seasonal produce. Having meals cooked by volunteers, following agreed recipes that have been assessed by a nutritionist, also works well for some providers as it gives them control over the quality and quantity of meals prepared.

Workshop participants from centre-based Meal Services commonly noted that the ability to provide nutritionally balanced meals, often culturally specific and cooked fresh on the premises, works well in their model. Cooking on the premises allows for individual dietary needs and preferences to be met. Participants from centres that celebrate specific cultural days also valued the ability to provide cultural connection for older adults.

Various modes of meal production and delivery were reportedly successful, such as providing:

- Options for cooked fresh versus cooked frozen meals that give clients choice
- Cooked/chilled meals delivered early in the day so that clients can decide when they wish to eat
- Hot meals prepared fresh by someone who local (Indigenous) elders know well and whose food they enjoy
- Frozen meals, which are good for emergencies and allow a seven-day-a-week service (as they can be consumed on weekends)
- A combination of fresh and frozen food, which works for people in outlying areas.

The capacity for day centres to provide clients with frozen meals to take home was also noted.

Providers had tried a range of home delivery methods, including: staggered delivery rounds; working with other services (e.g. transport and home care) to deliver meals; using volunteers to deliver hospital-prepared meals; and asking carers to pick up meals for clients. Providing alternative options for clients to access meals, such as centre-based meals or a café program, was reported to be successful for some providers. Other options, such as group meals provided in a range of venues, including hotels and social luncheons, were also noted as working well.

Providers had also experimented with different packaging, such as moving away from tiffins (metal carriers); providing individual eskies for each client; and providing hampers/weekend ration packs.

Other Food Services (OFS) providers said that helping clients to prepare food at home gives clients choices and supports a wellness model. OFS providers are able to respond to clients’ specific needs, such as individualised assistance to prepare meals. OFS was seen to work especially well for small groups of clients, such as clients from CALD backgrounds living in Darwin.

RQF respondents indicated that their most common response to client demand was to offer different or more interesting menus and to adapt the delivery options for clients. Home-delivered Meal Services in particular had responded in a wide range of ways to shifts in client need and demand. However, attending to clients’ social needs was much more common among centre-based meal providers than home-delivered meal providers.
Trends in food production and delivery

Trends in food production noted by workshop participants included:

- A wider variety of foods for clients to choose from and more options for sourcing foods (e.g. from supermarkets)
- Demand for and provision of increased choice of meals (e.g. fresh, hot meals, salad, sandwiches, cheese and biscuits)
- An increase in requests for specific diets (e.g. vegetarian, gluten free, texture modified, kosher, specific cultures)
- An increase in requests for various forms of meals (i.e. breakfast, lunch, dinner)
- An increase in requests for both frozen meals and fresh meals
- An increase in outsourcing meal preparation, including cook/chill, community food production facilities and distribution centres
- Changing menus to reflect more multicultural tastes among all clients (not just CALD background)
- Component ordering (rather than full meals)
- Increasing cost of food and meal production and decreasing affordability
- An increase in use of technical equipment (e.g. blast-chillers, combi-ovens)
- Complicated food safety requirements pushing some providers out of the market
- An increase in the need to sub-contract services to meet needs (e.g. restaurants) – but nutritional content and food safety of meals from these sources are unknown.

Trends identified by workshop participants related to meal delivery varied both between and within jurisdictions and included:

- An increase in the geographic spread of delivery
- Declining numbers of clients in some LGAs due to supermarket competition
- Increasing episodic or intermittent deliveries
- Increasing consumer choice around where clients eat, what they eat and who they eat with
- An increase in the number of days clients receive a meal
- A move away from delivery seven days a week to more flexible times and days
- An increase in requests for frozen meal delivery to cover weekend meals
- Increasing requests from clients for assistance to cook their own meals at home
- Increasingly, carers or paid workers collect meals from providers
- An increasing need to respond to natural disasters with changes to delivery (e.g. food drops from planes/helicopters)
- An increasing demand for centre-based meals, combining social interaction and access to information
- An increase in outings, combining a meal with social activity.

FOOD SAFETY

An overview of the literature suggests that the food safety issue is of paramount importance and a challenge to Meal Services (Almanza, Namkung, Ismail, & Nelson, 2007). Compared to younger counterparts, older people have a higher risk of food-borne illness, and, once ill, take longer to
recover (Albrecht & Larvick, 2007). Appropriate methods of food preparation, efficient meal delivery, and clients’ safe food storage practices all play a vital role in producing optimal conditions for food consumption.

A US study (Namkung, Ismail, Alamanza, & Nelson, 2007) investigated the length of time between packing and delivery of home-delivered meals, and examined procedures used to mitigate risk of food-borne illness. According to the US Food and Drug Administration Code, in order to avoid dangerous bacterial growth, perishable food should not be left at room temperature for more than two hours. Namkung et al. (2007) found that the total average delivery time from packing to last delivery was 1.92 hours. Worryingly, 31% of deliveries took longer than two hours, which represented a risk of food-borne illness to a considerable number of clients. The researchers argued that risk-mitigating efforts or factors should be applied to the preparation and delivery process. These factors include: types of packaging for individual food; type of holding unit used for meal trays prior to loading; type of transport container; and method of placing meals in the vehicle (Namkung et al.).

Meal preparation and delivery affects food safety, but an equally important consideration is the client’s own food handling and storage practices. Albrecht and Larvick (2007), using a Temperature Data Tracker, found that half of the MOW clients of a US meal service kept their average refrigerator temperature above the recommended reading and 40% saved food for later consumption. Similarly, in a survey, Frongillo et al. (2010a) found that 61% of MOW clients eat their meal immediately and Lirette, Podovennikoff, Wismer, and Tondu (2007) found 51% do so. Clients who receive frozen meals are more likely to store the food in their refrigerator than those receiving hot meals (Frongillo et al., 2010a). High refrigerator temperatures combined with clients’ tendency to keep meals for later consumption poses a potential danger of food-borne illness.

Given that so many meal program clients prefer to store food for later consumption (Albrecht & Larvick, 2007; Frongillo et al., 2010b), many may prefer to receive chilled or frozen meals rather than hot meals. An important benefit of providing chilled meals to MOW clients is that it may increase food quality and safety (Parsons & Roll, 2004). An innovative practice implemented in Canada aimed to increase food safety by using the ‘cook-chill’ delivery system (Parsons & Roll, 2004). Notably, they found that 89% of MOW clients who received chilled meals reported they consumed the entire meal later that day, and 75% had no objection to receiving chilled meals. This finding suggests chilled meals may be a good option for some clients.

The cross-over from cooked to frozen meals by MOW in some areas has been quite dramatic, as illustrated in the Riverina/Murray district (New South Wales Meals on Wheels Association, 2010), where in a period of nine months in 2009, the number of delivered hot meals decreased by 20% while the number of frozen meals increased by 50%.

Providing chilled or frozen meals to decrease the risk of food-borne illness needs to be weighed against the finding that these types of meals are not every client’s preference. In some studies, clients receiving hot meals reported higher satisfaction than those receiving frozen food. In the USA, for example, clients receiving hot meals report higher satisfaction than those receiving frozen food (Frongillo et al., 2010a). As well, 25% of clients in Parsons and Roll’s (2004) Canadian study objected to cook-chilled meals, though the remaining 75% of accepted cook-chilled meals as they could delay
consuming the meal until later in the day. These findings suggest that people may benefit from having options.

INNOVATION IN FOOD DELIVERY AND FOOD SAFETY

Innovations identified by the literature review include using a range of settings and programs such as cafés, clubs, picnics and outings with a meal included. Other innovations include: providing snacks rather than or in addition to full meals; providing more meals (i.e. 3 meals a day for 7 days a week) in order to provide 100% of recommended daily allowances (RDAs); and providing more flexible service, such as taking clients to shop for groceries or dining out; and using information technology (IT) to increase flexibility, for example, in ordering meals. IT can also be used to help calculate the most efficient delivery routes. For example, in a Finnish trial of a commercial, experimental route optimisation tool in a communal home meal delivery service, savings of up to 50% were recorded in both distance travelled and number of vehicles used (Bräysy, Nakari, Dullaert, & Neittaanmäki, 2009).

