

Review of food standards in Victorian public hospitals and residential aged care services

Summary report



Department
of Health

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Acknowledgements

The Department of Health acknowledges the contribution of the Project Reference Group that provided expert advice and guidance to inform the review. The group included key representatives from metropolitan, rural and regional health services (hospitals and residential aged care services) and central production kitchens, with experience in clinical and food service dietetics, public health nutrition, food service management and/or procurement, and a consumer representative.

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Background to this review

In November 2018, the Victorian Government committed to ensuring that food available in our public hospitals and public aged care facilities is healthy, of high quality, and where possible, locally sourced, supporting Victorian farmers and producers. In addition, “that all Victorian public hospitals and public residential aged care facilities will be required to follow new health and quality food standards, following a comprehensive audit”.

This review of food in public hospitals and public sector residential aged care services (PSRACS) across Victoria was the first step in this process. The Department of Health recognises that food currently served to patients in our public hospitals and aged care facilities is safe and meets current quality standards. This review was the first of its kind in Victoria and will help to understand current practice, consumer views, and identify opportunities for improvement and support.

The importance of food service in hospitals and aged care services

The health and quality standards of food in public hospitals and PSRACS are key components of quality care. These standards promote recovery, health and wellbeing, as well as preventing poor nutrition and malnutrition.

Nutritious food is essential for optimal patient and resident treatment and recovery from illness, as well as enhancing wellbeing and positive social experiences. It also plays a key role in the prevention and management of a range of chronic diseases, such as type 2 diabetes, many cancers, obesity, poor oral health and some mental health disorders.

This initiative recognised that food is not only a vital component to improve nutrition and health, but it is also an expression of cultural identity that anchors people in times of stress and dislocation, providing a sense of wellbeing and emotional comfort. This is particularly important for aged care residents, who have an average length of stay of three years in a facility.

Malnutrition can be a serious issue for patients and residents. *Targeting zero: report of the review of hospital safety and quality assurance in Victoria* (Department of Health and Human Services 2016a) found that malnutrition is a common preventable hospital-acquired complication.

Objectives of the review

The review aimed:

1. to determine the current situation regarding foods and drinks (either served to the bedside or available for purchase) in public hospitals and PSRACS with respect to –
 - (a) nutritional value, and
 - (b) quality (with reference specifically to variety, cultural diversity, taste)
2. to determine the extent to which procurement arrangements for food served in public hospitals and aged care facilities support Victorian farmers and producers
3. to provide recommendations on mandating standards (new or revised existing standards/guidelines) to ensure food available in public hospitals and aged care facilities is healthy, of high quality, and where possible sourced from Victorian farmers and producers.

Scope of the review

The review included foods and drinks provided to inpatients and aged care residents:

- at the bedside – via the general inpatient/resident menu (standard or full ward diet), and
- through on-site vending machines and retail food outlets that are managed in-house by health services.

The review assessed:

- nutritional value, with reference to the *Australian dietary guidelines* (National Health and Medical Research Council 2013), *Nutrition standards for menu items in Victorian hospitals and residential aged care facilities* (Department of Human Services 2009) (the *Victorian Nutrition standards*), and *Healthy choices: policy guidelines for hospitals and health services* (Department of Health and Human Services 2016b) (the *Healthy choices guidelines*)
- quality – including taste, variety and cultural diversity
- community (including patients/residents) opinions and experience of the food
- whether the food is locally produced in Victoria.

