Malnutrition in Victorian cancer services

Malnutrition governance toolkit

Department of Health & Human Services

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Introduction

This toolkit supports the principle that access to appropriate nutrition is a fundamental human right for all and the provision of safe and nutritious food and fluids within health services is an essential element of patient care. Hospitalised patients represent a diverse group with varied clinical and cultural needs, and many are either malnourished on admission or become so during their admission. Malnutrition is associated with adverse outcomes and increased healthcare costs and remains under recognised and under diagnosed. Providing timely and appropriate nutrition care helps with treatment and recovery, and can improve a patient's experience of their care and quality of life.

The Victorian Department of Health has identified that appropriately identifying and managing malnutrition as an important supportive care need for people with cancer and in 2012 funded a project to investigate practices relating to malnutrition in Victorian cancer services (VCS). Results from this project showed wide variation between participating sites in the proportion of malnourished patients receiving appropriate nutrition care. Patients in health services with strong nutrition governance systems and processes, including a hospital nutrition policy, a multidisciplinary nutrition committee and regular auditing, were more likely to have received individualised nutrition care from a dietitian.

Health services have a duty of care to ensure food and fluids they provide are appropriate for all patients in order to meet their needs during hospitalisation. Malnutrition should be a multidisciplinary concern – it takes a dedicated team approach to build strong malnutrition governance and high-quality nutrition services. Supporting the patient and, where appropriate, carers to contribute their views and opinions to this aspect of their care and treatment is paramount. Health services should have resources available to multidisciplinary clinicians to improve awareness, recognition and understanding of malnutrition.

The aim of this toolkit is to reduce variation in the way nutrition care is provided to malnourished patients with cancer by sharing effective strategies that can support malnutrition prevention and management. Although this toolkit is directed towards the care of cancer patients, many of the strategies can be applied to the wider hospital population. The toolkit does not, however, address the specific needs of paediatric patients. It is also beyond the scope of this toolkit to include management of food allergies and intolerances within the health service setting.

The *Malnutrition governance toolkit* is designed for a wide audience but will particularly assist nutrition and dietetic managers, dietitians and clinical governance/quality departments in health services to build effective malnutrition care systems and processes.

The final chapter in the toolkit provides guidance for dietetic managers and clinicians in service development and benchmarking of nutrition service delivery models between health services.

It is beyond the scope of this toolkit to detail hospital food service models in relation to managing and treating malnutrition. However, food service delivery models should be an important consideration when looking globally at malnutrition management within health services.

Alongside the development of this toolkit, work is also underway to develop a cancer malnutrition e-health education package for cancer care clinicians. For this reason the *Malnutrition governance toolkit* has only briefly explored staff education strategies.

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Chapter 1: Malnutrition governance

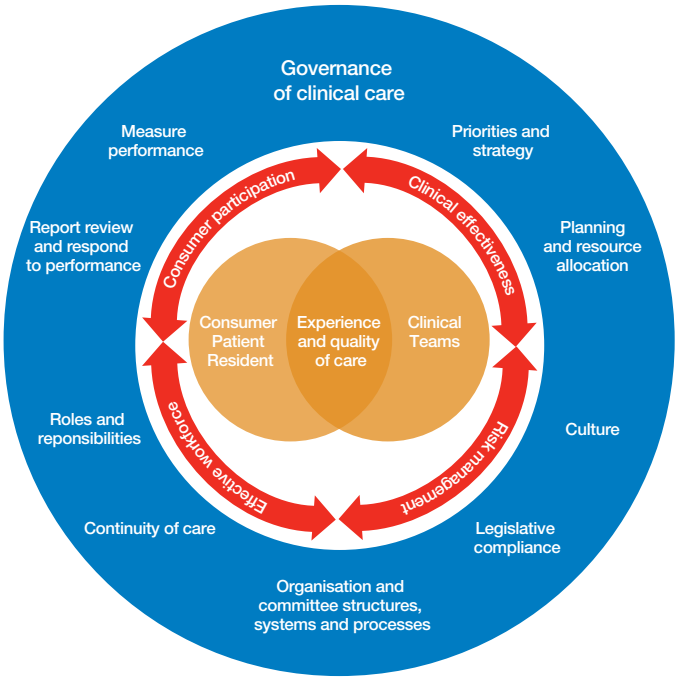
1. What is clinical governance?