Several aspects of food delivery models have been analysed. In Australia, Krassie et al. (2010) suggested the development of a distribution and warehousing system to ensure that food services have equal and expanded access to the range of appropriate meals available. Some meal service providers have adjusted their processes, by using central warehouses and industrial kitchens.

Lirette et al. (2007), concerned about food safety, recommended that MOW clients be provided with refrigerator thermometers to ensure correct temperatures are maintained, and instructions for proper storage, chilling, freezing, and reheating food should be placed on food containers to reduce risk of food-borne illness. In the course of their study these researchers did not actually install thermometers into the refrigerators of participants in order to measure the extent to which thermometers helped people maintain their refrigerators at the correct temperature. Future research in this area would need to trial the effectiveness of thermometers.

Provider views on innovation in food production and delivery

Providers both at the national workshops and who returned the RQFs had implemented a large range of innovations to improve flexibility of food production and delivery. Innovations for delivery of home-delivered meals are grouped below under several themes:

Meal Choice and Food Content

- Increased menu choices
- Seasonal menus
- Development of special menus such as grazing packs (finger foods) and CALD menus
- Different sized meals, different portion sizes
- Multi-item choice – more than just lunch
- Breakfast packs
- Fruit box
- Hampers – winter warmer pack
- Multiple service providers (diversity)
- Centralised ordering, all frozen meals
- Semi-prepared meals (i.e. vegetables chopped ready to heat)
Individual raw food packs with a recipe to cook at home with support
- Culturally appropriate models of service (i.e. cook at home)
- Fish and chips Friday or delivering clients’ favourites (café food)
- Pick and choose options for meals or meal packages
- Fortifying meals to increase known nutritional content
- Rotating menus with breakfast and lunch available
- Frozen meals/chilled meals
- Traditional bush tucker and use of local donated produce such as seafood, turtle, kangaroo and dugong when they are available
- Innovative cooking methods – Delta T ovens
- Consulting clients about menus.

Delivery
- Police deliver in an emergency
- Flexible delivery times
- More services to cover weekends
- Morning delivery runs
- Meal delivery earlier for chilled/frozen to allow for independence
- Cook/chill delivery early morning (not lunchtime) so volunteers can chat/have a cuppa
- Clients can come in to ‘shop’ to purchase meals; don’t want to be seen as MOW clients
- Clients can pick up meals from the centre – promotes social interaction
- Delivering basic staples (e.g. milk / bread / newspaper)
- Use of foods with a 30-day shelf life
- Small eskies for food transportation
- Using commercial frozen meals for delivery to address isolation and monitor wellbeing.

Improved packaging
- Changing the presentation of the meals (i.e. clear packaging vs. foils) to make them more inviting; meals can look better and less like a packaged meal
- Different packaging such as meals on a plate and individual eskies
- Vegetables packaged separately from meat
- Trialling a new type of box that can carry both hot and cold meals.

High Needs Clients
- Dementia clients have trained volunteers stay with them while they eat – lunch buddy or Meal Mates
- Supported lunch for customers with dementia
- Dementia and finger food packs
- Dementia support, volunteers to assist with meals in the home – heating, safe food storage and social support
- Direct care staff providing support, guidance and training with meal preparation wherever appropriate
- Extra support workers to assist customers to reheat meals, now combining with other HACC workers
- Use sensory stimulation for cognitive impaired clients (e.g. to trigger pleasant past memories).
Innovations for centre-based meals and outings:

- Clients can take frozen meals home
- Meals in community rooms (e.g. in a housing estate)
- Multicultural centre-based meals, outings and picnics
- Clients from various cultures meet weekly
- Vision impaired clients’ centre-based meals
- Clients can bring in and exchange recipes
- Centre-based meals based on dining room models of meals delivery
- Changing the role of the cook to become more interactive with clients and to learn about them as individuals
- Integrating activity groups and meals
- Community activity groups accessible all day in central locations
- Developing social groups (e.g. meal and a movie)
- Working with commercial transport and social support groups for outings
- Community kitchens for youth and older people
- Engagement of volunteers to bring clients in to services
- Volunteers take clients out for a day’s outing and meal (e.g. fishing)
- Internet café and community restaurant
- Wheels to meals (lunch club)
- Partner with local cafes/restaurants and ‘Let’s dine out’ vouchers
- Using social lunches to share information
- Morning tea club
- Clients taken out on a BBQ boat and back to a food source and home
- Café meal style options (more suitable for active service model)
- Once a month bus ride to the local pub for a counter meal
- Group cooking and role modelling
- Having lunches or morning/afternoon tea for clients at a centre or outside a venue
- Offering a variety of meals through menu cycles, alternative meals on the same day.

Innovations for OFS services

- Calendar with nutritional tips distributed to customers
- Food distribution network (fresh fruit and veg) – city
- Assistance with online shopping
- Shopping services and making meals at a centre to build skills and provide social opportunities
- Intergenerational program between a secondary school cooking class and older people who go in for a meal
- Social Meals in Rooming Houses project.
JURISDICTIONAL DIFFERENCES IN SERVICE DELIVERY

The information in this summary of jurisdictional differences comes from the RQF.

Nearly two-thirds (64%) of RQF respondents provided hot meals—all respondents from the Northern Territory said they provide hot meals. The ACT provider reported it supplies cook-chill and frozen meals. Of the responding providers in the other jurisdictions, 24% provided cook-chill meals (from 0% in the Northern Territory to 46% in Victoria), 31% provided frozen meals (from 9% in South Australia to 64% in New South Wales), and 23% of all respondents provided a combination.

While 38% of all respondents reported availability of culturally specific meals, only 12% of South Australian respondents and 33% of West Australian respondents reported having these meals available. Over 75% of respondents in all jurisdictions catered for special dietary needs.

Two-thirds (65%) of services provide meals five days/week and only 9% provide meals seven days/week. Mode of delivery varies considerably across Australia. Over half of the services allow clients to choose the mode of delivery (frozen, chilled, or hot), ranging up to 61% in New South Wales. Less than 20% of services provide only hot meals (ranging up to 50% in the Northern Territory). In most jurisdictions, services report that clients can choose how many meals are delivered per week but this ranged from 22% in Tasmania to over 90% of services in New South Wales, Victoria, Northern Territory and the ACT. Similarly, there was variation across jurisdictions in the proportion of services that can provide clients with choices about course combinations and purchasing extra courses.

SUMMARY

- Relatively few home-delivered meal providers can provide culturally specific meals; this is widely recognised as an issue for equity in services provision
- Food safety is an important issue
- Whether hot meals or chilled/frozen meals are provided depends on provider capacity, client preference and whether meals are home-delivered or centre-based
- Providers noted a very wide range of trends in meal production and delivery, some of which were at the request of clients
- Diversity in client needs and preferences is likely to continue to increase
- Better integration of Meal Services with other service types may be required in the future to meet the needs of clients with more complex health conditions
- Helping clients prepare food at home gives clients more choice and supports a wellness model
- Demand for assistance with meals at home has been increasing and may well continue to increase in the future
- The wide range of implemented service innovations has contributed to client choice and flexibility
- Meal Service providers show evidence of having designed, trialled and implemented a huge range of innovations in attempting to meet client needs and address other challenges to their viability
- Some providers are maximising the use of local resources to improve their viability.
Staffing, training and use of volunteers

Topics covered in this section of the report include:

- Staff roles and staff training
- Involvement of dietitians
- Involvement of volunteers
- Innovation
- Jurisdictional differences
- Summary

**STAFF ROLES**

Service providers who returned a completed RQF as part of the current review indicated they rely largely on paid staff to produce meals, although volunteers are frequently relied upon for delivery. Participants in the national workshops reported that what makes their service work is consistency in staff—both paid and volunteer. Issues with staffing may mean that food is sourced sub-optimally; in the Northern Territory, food for clients was sometimes purchased from roadhouses due to staffing issues and client remoteness. Similarly, one of the challenges to the meals delivery model in the US is inadequate staffing resources (Lee et al., 2008).