Exclusions

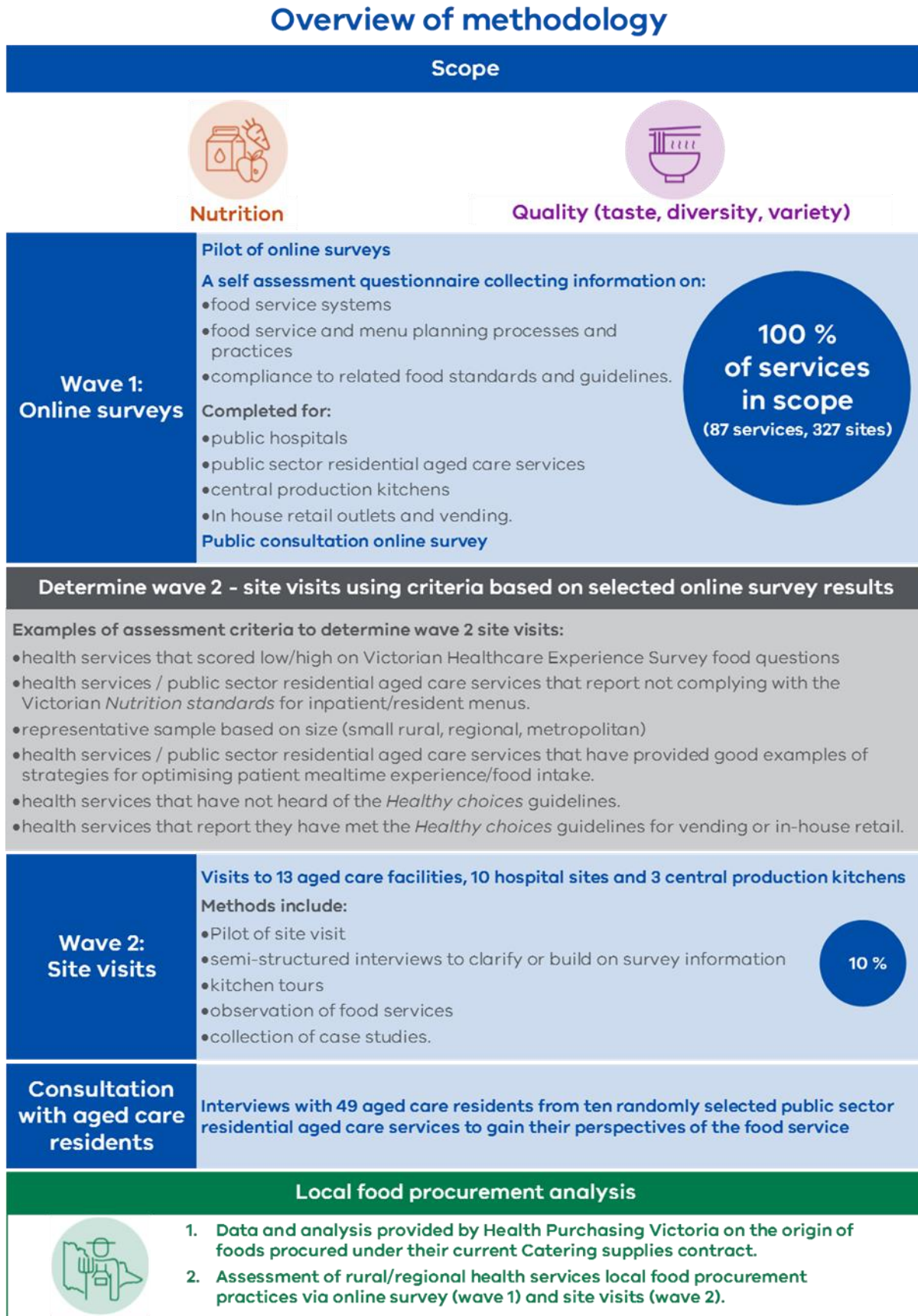
The following areas were not within the scope of the review:

- private hospitals and private residential aged care facilities
- special medically required or therapeutic diets (except soft and minced/moist texture-modified diets). Patients requiring therapeutic diets are managed clinically by dietitians within health services, in consultation with the food service
- health services that do not have patients/residents overnight and do not provide a full menu/food service, or have residents preparing their own meals
- private retail food outlets (cafes, kiosks, franchises, convenience outlets) located on health service premises that operate under a lease or sublease arrangement
- assessment of compliance against food safety regulations or standards
- food procurement practices of retail food outlets within health services.

Method

Figure 1 on the following page presents an overview of the different methodological components of the review and how they relate. Note, an analysis of the Victorian Healthcare Experience Survey food-related questions was also part of the methodology and subsequent findings of this review but has not been depicted in this figure.

Figure 1: Overview of review methodology components



Consultation
with aged care
residents

Interviews with 49 aged care residents from ten randomly selected public sector residential aged care services to gain their perspectives of the food service

Local food procurement analysis



1. **Data and analysis provided by Health Purchasing Victoria on the origin of foods procured under their current Catering supplies contract.**
2. **Assessment of rural/regional health services local food procurement practices via online survey (wave 1) and site visits (wave 2).**

Response rate

Hospital inpatient and aged care resident online survey

The final sample size was 327 sites (hospitals and PSRACS) across 86 health services. The response rate for the main inpatient and resident online survey was 93 per cent (n = 80) of health services, and 74 per cent of sites (n = 241).

Retail/vending online survey

Close to two-thirds (62 per cent, n = 54) of health services undertook the retail outlet and vending machines survey.

Overall findings

Overall, the review found that Victoria's public hospitals and PSRACS provide nutritious food for their inpatients and residents.

Hospitals and PSRACS engaged enthusiastically with the review, and they are actively looking for ways to improve taste, variety, diversity and the proportion of locally sourced food.

This can be seen in the high response rate to the online survey, and the willingness with which hospitals and PSRACS made staff time available to contribute to the review and the site visits.

While the review found there was good compliance with the *Nutrition standards for menu items in Victorian hospitals and residential aged care facilities* (the Victorian *Nutrition standards*), it also identified variability across the state.

This included variability in food service models and processes, the quality of foods provided, and patients' and residents' experience of meals.

The review also found there is strong support for the 2009 Victorian *Nutrition standards* to be revised to include an increased focus on food quality, cultural diversity and the needs of aged care residents.

Photos: hospital food service



Left: Staff plating meals using cook–chill and hot-plating process in hospital kitchen



Right: Couscous salad - an example of a modern, culturally diverse dish.

Key findings based on theme



Nutritional value

Most hospitals and PSRACS comply with the Victorian *Nutrition standards* for full ward diets.

In all, 86 per cent of sites reported using the standards, and 71 – 80 per cent reported complying with the standards. The main reasons reported for not complying with the Victorian *Nutrition standards* were: limitations with these standards and use of alternative standards, for example those from other states.

All three central production kitchens (CPKs) servicing the majority of metropolitan health services comply with the Victorian *Nutrition standards* for full ward diets.

However, rural and regional health services reported lower compliance. A key reason for this is that there is less access to dietetic capacity for food service planning.



Indeed, the review found that sites with a dedicated food service dietitian had a better response to menu planning.


In addition, the sector wishes to see the 2009 Victorian *Nutrition standards* revised.