The Australian Council on Healthcare Standards (ACHS) defines clinical governance as:

> *… the system by which the governing body, managers and clinicians share responsibility and are held accountable for patient care, minimising risks to consumers and for continuously improving the quality of clinical care.*[1]

The *Victorian clinical governance policy framework* outlines the components of clinical governance as represented in Figure 1. At the centre of this model is the interaction between consumers and clinicians as their ability to work in partnership determines the quality of care provided. Clinicians are responsible and accountable for the safety and quality of the care they provide and are supported in this by management and health service boards. This support involves fostering a positive culture, resourcing quality and safety strategies and empowering clinicians to improve clinical care delivery as well as engaging clinicians in risk management and improvement activities.

Figure 1: Components of the governance of clinical care framework



Source: Department of Human Services 2009[1]

2. What is malnutrition governance?

Malnutrition governance directs a focus and systems-approach to addressing the clinical risk of patient malnutrition. It helps prevent, identify and manage malnutrition by improving structures, systems and processes within health services to continuously monitor and improve the quality of nutrition care delivery.

3. Why is malnutrition governance important?

Increased hospital length of stay and readmission rates, higher morbidity and mortality and higher healthcare costs are strongly associated with patient malnutrition.[2–7] Timely and appropriate nutritional care can reduce the impact of malnutrition on patient outcomes and hospital costs, but unfortunately malnutrition continues to go unrecognised and untreated in many hospitalised patients.[2–4, 8]

Malnutrition is particularly common among patients undergoing treatment for cancer. A strong health service nutrition governance system is therefore essential to mitigate the clinical risk associated with malnutrition. Results from the *Investigating Practices Relating to Malnutrition in Victorian Cancer Services* project in 2012 determined an overall malnutrition prevalence rate of 31 per cent in cancer patients receiving active treatment.[9] This study also showed malnutrition in the oncology population was twice as likely for those patients who were inpatients with 57 per cent affected, compared with 25 per cent of ambulatory care patients.[9]

Results of the 2012 Malnutrition in Victorian Cancer Services project showed that health services with strong nutrition governance systems and practices (including a multidisciplinary nutrition committee, health service malnutrition policy and nutrition care audit processes) provided more effective nutrition and dietetic care for their malnourished patients.[9]

Creating a culture where stakeholders from all levels of a health service, from clinical and corporate executives to staff at the coalface, value nutrition as a key underpinning of patient care has been recognised as a key strategy in driving improvement and effectively addressing malnutrition.[10] Health service boards, although not delivering services directly or managing operational details, can establish the leadership, accountability and organisational culture necessary for staff to delivery safe and effective services.[11]

The inclusion of specific nutrition care criteria within health service accreditation standards has provided a catalyst for hospital-level improvements in systems and practices to demonstrate that the nutritional needs of patients are met.

- The National Safety and Quality Health Service Standards (NSQHS standards) developed by the Australian Commission on Safety and Quality in Health Care (ACSQHC) applies to public and private hospitals from 1 January 2013.[12] These standards place focus on governance processes, on partnering with consumers and on clinical risks including falls and pressure injuries.
- The Victorian Department of Health helped develop a draft nutrition standard in 2011–12[13] because there is no nutrition standard or specific nutrition care criterion included within the NSQHS standards. The draft nutrition standard was designed to be used in conjunction with the NSQHS standards and is therefore aligned in format and intent with the NSQHS framework. Finalisation and implementation of this work is currently on hold.
- For hospitals electing to undergo accreditation under the Australian Council on Healthcare Standards (ACHS) EQuIPNational program, the nutrition criterion from the previous EQuIP5 accreditation program has been retained within Standard 12 – Provision of care.[14] The nutrition criterion specifies the requirement for health services to adopt a nutrition management strategy including a multidisciplinary approach, nutrition policy, use of an approved nutrition screening tool, documentation of patient nutrition needs, audit and reporting and staff education.