Staff skills and personal qualities are critical. In Australia, Fletcher and Read (2012) found that staff exhibit a high degree of passion about their role and both compassion and professionalism in the service they provide to clients, and clients are overwhelmingly positive about their interactions with both staff and volunteers. In the UK, Rabiee and Glendinning (2011) found one key feature of services that contributes to the effectiveness of a re-ablement approach is staff commitment. Similarly, researchers in a study of home support in Vancouver (Byrne, Frazee, Sims-Gould, & Martin-Matthews, 2010) concluded that people involved in the delivery of services are integral to maintaining and supporting the personhood of older clients.

Focus group participants were enthusiastic about staff who provide centre-based meals. Many identified the supportiveness or flexibility of staff and kitchen staff as being a benefit of attending a centre for meals.

**STAFF TRAINING**

Providers commonly recognise the need for staff training. Some workshop participants particularly identified a need for training in cultural awareness to meet the needs of clients from CALD backgrounds. Providers in rural and remote areas of the Northern Territory said they would like ongoing training through team leaders or coordinators to improve staff skills in ordering produce, menu planning and food safety. In New South Wales, one group noted that a HACC-funded dietitian provided training for volunteers and staff to recognise clients at risk of malnutrition.
IN VolvemenT OF DIETITIANS

Several authors have noted the crucial role that HACC-funded dietitians play in the provision of advice regarding nutrition and dietary requirements for individual service users (e.g. HDG, 2004; Leggo et al., 2008). Several resources have been developed by dietitians to support identification and provision of assistance to older people at risk of poor nutrition. In Victoria, the introduction of a risk screening tool and associated training has emphasised to HACC assessment officers the importance of good nutrition (HDG, 2004). Similarly, a Queensland project focused on training coordinators of HACC agencies, front-line HACC staff and health professionals working with HACC clients (Leggo et al., 2008). The Tasmanian Community Nutrition Unit has developed a Malnutrition Risk Screening Tool and Appetite for Life handouts on particular nutrition issues.

Studies have shown that dietitian-delivered interventions to care workers and informal carers are able to improve or prevent decline in clients’ nutritional and functional status without increasing informal carer burden (Salva et al., 2011; Laforest et al., 2007; Lauque et al., 2004).

In a recent submission to the Commonwealth Government, the Dietitians Association of Australia (2013) highlighted the diverse roles undertaken by HACC dietitians including:

- Assessing nutritional status and implementing nutrition care plans for individual clients in their home, centre-based care or a clinic setting
- Assisting HACC service providers to incorporate nutrition risk screening into their assessment processes
- Advising meal service providers in day care centres or MOW to support delivery of quality food and nutrition
- Educating care workers and food service workers
- Advocating for good nutrition for older clients to carers, policy-makers and the wider community via events, programs, health promotion activities, conferences and other forums.

While the number of dietitians currently employed in HACC programs has increased since the program’s early years, there is an uneven distribution of HACC-funded dietitians across and within states and territories. In a recent report on delivered Meal Services in Tasmania, the authors noted that, despite worryingly high levels of risk of malnutrition in clients new to the service, no HACC-funded dietitians are available to see clients at nutritional risk; instead Community Nutrition Unit dietitians provide advice and support to service providers (Department of Health and Human Services Tasmania, 2012). A possible contributing factor to a lack of dietitians in HACC may be that dietetics is perceived as less important than other allied health services such as physiotherapy and occupational therapy (HDG, 2004).

Provider views on dietitian involvement

In completing an RQF, just over one-half of respondents (51%) said that a dietitian had oversight of their menu, and this was highest for providers who delivered meals only to clients’ homes (60%, vs. 43% of providers who delivered most of their meals to clients’ homes and 33% of providers who delivered most or all of their meals in centres). Dietitian oversight of menus varies considerably between jurisdictions from 17% in Northern Territory to 81% in South Australia (according to RQF respondents).
In contrast, workshop participants in many jurisdictions reported no involvement with, and in some cases no knowledge of, HACC-funded dietitians or nutritionists. While none of the participants at the Brisbane workshop reported having access to HACC-funded dietitians, some were aware of the work that Queensland Meals on Wheels (QMOW) does with dietitians, and some providers in Queensland said they access nutritionists through QMOW.

In Victoria, HACC-funded dietitians were reported to be involved in some services through reviewing menus, testing and monitoring meals to HACC standards, assisting with cooking programs, and taking referrals for clients nutritionally at risk. (The Victoria Department of Health has paid grants to meal providers to purchase access to dietitians.) Victorian participants reported that each client receives a full Living at Home Assessment. Meals are part of an integrated suite of local government services, and council involvement in the meals program was said by some to work well. Council involvement in Meal Services also enables closer links with HACC assessment teams.

In Tasmania, HACC funds the Community Nutrition Unit, which services the sector and provides advice directly to services, rather than to individual clients. Tasmanian dietitians noted that this service model (the Community Nutrition Unit) provides effective nutritional support to service providers (though there is little or no follow-up with clients).

In New South Wales, most respondents said there was very little access to HACC-funded dietitians, especially in rural areas. Access was also limited by funding. One group said no nutritional advice at all was available in regional New South Wales. However, another group said that a HACC-funded dietitian provided training for volunteers and staff to recognise clients at risk of malnutrition, and a referral process for access to a HACC-funded dietitian was operating in the Macquarie and Lower Hunter regions.

New South Wales participants reported that non-HACC funded dietitians were included in several ways. One service paid a private nutritionist to review their menus. Other services sourced nutritionists or dietitians through hospitals, a university (dietetic students), a health service, or a not for-profit organisation.

Workshop participants in South Australia reported that people can self-refer to a dietitian, and all new clients receive a nutrition check. Having a dietitian in community care to guide coordinators in identifying malnutrition risk for screening and information to meal providers reportedly works well. Trained volunteers are also able to provide feedback that helps highlight the need for re-assessment.

Some participants reported having access to hospital dietitians. Service providers in some locations also send referrals to hospital allied health staff if concerns are raised; however, waitlists can be a barrier to responsive access. In some cases, hospital dietitians provide diabetic education for OFS clients. Where hospital kitchens are contracted to provide meals, hospital dietitians are also involved in the oversight of menus.

Consultant or brokerage dietitians are used by some services. Some participants reported having access to dietitians to check menus and portion sizes and survey clients. Dietitians in some locations also provide information on fortified meals and work with clients on designing meal options. Dietetic students on placement from universities are also used by some services to assess menus.
Clients’ assessment of dietitian involvement

Almost one-quarter of people who returned a Client Feedback Form who were OFS clients (24.8%) indicated they had seen a dietitian for support or advice (63.2% responded No and there was 12.1% missing data on this item). This proportion varied from 6.7% in Queensland to 29.2% in New South Wales.

INVolvement OF Volunteers

Some literature has investigated the motives driving the activities of volunteers, and knowledge about these motives has potential to determine a meal program’s ability to engage and retain them. Vanzhagi (2007) described the benefits volunteers derive from their involvement in and commitment to a MOW program. The author witnessed the group of volunteers at an MOW organisation in Canada evolve into an inclusive community based on a shared identity, with individuals reporting changes in themselves, ranging from becoming more socially involved and being less shy to a greater awareness of others’ needs.

A recent Australian report (Fletcher & Read, 2012) showed that volunteers exhibit a high degree of passion about their role and both compassion and professionalism in the service they provide to clients. They strongly recognise the social connection they provide for clients, and feel that an important role is to provide a bridge for the client to their community. Some volunteers develop friendships with clients that extended beyond delivering a meal, despite risking negative emotions when clients die.

As noted in the Winterton et al. (2013) literature review, the role of MOW volunteers is twofold: they deliver meals to older people’s homes and provide basic social interaction for people who may be isolated. However, while volunteers play a critical role in providing a minimal level of social contact for some older people, an Irish study has shown many clients are not interested in or satisfied by this kind of contact, and the amount of time volunteer deliverers spend with clients as they drop off meals may be extremely short (Timonen & O’Dwyer, 2010).

One study (O’Dwyer et al., 2009) showed that typical motives for volunteering include finding a new sense of purpose in retirement, to make the people involved feel like valued members of their own community, and to enable them to gain satisfaction from helping to keep a vital community service in operation. O’Dwyer et al. argued that most MOW coordinators interviewed had a good understanding of these motivations. However, few have the time to plan a more coordinated approach to recruitment and retention of volunteers, which could result in a crisis-management approach and a shortage of volunteers.