The most common snacks reported to be provided were sweet/savoury dry biscuits, fruit, yoghurt, sandwiches/toast, and cheese and crackers. However, healthier options such as fruit and yoghurt were generally less accessible compared to biscuits.

The review also identified that there were no nutrition standards for snacks, and these will be included in the new Victorian Nutrition standards.

Use of high saturated fat, high sodium processed meats (for example, sausages and bacon) varied, with half of sites reporting offering them up to three times per

	<p>week, and 13 per cent offering them four to seven times per week on the full ward menu. Some services used them as a major part of a main meal, whereas others used a small amount in mixed recipes. The <i>Australian dietary guidelines</i> recommend limiting processed meats for health.</p> <p>Sites use a number of strategies to maximise nutritional intake of patients/residents, including readily available snacks; mealtime support and assistance; appropriate eating utensils and accessible packaging. One area for improvement is to present texture-modified meals in a more appealing way. Only 61 per cent of all sites did this.</p> <p>Retail and vending</p> <p>While many health services are aware of, and seek to implement, the <i>Healthy choices guidelines</i> in their in-house retail outlets and vending machines, only a small number reported they have met them. A key barrier for meeting the <i>Healthy choices guidelines</i> reported from site visits is the voluntary nature of the policy.</p> <p>The few health services that have implemented healthy food/drink changes report that retail profits have not changed – and have even improved.</p>
 <p>Quality (taste, variety, diversity)</p>	<p>The review found some great examples of innovation in providing good-quality food. These include a cook–freeze method to provide appealing and varied meals, as well as online menu ordering systems that give patients choice and flexibility.</p> <p>However, the appearance, texture and taste of cooked vegetables can be an issue for some health services. This is due to limitations in production methods, mainly excessive reheating.</p> <p>While most health services offer adequate choices for lunch and dinner, there were fewer choices for texture-modified diets.</p> <p>Most sites offer vegetarian and vegan choices, with around half offering kosher and halal meals, and a third offering meals from a range of cuisines at both lunch and dinner.</p> <p>Site visits confirmed that while many services provide cuisines from different cultures, these are often limited (for example, Italian or Asian cuisines).</p> <p>The review found that PSRACS use a range of strategies to improve residents’ mealtime experience. Common examples were communal dining, nice table settings, finger food and appropriate utensils. Some other good practice examples that could be expanded to more PSRACS are: serving meals from the dining room, self-serving of food, involving residents in food preparation and growing vegetables and herbs for their own use.</p>
 <p>Consumer views and consultation</p>	<p>Consumers value high-quality food in health services. For the most part, patients’ and residents’ expectations are being met.</p> <p>Through the Victorian Healthcare Experience Survey, three-quarters of hospital inpatients rated their experience of the food as favourable. This was lower for metropolitan hospitals, where an average of 66 per cent of inpatients had a favourable response.</p> <p>For PSRACS, most public survey respondents (who were generally family members) reported that the food did not match their expectations. When speaking</p>

	<p>directly to residents (n = 49) as part of the review, around half were happy or reasonably satisfied and around half were not.</p> <p>Nearly three-quarters of PSRACS reported that they regularly consult residents about food, and more than half said they regularly consult with families.</p>
 <p>Local (Victorian) food</p>	<p>The review also investigated the use of locally sourced/produced food from Victoria. Most (89 per cent) of the rural and regional sites take advantage of the Health Purchasing Victoria (HPV)¹ policy exemption to purchase fresh produce from other suppliers, and a high proportion procure fresh fruit and vegetables, meat, poultry and bread from producers in their region, or in other parts of Victoria.</p> <p>A quarter of rural and regional health services have their own formal local food procurement policy.</p> <p>However, a significant proportion of canned, frozen and dried fruit and vegetables procured by all health services are sourced from overseas, and there is an opportunity to increase availability of locally produced products in these categories.</p> <p>Further information on Victorian-sourced foods will be collected through the future HealthShare Victoria Catering supplies contract, which will help inform the development of a local food procurement policy.</p>

Recommendations

The following section provides summary of the recommendations of the review of food standards in Victorian public hospitals and residential aged care services. These recommendations will be implemented in a phased approach, based on priority and available resources.

Policies and standards

Recommendation 1

Update the *Nutrition standards for menu items in Victorian hospitals and residential aged care facilities* (Department of Human Services 2009) (the *Victorian Nutrition standards*).

This will include:

- an increased focus on food quality (taste, appearance and variety), cultural diversity and healthiness
- more specific details with respect to aged care residents, including guidance on enhancing meal experience
- creating new nutrient criteria and guidance for mid meals and snacks
- nutrition standards for all texture-modified food categories and reference to the *International dysphagia diets standardisation initiative (IDDSI) framework*
- emphasising both undernutrition and chronic disease prevention as key nutrition priorities
- consideration of the needs of a diverse range of patients and residents including those living with a disability or mental health condition.

¹ Was Health Purchasing Victoria (HPV) at the time the review was conducted, now HealthShare Victoria.