The remainder of this chapter of the toolkit provides further detail for establishing and maintaining a malnutrition governance strategy within your health service. Where possible, this has been aligned to meet relevant standards within the NSQHS and ACHS EQuIPNational accreditation programs.

4. How do you engage staff and ensure malnutrition is a priority within your health service?

Given competing priorities within each health service, it is imperative to be able to successfully engage staff across all levels and clinical programs within your health service. A multidisciplinary approach for identifying and treating patient malnutrition can have a favourable impact upon outcomes[8] and is a key aspect of effective malnutrition governance. Examples of this include health services with an established multidisciplinary nutrition support team for managing patients with complex nutritional problems and health services with a multidisciplinary nutrition committee to develop policies for nutritional care.[15,16] Accountability for the quality of nutrition care is then shared among members of the multidisciplinary team consistent with their defined roles and responsibilities.[10,15]

The following provide some examples and tips for promoting patient malnutrition as a priority and focus within your health service. Refer also to section 6: *Enhancing nutrition governance practice for malnutrition care – establishing a multidisciplinary committee overseeing health service malnutrition management* of this toolkit chapter.

- Consolidate local and/or relevant data and evidence about the problem of patient malnutrition:
  - clinical incidents
  - patient/consumer feedback
  - malnutrition and malnutrition risk point prevalence – refer to Chapter 2, Appendix 4 of this toolkit
  - local research and quality improvement activities
  - benchmarking information with peer health services
  - evidence-based practice guidelines
  - potential loss of revenue secondary to under-identification of malnutrition.
- Identify motivated and influential nutrition champions among health service stakeholders and build a positive culture supportive of patient safety and quality improvement initiatives.[17]
- Develop internal relationships to secure medical and nursing leadership.
- Establish a multidisciplinary committee to oversee health service malnutrition management – see section 6 of this toolkit chapter.
- Establish a service-wide malnutrition policy – see section 7 of this toolkit chapter.
- Use the skills of your multidisciplinary nutrition support team and work collaboratively on research.
- Use existing health service marketing and communication opportunities to raise the profile of patient nutrition – such as ‘nutrition month’, window displays, health service newsletters and reports, web broadcasts and intranet postings.
- Utilise existing clinical audit activities to raise the profile of nutrition – for example, consider a malnutrition or body mass index (BMI) audit to complement local Pressure Injury Point Prevalence Surveys (PIPPS).
- Present multidisciplinary research, including its evaluation and audit, at the local level such as in ‘grand round’ presentations, ‘research week’ and medical and surgical unit professional education meetings to increase awareness and to educate staff about the risks and negative outcomes associated with malnutrition.
- Advocate for nutrition key performance indicators (KPIs) to be included on heads of department reports and hospital dashboards/scorecards.
- Provide opportunities for staff training and education about the problem of patient malnutrition. Involve non-nutrition disciplines in presenting training.

5. Elements of a strong clinical governance system – how do we apply this to malnutrition governance?

The *Victorian clinical governance policy framework*[1] outlines elements of a robust clinical governance system. The following table has been prepared using the *Victorian clinical governance policy framework* with malnutrition governance as a case study. Many elements are essential to consider when building strong malnutrition governance across your health service.