Winterton et al. (2013) discussed recruiting volunteers from sources other than the traditional venues of older drivers or retirees, such as corporate circles, younger drivers, and students, and provided examples of innovative recruitment approaches. As well as involvement in MOW delivery, volunteers are involved in meal production, social contact and assistance with shopping and meal preparation. Winterton et al. indicated that Meal Services organisations rely on altruistic motivations, such as wanting to contribute to society, to retain their volunteers.
Provider views on volunteer involvement

Evidence from the national workshops conducted as part of this review indicates that volunteers play key roles and many services would not be able to operate without them. The use of volunteers across all areas (production, delivery, and administration) was commonly reported as both working well and a critical component of service models. Volunteers also play a key role in monitoring clients and connecting clients to their community, in both home and centre-based settings. However, participants in the Northern Territory reported that no volunteers are available to any of the services.

Many participants reported that what makes their service work is consistency in staffing, both paid and volunteer. Rosters that allow volunteers to build rapport with a regular group of clients work well, as changes in clients’ wellbeing can be identified quickly. Having ethno-specific volunteers is also valued.

In Victoria, participants valued having a part-time, volunteer co-ordinator funded by the Department of Health to manage volunteers. Support for volunteers, including a Volunteer Resource Centre, and training for volunteers through providers and councils, was also mentioned as working well by some participants.

Having well-established partnerships and working relationships with volunteer recruitment organisations has meant some providers have experienced no difficulties with recruiting volunteers. Building relationships with corporate partners, who allow staff time for volunteering, is also working well for some providers. Relationships with schools and disability services have also been established by some providers, resulting in a steady flow of volunteers.

Evidence from the Review Question Form also highlighted the importance of volunteers. Of those services that produce their own meals, nearly two-thirds (69%) use volunteers in meal production; of those that deliver meals, most (83%) use volunteers in delivery.

Volunteers fill a wide range of roles, including administration (especially for services that provided home-delivered meals) and food shopping and preparation. Centre-based meal providers emphasised the use of volunteers for transport and social support. Challenges with volunteers include their availability, getting specific kinds of volunteers, barriers to volunteering (e.g. police checks), and costs to the organisation.

By far the most common ‘Other’ role for volunteers is help with administration, followed by tasks in food preparation and help in shopping and the kitchen. Services that provide home-delivered meals are most likely to use volunteers in administration, but centre-based meals providers are most likely to use them in a range of food preparation roles and social support, and are more likely to use them for transport (as opposed to meal delivery) than providers that focus on home-delivered meals. The most common issue with volunteers is availability, and recruitment of specific kinds of volunteers was also commonly mentioned. A minority of respondents (n = 47) said they have no issues associated with the use of volunteers in their service. Home-delivered meals’ providers were particularly likely to report issues with getting specific kinds of volunteers, barriers to volunteering and costs to the organisation of having volunteers. The most commonly mentioned solution to issues with volunteers was good management of the volunteer workforce.
Some trends reported by providers at workshops included: a fall in volunteer numbers (with increasing age and retention rate issues), though one service reported an increase in volunteer numbers; and use of welfare recipients, who are able to spend extended amounts time with clients, as volunteers.

**Client views on volunteer involvement**

Clients of centre-based Meal Services who attended the focus groups in Adelaide and Brisbane suggested that their service should increase the numbers of volunteers. Some participants in Adelaide suggested that the requirement for police checks dissuaded potential volunteers from offering their services.

**INNOVATION**

Providers who attended the national workshops suggested a host of innovations regarding volunteer recruitment, training, and roles in providing nutritional support to HACC clients.

**Recruitment**

- Approaching schools / TAFE / businesses / disability services
- Promoting the volunteer image through the media – MOW day / volunteer week
- Recruiting volunteers who will work outside business hours – also extends to recruitment of younger volunteers
- Recruiting from businesses, school and clubs
- Tapping into the unemployed to work as volunteers
- Using young people as volunteers/work experience, promoting through various channels (e.g. radio)
- Partnership with TAFE for Certificate II in Hospitality
- Intergenerational involvement
- Use of school kids to help in kitchen and go out with drivers
- Use of volunteers who are working to deliver meals on the weekend.

**Training**

- Volunteer co-ordinator to assist services in ensuring all valuable volunteers are trained to help: recruit / retain / train
- Training volunteers in occupational health and safety issues
- Tailored training for volunteers to support clients with dementia.

**Retention and management**

- Recognition of volunteers through awards
- Outings for volunteers
- Peak organisations to take on the coordination of volunteers outside business hours (OHS risks taken on).

**Roles**

- Increasing the use of volunteers (and decreasing the use of paid staff)
- Volunteers in private vehicles pick up clients for centre-based meals
• Utilise volunteers from the local TAFE (i.e. buddying chefs and matching them with specific clients to improve skills)
• Increase element of social support and monitoring for clients.

JURISDICTIONAL DIFFERENCES IN USE OF DIETITIANS AND VOLUNTEERS
Dietitian oversight of menus (claimed by RQF respondents) varies considerably across jurisdictions from 17% in Northern Territory to 81% in South Australia. However, providers who attended the workshops indicated very limited access to HACC-funded dietitians in all jurisdictions.

RQF respondents indicated that Meal Services in the Northern Territory are a low user of volunteers, whereas those in South Australia rely enormously on volunteers. Using valid percentages, involvement of volunteers in meal production ranges from 20% of services in the Northern Territory to 91% in South Australia; similarly, involvement of volunteers in meal delivery ranges from 20% in the Northern Territory to 97% in South Australia.

SUMMARY
• Staff training is needed to assist providers to recognise clients at risk of malnutrition and to support implementation of a more consumer-directed approach in Meal Services.
• The involvement of dietitians is valued but most service providers have insufficient access to dietetic support either for assistance with menu development or assessment of clients at risk of malnutrition.
• Occupational therapists and speech pathologists also play important roles in Meal Services.
• Volunteers are critical to the viability of Meal Services.
• The heavy reliance of many Meal Services on volunteer labour has implications for the viability of services as the volunteer workforce ages.
• Some meal service providers may need assistance to deal with issues relating to volunteer recruitment, retention and coordination. However, other providers appear to have developed innovative responses to issues with volunteers, and such local solutions need to be encouraged.
Research and data

Main topics covered in this section of the report include:

- Gaps in knowledge
- The HACC MDS
- Client feedback
- Summary

GAPS IN KNOWLEDGE

The literature review indicated gaps in knowledge that could be addressed through research and evaluation. Although the production of meals and the delivery process are integral components of the supply chain, the literature review found no journal article or report that covered the full extent of the supply chain, from customer demand at the beginning to customer satisfaction with the delivered meal at the end. Mentzer et al. (2001) proposed that integrated supply chain management enhances the customer value and satisfaction, which ultimately leads to a profitable and sustainable position of the company and other members in the supply chain (Porter, 1985).

Evaluations of Meal Services that consider the views of staff, volunteers, and clients, with the aim of identifying alternative models of delivery to fulfil cost requirements, meal satisfaction, and social objectives would be useful. Evaluation for the targeting and monitoring of new, innovative and cost-effective strategies could include measures of food sufficiency,12 in order to alleviate the risk and presence of food insufficiency (Sharkey, 2003). Another gap in knowledge is the nature and impacts of ‘Other Food Services’.

HACC MDS

In the Home and Community Care (HACC) Minimum Data Set, ‘Meals provided at home’ refers to meals that are prepared and delivered to the client. ‘Meals provided at centres’ are only counted in the MDS where they are the primary reason the client is there or they are the primary service the client receives while there. Other Food Services includes assistance provided during preparation or cooking of a meal at the client’s home and advice on nutrition, food storage, or preparation. Assistance with shopping and meal preparation may also be part of Domestic Assistance received by the client.

Some workshop participants did not believe the HACC MDS adequately captures their contributions to the delivery of nutritional support to older people.

Measurement of client outcomes has been difficult in the HACC MDS. With the move to a common client record and a more uniform approach to assessment, it may be possible to use nutritional risk

---

12 Food insufficiency is defined as an inadequate amount of food intake due to a lack of resources. The term food insecurity may also be used.
screening and scores to report on outcomes of the intervention of meals services in improving clients’ nutritional status.