Supporting rationale

- Nutritious food is essential for optimal patient treatment and recovery from illness, as well as enhancing wellbeing and positive social experiences. It also plays a key role in the prevention of a range of chronic diseases, such as type 2 diabetes, many cancers, obesity, poor oral health and some mental health disorders.
- Optimal nutrition contributes to improved clinical outcomes for patients/residents and reduced health service costs. Patients with poor nutrition, including malnutrition, are at greater risk of pressure injuries, and their pressure injuries are more severe (Banks et al., 2010; Fry et al., 2010). They are also at greater risk of healthcare-associated infections and mortality in hospital, and for up to three years following discharge (Correia et al., 2014; Tappenden et al., 2013; Lim et al., 2012; Agarwal et al., 2013; Charlton et al., 2013). Malnutrition substantially increases length of hospital stay and unplanned readmissions (Lim et al., 2012; Agarwal et al., 2013; Charlton et al., 2012).
- In addition, nutritious food that is appealing, tasty and meets the individual preferences contributes to improved quality of life for aged care residents and long-term patients.
- Poor oral health (insufficient teeth or chewing or toothache) can lead to difficulty in eating a nutritious diet, particularly for aged care residents (Department of Health and Human Services 2011).
- Nutrition and quality standards are important to minimise harm and prevent complications, such as malnutrition and dehydration (ACSQHC 2017, Department of Health and Human Services 2016a).
- Survey findings showed that while a high proportion of health services (86 per cent, n = 205 sites) use the existing 2009 Victorian *Nutrition standards*, a high number (n = 32 sites) also use other states' or sectors' nutrition guidelines for their menus. Feedback from the sector during site visits indicates support for updating these existing Victorian *Nutrition standards*.
- Stakeholder submissions all supported a revision of the existing Victorian *Nutrition standards*.
- Review findings indicated that the provision of nutritious snacks could be improved. For example, dry sweet and savoury biscuits were readily available on mid-meal tea trolleys, however often items like yoghurt and fresh fruit were not.
- Review findings – including both sector and direct community/patient/resident consultation – indicate that the quality (appearance, taste, temperature) as well as the types of meals provided by health services could be improved. This includes the appearance, taste and texture of vegetables. Fresh fruit may not be of high quality or seasonal/varied or presented in appealing ways, for example cut up.
- One-half of all sites provide high-fat/high-salt processed meats such as sausages and bacon one to three times per week, and 13 per cent offer them four to seven times per week (one-third reported never providing them). Aligning the standards with the *Australian dietary guidelines* would result in a reduction of high-fat, high-sodium processed meats such as salami, sausages and bacon provided on menus.

Recommendation 2

Develop new nutrition and quality standards for menu items for paediatric hospitals for Victoria.

Supporting rationale

- There are currently no Victorian nutrition standards for menus in paediatric hospitals.
- The two paediatric hospitals report using the NSW *Nutrition standards for paediatric inpatients in NSW hospitals* (which make reference to the Victorian *Nutrition standards*.)

Recommendation 3

Implement the revised, mandated Victorian *Nutrition standards* by:

- providing state-wide oversight and leadership for the revised standards through the Department of Health
- integrating the revised standards into Department of Health reporting and accountability processes for health services as appropriate
- referencing the revised standards within the Department of Health *Health service policy and funding guidelines* and the relevant national quality and safety standards
- including the revised standards in relevant CPK and HealthShare Victoria policies and contracts.

Supporting rationale

- The Victorian Government has made an election commitment to mandate new nutrition and food quality standards.
- The *Victorian public health and wellbeing plan 2019 – 2023* (Department of Health and Human Services 2019b) includes a strategic action to accelerate the implementation of healthy food (and drink) supply policies in all key public settings (including health services).
- While the *National Safety and Quality Health Service (NSQHS) standards* and *Aged care quality standards* make reference to nutrition/food, the detail, as well as specific reporting and monitoring, of these standards is minimal.
- Survey findings show that while 86 per cent of sites use the Victorian *Nutrition standards*, a lower proportion of sites reported full compliance with the standards (as low as 65–69 per cent for rural/regional sites for some parts of the standards).
- Sector feedback from site visits supports stronger oversight, and monitoring of the Victorian *Nutrition standards*. Mandating the Victorian *Nutrition standards* would allow dietitians to have greater accountability over the nutritional value and quality of menus.
- Feedback from site visits noted that standardisation of the Victorian *Nutrition standards* across the Victorian health sector would allow greater efficiencies for food service staff and improve experience for patients/residents.
- Sector feedback also noted that food services should be managed under the clinical care area of health services as opposed to business or operational services.

Recommendation 4

Ensure an increased focus on cultural diversity is incorporated into all recommendations of the review.

Supporting rationale

- Victoria has a diverse multicultural population, and foods offered in Victorian public hospitals and PSRACS should reflect this diversity.
- People from culturally and linguistically diverse backgrounds are often missed in consumer consultation strategies.
- On average, 73 per cent of hospitals had a favourable response to the VHES question *Was the hospital food suitable for your dietary needs (for example, medical, cultural, or religious needs or personal preference)?* While this is good, there is still room for improvement.

- Further, consultation with residents in PSRACS conducted as part of this review indicated that some residents may not be having their cultural needs met when it comes to food.
- Online survey results indicated that, across all sites:
 - three-quarters (75 per cent) offer two vegetarian meal choices for both lunch and dinner daily
 - two-thirds (67 per cent) offer two vegan meal choices for both lunch and dinner daily
 - just under half offer two kosher meal (48 per cent) and two halal meal choices (46 per cent) for both lunch and dinner daily
 - one-third (33 per cent) offer meals from a range of cuisines for lunch and dinner daily
 - some sites (mainly rural and regional and PSRACS) did not provide any of these meal types on the daily menu. However, this may also accurately reflect the different demographic profiles of patients across different geographical sites.
- This recommendation aligns with the Safer Care Victoria *Partnering in healthcare: a framework for better care and outcomes* (Horvat, L 2019). This framework includes strategies for engaging with culturally diverse consumers in their healthcare.

Recommendation 5:

Mandate the *Healthy choices: policy guidelines for hospitals and health services* (Department of Health and Human Services, 2016b) (the *Healthy choices guidelines*) for all vending and in-house managed retail food outlets in health services.

In addition, extend this to include a new 'no sugary drinks' policy.

Continue to provide implementation support to health services via the Healthy Eating Advisory Service (HEAS).

Mandate via:

- increasing their focus within the Department of Health *Health service policy and funding guidelines*
- integrating the *Healthy choices guidelines* into the HealthShare Victoria Catering supplies contract (for in-house retail and catering procurement).

Monitor mandatory implementation of the Victorian Government *Healthy choices guidelines*.

Supporting rationale

- The *Victorian Cancer Plan 2020 – 2024* (Department of Health and Human Services, 2020c) has a target for at least 80 per cent of hospitals and health services' retail outlets and vending machines to meet the recommended Victorian Government food and nutrition standards.
- The *Victorian public health and wellbeing plan 2019 – 2023* (Department of Health and Human Services, 2019b) includes a strategic action to accelerate the implementation of healthy food (and drink) supply policies in all key public settings (including health services).
- Current survey findings as well as past evaluations of the uptake of *Healthy choices guidelines* indicate that voluntary implementation and meeting of the *Healthy choices guidelines* over the past 10 years since 2010 is low and slow. A review conducted in 2015 reported that despite small improvements in the healthiness of foods and drinks sold, that on average, over half (50 – 60 per cent) of all foods and drinks available in retail outlets (commercial and in-house) and vending across Victorian health services were unhealthy ('Red' category).
- Information collected via the HEAS, shows that meeting the guidelines is achievable and feasible, with some great examples of leadership from individual health services meeting the

guidelines for their retail outlets and vending, and many demonstrating positive economic impacts on business.

- 29 of the 54 health services completing the survey had in-house retail outlets. Of these 29 services, 14 services reported that all of their in-house outlets met the *Healthy choices guidelines*. 39 of the 54 health services completing the survey had vending machines. Of these 39 services, 19 services reported that all their machines met the *Healthy choices guidelines*. While this demonstrates that implementation is feasible, there is room to improve the healthiness of foods and drinks sold in public health services.
- Further, information gathered by HEAS demonstrates there are retail outlets managed via external contracts able to successfully implement the *Healthy choices guidelines*, with no impact on profits.
- The current *Healthy choices guidelines* allow for zero to up to 20 per cent availability of sugar sweetened drinks. Lead adopters have discontinued selling sugary drinks (for example, Bendigo Hospital and the Western District Health Service). Other states, such as New South Wales, Queensland and Western Australia have extended their guidelines to require health services to be free from sugary drinks.
- Feedback from both the current review, as well as via the HEAS and past baseline evaluations, indicates the sector supports mandatory *Healthy choices guidelines* as an enabler to successful implementation – as this helps facilitate organisational support, sustainable change and most importantly an even playing field for all retail businesses.
- This recommendation is consistent with the recent COAG Health Council's *Call to action: health sector to lead in healthier food and drink choices for visitors and staff* and accompanying recommended nutritional standards.
- New South Wales has seen success with their health services commitment to monitor and report on compliance with their healthy food policy for retail/vending. Sugar-sweetened drinks were removed from sale in 89% of food and drink outlets in NSW health facilities within the first six months of launching their policy (in June 2017) and 96% had removed sugary drinks within 18 months.
- Victoria (along with Tasmania) are the only states with voluntary guidelines. Other jurisdictions, including Queensland, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory also have their healthy food supply guidelines for health services mandated.

Recommendation 6

Develop, implement and monitor a Local (Victorian) Food Procurement Policy and Guidelines for Health Services.

This policy will build on current exemptions for rural and regional health services to procure 'fresh produce' locally. It will consider feasibility (for example, what can be grown and produced in Victoria due to seasonality).

The guidelines will encourage health services to procure food from their local regions and develop their own organisational food policy.

Implementation of the policy and guidelines would be via:

- including local (Victorian) food procurement considerations into the future HealthShare Victoria Catering supplies contract
- including them in the Department of Health *Health service policy and funding guidelines*, and/or other appropriate policy implementation mechanisms.

Monitoring of the policy and guidelines could be via:

- regular evaluation of health service food procurement spend on food produce/products grown/produced/manufactured in Victoria through the HealthShare Victoria Catering supplies contract
- reporting requirements by health services that include local food procurement considerations.