CLIENT FEEDBACK

Tilston, Gregson, Neale, and Tyne (1994) observed some 20 years ago that studies on the Meals on Wheels service often excluded client perspectives. More recently, a greater focus on consulting consumers has resulted in unexpected benefits to the program. For example, in Alabama, MOW enlisted the support of the Jewish community to create sustainable delivery routes (Buys, Marler, Robinson, Hamlin, & Locher, 2011). In the USA, Wunderlich (2011) suggested more consultation with older people is required to develop a reliable approach to effective nutrition education campaigns in this age group. In focus groups conducted as part of this review, participants suggested that clients could be asked for their feedback more often. However, some clients may have difficulty communicating their expectations or level of satisfaction with the meals and services provided (Barnes, Wasielewska, Raiswell, & Drummond, 2013).

Several participants of the national workshops reported that they conduct client satisfaction surveys and believe this aspect of their service model works well by assisting them to meet client needs and preferences. Some providers also seek information from family members about food that is familiar to the clients. Processes for seeking client feedback and responding to feedback were also reported to work well by some participants.

The large number of examples of providers demonstrating a flexible and innovative service response also suggests that many services have processes for listening and responding to clients’ views.

SUMMARY

- There are many opportunities for valuable research to be undertaken into Meal Services.
- Gaps in (published) knowledge include: funding and costing of Meal Services; evaluations that consider the opinions of all stakeholders and include a systematic assessment of clients’ views; information on OFS; knowledge on work works in education campaigns directed towards older people; and research that integrates the whole supply chain for Meal Services.
- Ways for clients to provide feedback are an important component of a meal service.
- The HACC MDS requires attention to improve consistency in coding and completion and to reflect what providers provide.
- The design of an individual client record affords opportunity to include outcome measures around nutritional status.

---

13 It is acknowledged that some research has been undertaken in Australia that is not in the public domain.
Funding models, costing and resources

Main sections of this part of the report are:

- Resources and funding
- Innovations
- Jurisdictional differences
- Summary

RESOURCES AND FUNDING

Very few reviews of costs or funding models for Meal Services have been reported in the literature, though the Meals Review Sub-Group indicated that studies funded by the Meals on Wheels Association have addressed funding models and the costs of meals.

In the United States, Troyer, McAuley, and McCutcheon (2010) estimated the cost-efficiency of specific therapeutic meal programs. Also in the US, Militello, Coleman, and Haran (1996) investigated the financial aspects of different production and delivery models in different regions with regard to deliveries, food planning and preparation, funding, and management, through interviews with directors of various organisations.

The Productivity Commission (2011) addressed issues of how Meal Services might be funded. It included an international review of evidence on home care services showing that user co-contributions for services such as meals are very diverse. In Japan, there is a 10% user co-payment for home services; in the Netherlands, the co-payment averages 12%, depending on the client’s income. However, some aged care systems, such as those in Denmark and Austria, fund home care services sufficiently to meet expected need, thus requiring no user co-payment. In the US, home care services are generally funded out of pocket, unless a person is eligible for means-tested Medicare support. The Australian Meals on Wheels’ submission to the Productivity Commission discussed the issue of how to set user co-contributions so that they did not act as a disincentive for clients to eat adequately.

Client views on costs of Meal Services

With a few exceptions, most focus group clients in all states reported that they were getting value for their money (often ‘good’ or ‘very good’ value). The majority of participants stated that their meals were affordable or that the cost was no issue. Participants in Perth stated that cost was not an issue because their families and community would help look after them. A common concern was that clients had noted a rise in prices and were worried that a price increase might prevent them from coming to have meals at the centre. A compounding issue for many was the cost and availability of transport (in Melbourne, Adelaide and Hobart).

Client Feedback Forms also indicated general satisfaction with the cost of services. Overall half of clients (49%) said they strongly agreed that what they paid for their delivered meals represented value for money, another 40% agreed with the statement, and a minority of respondents (4%) disagreed. (Missing values on this item accounted for 7% of responses.) When missing values were
removed, the proportions in the three groups (home-delivered meals clients, centre-based meals clients, and clients with both services) who strongly agreed that their meals represented value for money were very similar, ranging from 52% to 54%.

Provider views on costing models

In response to the question ‘what would best help you to meet the needs of your current and future clients?’ many RQF respondents highlighted funding issues, including increasing or ongoing funding, more flexible funding, and keeping meals affordable. Home-delivered meals’ providers were much more likely than centre-based or mixed providers to be concerned about funding, meal production and promotion/marketing.

Providers were asked to estimate their average cost of producing and delivering a meal. Most participants were only able to give an estimated range and a general idea of components involved, although there was little consistency in how a meal was defined or components delivered. The unit cost range reported was typically only related to food preparation, ingredients and delivery and did not include ancillary costs (e.g. administration components, capital costs and depreciation).

Increases in client complexity may have cost implications. Funding based on outcomes rather than outputs was generally seen by providers as preferable, as it is more flexible. Funding models varied between and within jurisdictions and client fees ranged from a low of $10 per week for five meals to $12 per meal.

Specific breakdowns for component costs were not reported by most workshop participants, but the types of components typically included:

- **Production** – fresh ingredients, containers, labour costs, kitchen running costs, labelling, packaging, meal testing, cleaning
- **Distribution** – fuel, fuel vouchers, uniforms, vehicles, volunteer reimbursement
- **Administration** – police checks, phones, marketing, rent, utilities, insurance, food safety audits, auspice fee, run sheets, invoicing, computer costs, training, intake, maintenance, administration staff salaries
- **Staffing and training.**

Capital costs and depreciation were typically not included.

Common sources of additional funding reported by participants included:

- Commonwealth, state and local government (council) grants
- In-kind council support and council auspice
- Social clubs and service groups (Rotary, RSL, Lions)
- Corporate sponsorship
- Bequests and private donors (donations of money and time)
- Sale of other food and catering for other community fundraisers
- Raffles, sausage sizzles
- Partnerships with other services
- Interest from accumulated funds.
Many workshop participants reported that their service would not be viable without volunteer contributions. The cost to services to replace volunteers with paid staff, where tracked, was reported by several providers to be between $35,000 and $800,000 per annum. One service reported 35,000 volunteer hours each year and equated the cost to an extra $20 per meal. Some services also noted the contribution of ‘hidden’ volunteers — paid staff members who work over and above their duties and paid work hours.

Participants were asked whether their current funding model helps or hinders the sustainability of their service. Few participants indicated that their current funding models were a ‘help’. Funding based on outcomes rather than outputs was generally seen by providers as helping them with service sustainability; participants who said their organisations received unit-based funding indicated that outcome-based funding would be preferable, especially rural/remote services which have higher transport costs, staff costs, and costs to deliver training.

Helpful aspects identified included getting payment in advance and funds for dietitians and volunteer coordination.

Some participants thought that the current funding model helps maintain status quo but does not allow for equipment upgrades, maintenance or necessary changes. One group commented that their business model was sustainable as long as clients considered the price affordable.

Unhelpful aspects of the current funding model were also identified. In particular, workshop participants criticised the limitations imposed by output-based funding, which was seen as purely quantitative, as failing to take the quality of services into account, as stifling innovation and expansion of services, and as inconsistent with a person-centred approach. Output-based funding also failed to take into account costs of things such as: professional development; growth of services; the socialisation aspects of the service; client assessment; and infrastructure and leasing arrangements. Other comments included:

- The funding model is sustainable only due to local government commitment and the heavy involvement of volunteers. If either of these were withdrawn, the service would cease.
- Production kitchens and distribution centres are similarly funded, but production kitchens have added costs that put a great deal of pressure on the service. Added funding is needed to accommodate extra costs.
- In an Indigenous organisation, with limited funding and no client contributions and no volunteers, sustainability is difficult.
- The HACC subsidy does not increase with increasing costs of fuel and food.
- South Australia has introduced direct debit for clients’ payments for meals. South Australia has also allocated funding that specifically targets CALD groups, and allows home-based and centre-based providers greater access and ability to reach a wider population than would otherwise be possible.
INNOVATIONS IN RESOURCES AND FUNDING

Innovations implemented by workshop participants to address resources and funding are grouped by theme below:

Kitchens and production facilities
- Reclassifying commercial kitchens – for use in HACC
- Loaning or leasing microwave ovens to clients to heat meals
- Investing in better facilities – new kitchens and updated equipment (such as blast chillers)
- Using a kitchen provided by the shire council to reheat meals
- Increasing freezer space to improve variety, and providing infrastructure to meet growing needs
- Installing cook/chill kitchens in metro areas
- Using established kitchens rather than setting up new ones
- Using large premises to bulk-produce nutritional meals
- Acquiring appropriate vehicles for meals on wheels
- Acquiring proper heat bags (limited $).

In addition, centre-based meals providers talked of acquiring a minibus; getting carers to bring clients in; and driver safety training.

Establishing partnerships
- Using a range of suppliers, not just one provider
- Entering into partnerships with other organisations that have the skills and resources for training; for example, first aid manual handling
- Combining with other services to share costs on items such as purchasing to allow cost savings on meals
- Drawing on organisations/businesses for meals delivery
- Partnering with community gardens
- Developing a clear service agreement with hospitals
- Looking at more accurate brokerage costs (for CACP and EACH)
- Involvement with Community chef – local government ownership, buying power in numbers and support for specific research
- Sharing a kitchen with other agencies such as School Nutrition, HACC, EACH and CACP programs.

Sourcing food
- Adding produce from a Planned Activity Group (PAG) vegetable gardens to the midday meal
- Tapping into fresh local foods.
JURISDICTIONAL DIFFERENCES IN FUNDING MODELS, COSTING AND RESOURCES

The cost of meal production and delivery reported in the workshops depended on what was included. Examples given at the workshops included: $6–$8 for two courses and juice; $20–$30 for one week’s worth of meals delivered to a remote location; and $23 for a purchased meal (content not stated) and staff costs.

Costs to clients of home-delivered meals ranged from $5–$6.50 for a main course to $17 for Meals on Wheels in a regional city. Costs to clients of centre-based meals ranged from a low of $5.50 for a main course only to a high of $12.

SUMMARY

- A huge range of funding models are currently used across Australia. Unit prices and client fees vary a great deal both between and within jurisdictions.
- Outcome-based funding (often referred to by providers as block funding) is generally seen by providers as preferable to output-based funding, as it is perceived to be more flexible.
- Some providers are making use of small-scale local resources to improve their viability.
- Large-scale providers have invested in a range of ways to improve their resources and are likely to need funding support for future development.
Implications

This section of the report outlines the main messages that were heard repeatedly during data collection phases of the review and implications for the design and delivery of Meal Services in the future. The first part of this section provides some high-level summaries and implications, followed by a table that sets out findings and implications in more detail and indicates where information was derived.

An overarching challenge for the Commonwealth Home Support Program (CHSP) is to design funding models that balance improving consistency within and between jurisdictions (on the grounds of equity) with supporting flexibility, innovation and responsiveness to local conditions and client need (on the grounds of quality and effectiveness). A further issue is access to better data on the program to support policy decisions.

**FINDINGS AND IMPLICATIONS**

- Meeting the nutritional needs of older people is a very important element in supporting them to continue living in the community.
- Some sub-groups of older people are at high risk of malnutrition and health problems arising from under-nutrition\(^{14}\) that could compromise their capacity to remain living in the community.

**Implication:** These findings underscore the centrality of services that provide nutritional support in a service system intended to support older people to live in the community.

- As well as nutritional support, equally or more important for some groups of clients is the role of Meal Services in supporting older people’s social needs and providing a monitoring function.
- There is evidence of growth in wellbeing services to support individual capacity to improve nutrition and prepare food for oneself.
- The provision of Other Food Services is growing, and potential exists for this service type to contribute more to nutritional support within wellness frameworks.

**Implication:** Service models that recognise and direct funding towards the various non-nutritional functions of Meal Services may be required. These functions also represent opportunities for service integration, both within HACC and more broadly.

- Each jurisdiction has developed different patterns of service provision. Differences are apparent in the scale of services, provider mix, the use of dietitians, definitions and terms, how consumers’ needs for nutritional support are assessed, and how integrated food services are across the range of food service types and with other HACC services.
- Clients and their nutritional needs are becoming more diverse and more challenging.
- Service providers are becoming more flexible and client-centred in how they deliver their service.

\(^{14}\) Malnutrition is a diagnosis, whereas under-nutrition is a state of energy, protein or other specific nutrient deficiency, which produces a measurable change in body function and is associated with worse outcomes from illness. From Victorian Government Health Information at [Victorian Government Health Information](http://www.health.vic.gov.au/older/toolkit/05Nutrition/)
Many providers have responded to the challenges they face by implementing a range of new strategies and innovations, some of which have been highly successful.

Implication: Many providers express concern about the ongoing financial viability of delivered Meal Services.

Service systems will need to be flexible enough to respond innovatively to changes in client demographics and preferences. Funding models for Meal Services could be designed to support rather than restrict planning and innovation.

Many Meal Services have a heavy reliance on volunteer labour. This can be seen both as a strength (e.g. community involvement, high levels of personal commitment from volunteers) and as a challenge (i.e. some services are having difficulty recruiting and managing their volunteer workforce).

Implication: Service providers may need assistance to deal effectively with volunteer coordination, recruitment, retention and training. Forums for sharing strategies may need financial support.

Meal Services are facing challenges including: uneven access to dietitian input and other allied health support; inability to meet the food preferences of some sub-groups of clients (e.g. some CALD groups); and difficulty delivering meals reliably to some remote communities.

Implication: Funding mechanisms could be designed to acknowledge difficulty in reaching particular client groups.

There is room for improvement in some aspects of Meal Services.

Implication: Quality indicators in community services could include better data on client satisfaction and improved evidence of having sought client feedback and mechanisms for responding effectively to client complaints.

The HACC MDS, arguably, does not collect the information most useful to designing and evaluating the CHSP, and has a lot of missing data on key variables.

Implication: The HACC MDS requires review to improve its capacity to collect meaningful data that are useful for service planning and development. There is opportunity for developing a common client record to report on individuals’ outcomes from using HACC food services, such as improved nutritional status and capacity to continue providing food for oneself.
### Table 2: Summary and implications

#### Nutrition and older people

<table>
<thead>
<tr>
<th>Summary of evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate nutrition is vital for older people if they are to remain living in the community.</td>
<td>Literature review</td>
<td>It is important for a comprehensive system of community services to include nutritional support of older people in order to support them to remain living in the community.</td>
</tr>
<tr>
<td>Older people are at higher risk of malnutrition and associated disease than their younger counterparts.</td>
<td>Literature review</td>
<td>It is important for a comprehensive system of community services to include nutritional support of older people in order to support them to remain living in the community.</td>
</tr>
<tr>
<td>Complications of under-nutrition include: increased risk of falls, pressure sores, dehydration; early hospitalisation and residential care entry; increased health care costs and prolonged and complicated hospital stays; and increased mortality.</td>
<td>Literature review</td>
<td>Nutritional support may reduce pressure for government spending on health care and residential aged care.</td>
</tr>
<tr>
<td>Access to food and nutritional support may be compromised by low incomes and poor transport.</td>
<td>Literature review</td>
<td>A new funding model could: (a) recognise that some services support clients who are particularly vulnerable due to low levels of financial and other resources, and (b) incorporate strategies to support outreach to particular groups.</td>
</tr>
<tr>
<td>Older men are particularly likely to lack skills in accessing and preparing food.</td>
<td>Literature review</td>
<td>Policy on Meal Services could encourage collaboration across service boundaries to focus on the needs of vulnerable men (e.g. through other community initiatives such as Men’s Sheds).</td>
</tr>
<tr>
<td>Some service providers have focused on targeting older men’s needs.</td>
<td>Workshops</td>
<td>Policy on Meal Services could encourage collaboration across service boundaries to focus on the needs of vulnerable men (e.g. through other community initiatives such as Men’s Sheds).</td>
</tr>
</tbody>
</table>