Supporting rationale

- Build on current policy, including exemptions for rural and regional health services to procure 'fresh produce' locally and *Victoria's social procurement framework* (Victorian Government 2018).
- Current Victorian policy/strategy supports procurement from Australia and New Zealand (NZ).
- A significant proportion of certain food items (for example, canned, frozen and dried fruit and vegetables) are grown/produced/manufactured in NZ and other countries.
- Currently some health services opt for imported goods due to cost considerations.
- 80 per cent of rural/regional health services reported purchasing fruit and vegetables outside of the HPV contract, and around only 40 per cent of these report purchasing 'most'/ 'all' from their region.
- Currently only one-quarter of Victorian rural and regional health services have a local food policy.
- Guidelines will strengthen the mandate and capability of services to procure foods from Victoria and their region.
- This would align health service food procurement with current policy.
- Baseline data on current spend on Victorian produce/products will inform setting of new targets.
- As this is a new policy and there is limited information on local food procurement at this initial stage of development, monitoring its implementation will be important to enable review and adjustment of the policy.

Built environment and food service systems

Recommendation 7

Ensure relevant review recommendations are considered in service and capital planning for health services including PSRACS, underpinned by the following principles:

- maximise value from existing kitchen infrastructure (in consultation with both CPKs and services).
- value and utilise the existing food service workforce
- deliver on the new revised Victorian nutrition and food quality standards
- support health services to have some flexibility in their food service systems to improve patient experience and accommodate local needs.

Supporting rationale

- Consumer feedback from the review indicates that the quality of foods provided in hospitals could be improved. For example, analysis of VHES data available across the 12-month period (October 2018 to September 2019) for 64 health services who participated in the review reported an average of 75 per cent favourable (*good or very good*) response across hospitals to the question '*How would you rate the hospital food?*'. This was lower for metropolitan

hospitals, with an average of average of 66 per cent favourable response. Another public consultation survey conducted for the review showed that 90 per cent of respondents (n = 240) reported that their experience of food served in PSRACS did not match theirs or their family members expectations.

- Feedback from site visit interviews indicated that it could be beneficial for health services to have flexibility to use alternate food service models that may enhance their quality and efficiency and allow more variety and flexibility in menu planning. Many services acknowledged that while there could be initial infrastructure costs involved with this change, that there was the potential for improvements in efficiencies. Further work is needed to ascertain the cost–benefit of changing to different food service models.
- Some sites commented that the job satisfaction of food service staff may be increased when using the cook–fresh method and the online patient menu ordering systems used with the cook-freeze food service.
- Health services across Victoria already use a range of different food service systems and processes depending on their facilities and patient types.
- Review findings (mainly site visits) reported positive responses to cook–freeze meals from both a quality (taste and appearance) perspective, as well as allowing greater menu choice and cultural diversity.
- Note, that only a small number of sites have implemented cook–freeze in Victoria at this point. However, NSW Health has introduced cook–freeze broadly across its health services.
- Incorporating review findings into new redevelopments/builds and refurbishments provides a good opportunity to extend and build on some innovative work currently occurring in transforming food service systems and aged care dining facilities.
- While the *Metropolitan Melbourne food services strategy* was an effective response to the challenges of food provision at the time it was developed, it has not been fully implemented. The strategy aimed to centralise processes for standardisation and efficiencies benefits, however, there exists variation in the degree that metropolitan health services use the CPKs.
- Ordering closer to mealtime assists with meeting patient needs and preferences at that point in time. It also reduces the chance of patients missing out on meals and increases the chance the meal will be eaten, common due to medical procedures.
- Review findings (mainly site visits) reported positive responses to some sites who have implemented online/electronic patient menu ordering systems from both a patient intake and satisfaction perspective and production efficiency, waste reduction perspective.
- An important consideration is the compatibility of online patient menu ordering systems with different food service models.

Recommendation 8

Provide support (for example, project grants) to PSRACS to enhance mealtime environments, for example, installing small kitchens with bain-maries in dining rooms for serving bistro-style meals, vegetable gardens, inviting family and visitors to have a meal, participating in cooking or baking where possible, moulding of texture-modified meals, finger foods, nice crockery and providing metal (or tough plastic) cutlery (relevant for hospital inpatients also). Projects should be done in consultation with residents.

Supporting rationale

- Review findings (site visits) found that two to three PSRACS sites had or were in the process of implementing meal experience dining project grants, with positive feedback.

- There are some leading examples that other PSRACS sites can be inspired by and learn from in enhancing their resident's food and meal experience and thus health and wellbeing outcomes.
- There is opportunity to build on the public and sector interest and motivation in enhancing residents' meal and food experience that has been seen recently in response to the Royal Commission.
- Providing appropriate cutlery (metal or tough plastic) facilitates optimal patient food intake as well as reducing waste, contributing to environmental sustainability outcomes. 'Appropriate' cutlery also includes modified cutlery for residents with impairments such as post stroke hemiplegia. Providing 'finger food' options for residents who 'graze' or have lost the ability to manipulate crockery/cutlery also facilitates optimal food intake and enjoyment.

Photos: PSRACS food service



Left: Garden View Court Hostel serve meals directly to residents from a small kitchen in the communal dining area. This exposes the residents to the aromas and sites of food.



Right: Nicely presented texture-modified meal – using moulds.

Workforce

Recommendation 9

That the level of dietetic input to food service planning is increased across health services, specifically considering the following:

- an increase in dietetic workforce capacity for rural and regional services, specifically allocated to food service planning roles. This increased capacity could be in the form of direct workforce allocation or via shared workforce models
- increased access to dietitians for PSRACS food services. An alternative would be to provide grants for regular menu and meal environment reviews and short-term dietitian work allocations/secondments
- recommend that dietetic teams in larger health services allocate dedicated dietitian hours, based in or aligned with the food services department. Also, that dietetics has governance and reporting responsibilities/roles within food services.