#### Roles of Meal Services: Nutrition

<table>
<thead>
<tr>
<th>Summary of evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>The delivery of meals links directly to health outcomes including improving the nutritional intake of older people.</td>
<td>Literature review</td>
<td>Meal Services have an important part to play in the CHSP because they can help reduce the risk of malnutrition, support older people to remain healthy, and contribute to assisting older people to remain living in the community.</td>
</tr>
<tr>
<td>Older people typically eat less than younger ones and many clients view their delivered meal as their ‘main meal’ of the day.</td>
<td>Literature review Workshops</td>
<td>The nutrition content of delivered meals is important and guidelines may need to be provided to ensure that meals meet minimum nutritional requirements.</td>
</tr>
<tr>
<td>Home-delivered and centre-based Meal Services may not (and do not set out to) meet all of an older person’s nutritional needs. A range of factors other than service provision influence an older person’s nutritional status.</td>
<td>Literature review</td>
<td>Using nutritional risk screening tools at assessment will focus care plans to include the most appropriate mix of services and individual effort to support improved or maintain adequate nutrition.</td>
</tr>
<tr>
<td>Delivered meals are not solely responsible for the client’s overall nutrition and health levels – actually eating the meal is central as well as other food eaten and early identification of malnutrition and other health issues.</td>
<td>Workshops</td>
<td>Nutrition screening and periodic monitoring of food intake could help support identify clients at high risk of under-nutrition.</td>
</tr>
<tr>
<td>‘Other food services’ using a restorative approach improve clients’ capacity to look after their own nutrition and health.</td>
<td>Literature review Workshops</td>
<td>Restorative Meal Services may reduce current and future need for delivered Meal Services.</td>
</tr>
<tr>
<td>Older people who receive home-delivered meals</td>
<td>Survey</td>
<td>This signals older people’s interest in maintaining their...</td>
</tr>
</tbody>
</table>
### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>value most the nutritional aspect of Meal Services.</td>
<td>nutritional health.</td>
</tr>
<tr>
<td>Older people receiving home-delivered meals in the home are even more ‘nutritionally vulnerable’ than other older people due to chronic and complex health problems.</td>
<td>Better assessment and care plans for those with nutritional risk and other health and care needs will require consideration of the service linkages necessary across the HACC suite of services (and more broadly with health services) to achieve effective, co-ordinated care.</td>
</tr>
<tr>
<td>Food insufficiency is an issue in some population groups and client sub-groups.</td>
<td>HACC assessment is an important means for: identifying causes of food insufficiency; addressing solutions through existing service options; and providing evidence to underpin the development of new service models required to support particular groups or areas.</td>
</tr>
</tbody>
</table>

### Roles of Meal Services: Social support and other

<table>
<thead>
<tr>
<th>Summary of evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meal Services can enhance client social contact. This is especially true for centre-based Meal Services and Other Food Services.</td>
<td>Literature review Client Feedback forms</td>
<td>The role of Meal Services in providing social contact and support, and the role of meals as a component in HACC social support services, could be acknowledged in a new funding model for CHSP.</td>
</tr>
<tr>
<td>The social contact provided by home-delivered meals is often minimal: the social impact of meal delivery varies a great deal across services, staff, and clients.</td>
<td>Literature review Client Feedback forms</td>
<td>Assessment of clients could address whether they need or desire social contact as well as nutritional support, and the best available service or combinations to meet individual needs.</td>
</tr>
<tr>
<td>Centre-based Meal Services provide quite a different service from home-delivered Meal Services: clients attend for social contact rather than nutritional support.</td>
<td>Client Feedback Forms Focus groups</td>
<td>Centre-based Meal Services require a different funding model from home-delivered meal services. Centre-based meal services require different reporting arrangements from home-delivered meal services.</td>
</tr>
<tr>
<td>Meal Services have an important part to play in providing health and wellbeing checks.</td>
<td>Literature review Workshops</td>
<td>The role of Meal Services in providing health and wellbeing checks could be acknowledged in a new funding model for CHSP, and supported by training resources for volunteers.</td>
</tr>
</tbody>
</table>

### Roles of Meal Services: Social support and other

<table>
<thead>
<tr>
<th>Summary of evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>The HACC MDS requires attention to improve consistency in coding and completion and to reflect what providers provide. The HACC MDS does not describe allied health involvement well enough to determine what is provided to Meal Services clients.</td>
<td>Workshops</td>
<td>A review of the MDS would be timely in a newly designed CHSP.</td>
</tr>
</tbody>
</table>

## Meal service clients

<table>
<thead>
<tr>
<th>Summary of evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
</table>

---

15 Food insufficiency is defined as an inadequate amount of food intake due to a lack of resources. The term food insecurity may also be used.
### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Feedback Forms Focus groups</td>
<td>HACC assessment is an important way of identifying the risks of social isolation, particularly where clients live alone. (However, it cannot be assumed that clients who live alone are socially excluded and need social support.)</td>
</tr>
</tbody>
</table>

### Meal service clients

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops</td>
<td>It is important that flexibility be built into service and funding models so that providers can adapt and respond to emerging client needs.</td>
</tr>
</tbody>
</table>

### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops</td>
<td>New funding models need to be flexible enough to support innovation for emerging client groups with distinct needs and food preferences.</td>
</tr>
</tbody>
</table>

### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops</td>
<td>New funding models need to be flexible enough to support innovation for client groups with distinct needs, such as clients with dementia.</td>
</tr>
</tbody>
</table>

### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops</td>
<td>New funding models need to be flexible enough to support innovation for client groups with distinct needs and food preferences.</td>
</tr>
</tbody>
</table>

### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review Workshops</td>
<td>New funding models could consider the ramifications of supporting clients with increasingly complex needs in the community.</td>
</tr>
</tbody>
</table>

### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Feedback Forms Focus groups</td>
<td>Funding centre-based meals may promote flexible ways of providing social support to socially isolated older people where a meal is used to connect people to their community. Funding models may need to be designed to reflect this dual purpose, while quality and nutrition levels of meals provided could remain set as agreed.</td>
</tr>
</tbody>
</table>

### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client feedback forms</td>
<td>Future funding may need to take into account a shift in service models towards OFS, which are potentially more expensive (although more likely to be short term) than home-delivered or centre-based meals. There is opportunity for including measures of clients’ capacity gains (i.e. improved nutrition and independence in food provision) to capture the benefits of individualised and group re-ablement programs. The service system may need both more OFS providers and better acknowledgement and improved reporting on the way other HACC activities are used to support gains and independence in nutrition.</td>
</tr>
</tbody>
</table>

### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td>Future funding may need to take into account a shift in service models towards OFS, which are potentially more expensive (although more likely to be short term) than home-delivered or centre-based meals.</td>
</tr>
</tbody>
</table>
### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>There is opportunity for including measures of clients’ capacity gains (i.e. improved nutrition and independence in food provision) to capture the benefits of individualised and group re-ablement programs. The service system may need both more OFS providers and better acknowledgement and improved reporting on the way other HACC activities are used to support gains and independence in nutrition.</td>
</tr>
</tbody>
</table>

### Meal service clients

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Many older clients are interested in regaining independence and learning new skills—an attitude conducive to restorative approaches.</td>
</tr>
</tbody>
</table>

### Service Models

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ways for clients to provide feedback are an important component of a meal (or any) service. Continuous improvement in Meal Services could continue to encompass (and consider improving) methods of gathering and responding to client feedback.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>While quality indicators in community services already include information on client feedback processes and satisfaction, in some cases these mechanisms could be strengthened to ensure services respond more effectively to client complaints.</td>
</tr>
</tbody>
</table>

### Service Models

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>It is important to support and create opportunities for sharing innovative practice (e.g. through conferences and other methods resourced and supported through the CHSP).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>It’s important that services have capacity to respond to current and future client need, and that funding models do not restrict this capacity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFS can be offered as a short-term service in group settings by CHSP-funded dietitians to teach good nutrition and meal preparation, thereby reducing current and future need for delivered meals.</td>
</tr>
</tbody>
</table>