Supporting rationale

- A key reason reported in review findings for sites not fully complying with the Victorian *Nutrition standards* and not conducting nutritional menu analysis was limited dietetic staff time allocated to food service. This was especially the case for rural and regional services and PSRACS.

Recommendation 10

Support enhanced training and skills of the workforce inclusive of food service, PSRACS and hospital staff by considering the following potential strategies:

- Options for developing state-wide training programs on nutrition and hydration (including oral health) and patient/resident engagement specific to food service, patient service assistants and other relevant aged care service staff for health services to include as part of their organisational (and contracted service) orientation training requirements (web-based or alternatives).
- *Specific to food service assistants:*
 - that an updated Food Service Assistants training program (extended to be specific to Health Services², including nutrition units) be offered by a Victorian tertiary education provider.
- *Specific to public aged care services:*
 - promoting and supporting existing and new opportunities for in-house training for all care staff and support workers in public aged care, to keep skills current in malnutrition screening and dysphagia, referral pathways and documentation processes.
 - improving mealtime experience by supporting Department of Health aged care staff to participate in a training program around food and eating in residential homes (links to recommendation 8)
- Establishing a mechanism (for example peer-to peer support program, community of practice or formal network) for food service staff, aged care staff and dietitians to foster and share best practice on topics such as appealing texture-modified meals and innovative food service and menu systems and processes. This could also be a mechanism for sharing review information.
- Showcasing examples of innovative and high-quality food service and nutrition practices of hospitals and PSRACS through creation of new categories for the annual Victorian Public Healthcare Awards.

Supporting rationale

- Review findings reported that while 86 per cent of all sites surveyed offered nutrition training and 78 per cent provided patient/resident engagement training, nutrition training was mostly ad hoc and informal. Patient engagement training was more commonly formalised into organisational training programs by some health services.
- Further, only around half of metropolitan PSRACS reported providing food service staff training in nutrition and resident engagement.

² By including the existing HLT23215 Certificate II in Health Support Services

- The review revealed some great examples of best practice (refer to photos and case studies throughout the report) that would be of benefit to share. There was also a general desire and motivation by health services to focus on this important priority of quality food provision for their clients and particularly aged care residents.
- Some health services said they would gain from sharing the information gathered in the review to learn from other similar services.
- In Victoria, Food Service Assistants (FSAs) only require a food safety certificate to be employed. Patient Service Assistants (PSAs) need to have a Certificate 111 in Health Services. This is different to other states, where for example, in Queensland, Food Service Assistant training includes two units relevant to nutrition and menu planning (HLTAHA018 Assist with planning and evaluating meals and menus to meet recommended dietary guidelines and HLTAHA019 Assist with the monitoring and modification of meals and menus according to individualised plans).

Patient and resident feedback

Recommendation 11

Collect information and reporting on patients' and residents' experience of food via:

- the state-wide Victorian Healthcare Experience Survey
- Health Services and PSRACS reporting on the *National Aged Care Quality Standards*.
- a requirement for PSRACS to conduct a resident food satisfaction survey at least annually.

Supporting rationale

- Results from the public consultation and the targeted consultation with PSRACS residents undertaken as part of this review indicate a need to improve food provision in health services and PSRACS to meet expectations. Hence, there is an ongoing need to seek consumer feedback as part of quality improvement.
- An objective of this review and revised standards was for foods provided in health services to improve in taste and better cater for diverse cultural and modern-day diets. These elements require a degree of consumer feedback to assess/measure.
- The revised *National Aged Care Quality Standards* have an enhanced focus on demonstrating consumer-centred decision-making and choice in all aspects of residents' care.

Other

Recommendation 12

- Further work to reduce food waste and packaging in public health services, via actions within the: *Sustainability in Healthcare - Environmental sustainability strategy 2018–19 to 2022–23* and the *Department of health and human services pilot climate change adaptation action plan 2019–2021*.

Supporting rationale

- Food waste was out of scope of this review, however, there was one question included in the survey regarding this topic – around plate waste audits. The information collected, however was limited and warrants further investigation.
- Review survey findings showed that only 11 per cent of both hospitals (n = 13) and PSRACS (n = 13) undertake plate waste audits monthly or more.

- The issue of waste was raised by the Project Reference Group and a couple of health services during site visit interviews.
- From the site visit interviews, two metropolitan sites reported that their food waste had reduced as a result of new menu ordering systems (both sites have electronic menu systems, with closer to mealtime ordering). One regional site reported that they don't have much waste as they are able to tailor and serve smaller meals to suit their patients.
- Monash University and Eastern Health are currently conducting a series of research projects on environmental sustainability across the food supply chain in hospital foodservice (Carino S et al. 2020; Collins J et al. 2020). Their preliminary research has found that:
 - healthcare organisations generate more food waste than any other foodservice setting, with on average 322kg of food waste generated across three hospitals every day. Extrapolated across all Victorian hospitals, this is an extremely large amount of food and money being wasted.
 - at just one metropolitan hospital, their research, funded by a Department of Health and Human Services sustainability innovation grant, found that over 2000 unopened packets of non-perishable food items were thrown in the bin each day. Further work is underway to assess the microbiological safety and feasibility of re-using these packets.
- This recommendation aligns with the *Sustainability in Healthcare - Environmental sustainability strategy 2018–19 to 2022–23* (Victorian Health and Human Services Building Authority 2018) which sets out the department's commitment to further improve the environmental sustainability of the health system and to adapt the health system, so it is resilient in the face of climate change. This strategy includes actions around enhancing waste reduction, including relating to food.
- This recommendation is supported by the actions within the *Department of health and human services pilot climate change adaptation action plan 2019 - 2021* (Domain 1) (Department of Health and Human Services 2019c) and could be linked to individual health service climate change action plans.

Conclusion

Food and food service in public hospitals and aged care facilities are key components of quality care. Nutritious and high-quality food, served in a way that optimises patient/resident intake will improve patient recovery, clinical outcomes and health and wellbeing as well as prevent poor nutrition and malnutrition.

The Department of Health recognises that food currently served to patients in our public hospitals and aged care facilities is safe, of high quality and nutritious.

The findings and recommendations of this review will help to understand and identify improvements that can be made with regards to:

- nutrition and food quality standards
- food service systems and processes
- the built environment and food service systems
- patient and resident feedback and
- workforce capacity, to further enhance the nutrition and quality of foods provided to patients and residents.

In addition, new policy is recommended to further promote and encourage procurement of local food where possible, to support Victorian farmers and producers.

Case studies

Case study: Western District Health Service

Western District Health Service (WDHS) in Hamilton is leading the way in supporting healthy eating, following the removal of all sugary drinks in 2015.

The Green Bean Café serves 100 per cent 'green' category (healthy) foods that are innovative, tasty and nutritious. This all 'green' offering also includes vending machines located within WDHS.

The main changes include:

- all meals offered at the cafeteria are checked through the Healthy Eating Advisory Service FoodChecker tool, with currently a 170+ tried and tested 'green' recipe bank.
- no salt is added to meals – pepper and other spices are used to flavour foods
- adding more fresh vegetable-based salad options daily
- sweet snack items have been replaced with fresh fruit or no or low sugar alternatives

Led by the Chief Executive Officer, an enthusiastic team committed to change, and consultation with the wider community has ensured their success.

Photo: Nutritious, tasty 'green' rated dishes available at the Green Bean Café



Case study: Indigo Health – Glenview Nursing Home

Food services manager, Toni, provides great leadership in ensuring a high-quality food service and meal experience for the residents at Glenview Nursing Home. Actions they have implemented include:

- Where appropriate, residents are served by staff 'bistro-style' from bain-maries in the dining room or are encouraged to serve themselves from the centre of the table (for example, salad bowls).
- Texture-modified meals are presented attractively and as close to their original form, using hand-piped shapes.
- The dining room provides communal tables with tablecloths and nice table settings. Cloth napkins, china crockery and non-plastic cutlery are used.
- Residents help with meal preparation for Tuesday BBQs and are involved in setting tables as they desire.
- There are special food events to provide food variety and interest. For example, a Christmas in July lunch.
- Residents can do their own basic food preparation such as make toast, or make themselves or their visitors a cuppa in the kitchenette.

Photos: Left: the communal dining room, this includes a bistro-style servery at the front of the room. Right: outdoor eating area and sensory herb garden.



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Glossary

Terms and definitions

Below are some explanations of common terms used in this report. These definitions are provided in the context of the review and the Victorian health sector food services.

Central production kitchen/unit – A central production kitchen, sometimes referred to as a central production unit, is a main kitchen used to prepare meals and meal components that are then distributed in bulk to finishing and receiving kitchens in other service sites.

Cook–chill – A process where food is prepared, rapidly blast chilled and held under controlled chilled storage at 3 degrees Celsius, until retherming just prior to service. Cook–chill food can be chilled in bulk or cold-plated then chilled.

Cook–freeze – A process where food is prepared, rapidly blast frozen and held frozen at minus 18-20 degrees Celsius, until it is thawed and rethermed just prior to service. Cook–freeze food can be frozen in bulk or portion packed and then frozen.

Finishing kitchen – Finishing kitchens receive bulk food from the central production kitchen, tray meals on-site and reheat prior to delivery to the patient or resident. They perform other functions including dishwashing, production/procurement of thickened fluids, sandwiches, salads and some desserts.

Health service – Refers to a ‘primary’ or ‘overarching’ health service, that is often linked with more than one hospital or public residential aged care service. For example, Eastern Health is a health service, and the Box Hill Hospital and Moonda Lodge Hostel are individual sites/services that are part of Eastern Health. In this report, it is also used as the collective term for a hospital or aged care service.

Hot-plating – A process where hot meal components are assembled into individual meals, just prior to service; or hot meal components are assembled onto heat retaining equipment for immediate service to the patient or resident.

‘Local’ food – For the purposes of this review, ‘local’ food refers to food/fresh produce (fresh fruit and vegetables, meat and poultry products, bread) that is grown/produced/manufactured in Victoria. (For rural/regional health services, it could also mean grown/produced within their region)

Site – An individual health service site, usually linked with a ‘primary’ health service. For example, Eastern Health is a health service, and the Box Hill Hospital and Moonda Lodge Hostel are individual sites that are part of Eastern Health.

Receiving kitchen - Receiving kitchens generally receive plated meals from the finishing kitchen, health service kitchen or external provider to be reheated prior to delivery to the patient or resident.