---

16 A range of expressions of satisfaction and dissatisfaction is to be expected in evaluating any service.
### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In the OFS context, recipes for nutrient-dense food choices can be taught along with safe food handling and storage practices.</strong>&lt;br&gt;Workshops</td>
<td>Restorative nutrition care programs could include helping clients set nutrition and meal preparation goals and assessment of barriers to clients cooking for themselves. Assessment in the restorative context may identify practical barriers to clients cooking for themselves along with any wellbeing issues.</td>
</tr>
<tr>
<td><strong>There is a great deal of variation across jurisdictions and between local areas in how Meal Services are organised, who provides them, and how the service is resourced.</strong>&lt;br&gt;Workshops</td>
<td>While access to the range of food service types is needed (from advice and capacity building to home delivery and support), assessment and service integration are also important elements in the overall service system working for individuals.</td>
</tr>
<tr>
<td><strong>US studies have indicated that investment in home-delivered meals is negatively correlated with low-level Residential Aged Care admissions and may also reduce demand for low-level care in the community.</strong>&lt;br&gt;Literature review</td>
<td>Spending on Meal Services in the community has the potential to reduce demand on (low-level) residential care.</td>
</tr>
</tbody>
</table>

### Service Models

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relatively few home-delivered meals’ providers can provide culturally specific meals. This is widely recognised by service providers as a challenge in service provision.</strong>&lt;br&gt;RQF</td>
<td>Future service models could better address meeting the needs of CALD clients in their homes. CALD-specific centre-based meals programs are likely to grow for some populations and decline or even disappear for others.</td>
</tr>
<tr>
<td><strong>Instances of centre-based Meal Services have been decreasing, but may increase in the future as social isolation becomes a more important issue and the benefits of this service model are more widely recognised. (In some jurisdictions, similar activities may already be funded and reported as social support.)</strong>&lt;br&gt;Workshops</td>
<td>It may be important to explore possibilities for expansion and additional funding support for centres recognising that they will provide more services in the future.</td>
</tr>
</tbody>
</table>
| **A wide range of implemented service**<br>Workshops | Improved ways of helping providers to plan, share and
## Summary of evidence

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovations has contributed to client choice and flexibility.</td>
<td></td>
<td>Evaluate innovative practices could be established.</td>
</tr>
<tr>
<td>Some shifts in service models have occurred directly in response to client demand.</td>
<td>Workshops</td>
<td>Meal Service models will need to allow providers to respond to trends in client demand, which is likely to vary by client group and location.</td>
</tr>
<tr>
<td>Helping clients prepare food at home gives clients more choice and supports a wellness model. OFS clients value most ‘Knowing how to look after my health better’.</td>
<td>Client feedback forms</td>
<td>Future funding models may consider the costs and benefits of increasing OFS, and achieving consistency in reporting similar activities across different program activities.</td>
</tr>
</tbody>
</table>

### Service integration

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meal Services are often the first contact with the aged care system – it offers an opportunity to refer clients to assessment services.</td>
<td>Workshops</td>
<td>The interface between Meal Services and assessment services could be specified in the CHSP.</td>
</tr>
</tbody>
</table>

### Staffing and volunteers

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
</table>
| Many services have a heavy reliance on volunteer labour. This has implications for the viability of services as the volunteer workforce ages. | Workshops | Possibilities of responding include:  
- Shifting the models so that they are not so reliant on volunteers  
- Using volunteers in different ways  
- Recruiting new groups of volunteers  
- All of the above |
| Staff training is needed for:  
- Recognising clients at risk of malnutrition  
- Implementing a more consumer-directed approach in Meal Services | Workshops | Future funding models may need to include a component for staff training and dietitian involvement. |
| Most providers reported insufficient access to dietetic support, either for assistance with menu development or assessment of clients at risk of malnutrition. | Workshops | Ways of improving access to dietitians nationally could be considered.  
Ways of funding such support may need to be taken into account in funding models. |
| Occupational therapists and speech pathologists play a key role in making sure clients get what they need from Meal Services. | MRSG comment | Service models for the future need to incorporate a range of integrated allied health support for clients. |
| Volunteers are critical to the viability of many Meal Services: 69% of meal producers use volunteers in meal production, and 83% of meal deliverers use them in meal delivery. | Workshops | Future service models may need to take into account increased need for volunteer training and funding to support volunteers and volunteer coordination.  
Ways of funding volunteer coordination may need to be considered. |

### Research and information

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaps in knowledge include:</td>
<td>Literature</td>
<td>Partnerships with universities and providers could be</td>
</tr>
</tbody>
</table>
### Summary of evidence

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>review</td>
<td>sought to develop new collaborations to address knowledge gaps. Research partnerships could be funded through programs auspiced through the NHMRC Partnership or ARC Linkages schemes.</td>
</tr>
</tbody>
</table>

### Published research on funding and costing of Meal Services is lacking.

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td>Research is needed that can be made available in the public domain.</td>
</tr>
</tbody>
</table>

### Food Insufficiency is an issue in some groups of older people.

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td>Evaluations of Meal Services could encompass measures of client food insufficiency.</td>
</tr>
</tbody>
</table>

### Funding models, costing and resources

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops Mapping report</td>
<td>Some kind of consistency would provide equity. A consistent formula that acknowledges different local conditions could better recognise the funding issues faced by current providers and compensate them for adverse conditions and would improve equity and the extent to which equity is demonstrable. Ways of designing funding structures are required that take into account the wide range of circumstances that apply in Meal Services. Two different funding structures could be designed, one for production and one for delivery. It is important that funding models also recognise non-output components such as staff education and training.</td>
</tr>
<tr>
<td>Workshops</td>
<td>Better national consistency in the use of definitions could improve equity of access to Meal Services.</td>
</tr>
<tr>
<td>Workshops</td>
<td>Outcome-based funding could offer more flexibility to providers and be supplemented with additional subsidies for specific groups (e.g. CALD background, financial disadvantage, need for special or therapeutic diets). However, maintaining a unit price could also be useful to promote consistency and equity.</td>
</tr>
<tr>
<td>Workshops Mapping report</td>
<td>Services that are not currently maximising client nutrition by using national guidelines might be encouraged to do so.</td>
</tr>
<tr>
<td>Literature review</td>
<td>It is important that any guidelines for provision of Meal Services be age-appropriate and include nutrient-dense alternatives and those high in protein and energy. Providers’ attempts to improve viability through innovation could be recognised and supported through conferences, awards or direct funding.</td>
</tr>
</tbody>
</table>

### Summary of service scale between metro and rural areas; options for supply of food and food production; and use of volunteers.

<table>
<thead>
<tr>
<th>Source</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops Mapping report</td>
<td>Currently, a huge range of funding models (and levels of funding) currently operate across Australia. Unit prices and client fees vary a great deal between and within jurisdictions. Variation in unit costs are also related to: differences in service scale between metro and rural areas; options for supply of food and food production; and use of volunteers. Some providers are making use of small-scale local resources to improve their viability. Many providers believe that guidelines are important and that having national guidelines would be helpful. Some states have developed their own guidelines, but these are not consistent. Providers would not welcome having imposed standards. Meals for older people could take into account their special dietary needs and be more nutrient dense than meals for younger people. Some providers are making use of small-scale local resources to improve their viability.</td>
</tr>
</tbody>
</table>

### Workshops

| Workshops Mapping report | Many providers believe that guidelines are important and that having national guidelines would be helpful. Some states have developed their own guidelines, but these are not consistent. Providers would not welcome having imposed standards. Meals for older people could take into account their special dietary needs and be more nutrient dense than meals for younger people. Some providers are making use of small-scale local resources to improve their viability. |

### Literature review

| Literature review | It is important that any guidelines for provision of Meal Services be age-appropriate and include nutrient-dense alternatives and those high in protein and energy. Providers’ attempts to improve viability through innovation could be recognised and supported through conferences, awards or direct funding. |
References


Luscombe-Marsh, N., Chapman, I., & Visvanathan, R. (2013). Hospital admissions in poorly nourished, compared with well-nourished, older South Australians receiving ‘Meals on
Wheels’: Findings from a pilot study. *Australasian Journal on Ageing*, n/a-n/a. doi: 10.1111/ajag.12009


Meals on Wheels Tasmania Inc. and Red Cross Delivered Meal Services Tas. (1996). *Standards and code of practice for delivered meals, Tasmania*.


Quinn, Johnson, Poon, Martin, & Nickolson-Richardson, 1997)


Thomas, K. S., & Mor, V. (2013). Providing more home-delivered meals is one way to keep older adults with low care needs out of nursing homes. *Health Affairs, 32*, 1796-1802.