Elements of clinical governance systems	What should this look like?	Implications for *malnutrition* governance	Examples of how this could be achieved	Accreditation standard (NSQHS[12] and EQuIPNational[14])
Priority and strategic direction are set and communicated clearly	Strategic direction set, providing a vision for health services over an agreed timeframe.	Ensure nutrition is a focus in health service strategic planning.	Recruit nutrition 'champion' at executive level and within quality and risk department. Multidisciplinary nutrition committee established with defined terms of reference and reporting directly to executive.	NSQHS 1.1 EQuIPNational 12.2.1, 12.5.2, 12.7.1
	Short- and medium-term goals and priorities defined, reviewed and updated annually.	Develop nutrition-focused quality plans. Engage in annual cycle of reviewing and updating nutrition quality plans.	Multidisciplinary nutrition committee involved in inputting nutrition onto ward/department quality plans. Nutrition department quality plans developed and reviewed. Multidisciplinary nutrition committee drives annual cycle of reviewing and updating of nutrition within ward/department quality plans.	
	Evidence-based priorities are set that proactively improve performance and respond to identified issues and risks.	Develop a processes for monitoring key performance indicators (KPIs) of malnutrition care. Monitor the evidence base for continuous improvement ideas and innovations.	Set KPIs and monitor – refer to Chapter 2 of this toolkit for examples. Support from hospital library to include nutrition in focus of weekly bulletin topics.	
	Goals, priorities and strategic direction all take into consideration national, state and key healthcare professional policy and strategy.	Align nutrition quality plans with national, state and key policy and strategy.	Liaison with national and state health services to champion for nutrition within policy and strategy.	

(cont.)

Elements of clinical governance systems	What should this look like?	Implications for *malnutrition* governance	Examples of how this could be achieved	Accreditation standard (NSQHS[12] and EQuIPNational[14])
Planning and resource allocation supports achievement of goals	Quality initiatives equitably resourced according to strategic priorities and incorporated into business planning.	Ensure nutrition is a focus in health service strategic planning. Advocate for appropriate resourcing to ensure success, sustainability and achievement of nutrition-focused quality plans.	Recruit nutrition 'champion' at executive level and within quality and risk department. Multidisciplinary nutrition committee established and reporting directly to executive. Multidisciplinary nutrition committee involved in collecting data on dietetic activity to be used to support business cases for increased EFT for nutritional care. Multidisciplinary nutrition committee works to implement cost-neutral (and cost-saving) initiatives, where possible.	EQuIPNational 12.1, 12.3, 12.5, 12.7.1
	Improvement strategies planned and funded with regard to medium- and long-term quality and safety goals, targets and sustainability of improvement.	Develop processes for monitoring malnutrition care KPIs. Drive nutrition policy implementation.	Set KPIs and monitor – refer to Chapter 2 of this toolkit for examples. Multidisciplinary nutrition committee established and reporting directly to executive. Nutrition policy (or guidelines relating to the management of malnutrition) to sustain improvement and embed into routine practice. Multidisciplinary nutrition committee works collaboratively with other initiatives to obtain funding to support policy implementation.	
Culture is positive and supports patient safety and quality improvement initiatives	Acknowledgement that errors occur and the frequency of adverse events in healthcare thus embedding a culture of open disclosure, reporting and learning from adverse events.	Develop processes for monitoring malnutrition care KPIs. Incorporate plans for dissemination of this KPI information focusing on system deficiencies rather than blaming individuals – ensures staff are able to discuss concerns, incidents and errors in a just, open and supportive environment.	Set KPIs and monitor – refer to Chapter 2 of this toolkit for examples. Multidisciplinary nutrition committee involved in process of planned dissemination of information.	EQuIPNational 12.1, 12.2.1, 12.3, 12.5, 12.7.1

(cont.)

Elements of clinical governance systems	What should this look like?	Implications for *malnutrition* governance	Examples of how this could be achieved	Accreditation standard (NSQHS[12] and EQuIPNational[14])
Culture is positive and supports patient safety and quality improvement initiatives (cont.)	Empowerment and involvement of clinicians and consumers in planning and implementing quality and safety.	Ensure wide consultation (consumers, nutrition and non-nutrition staff) and engagement in the development of nutrition quality improvement plans. Nutrition policy supports a multidisciplinary approach to managing malnutrition.	Consumers and clinicians from a range of disciplines as representatives on multidisciplinary nutrition committee. Multidisciplinary nutrition committee or representatives involved in joint development of nutrition policy (or guidelines relating to the management of malnutrition). Written in committee membership or terms of reference (TOR).	EQuIPNational 12.1, 12.2.1, 12.3, 12.5, 12.7.1 (cont.)
	All levels of health system work towards establishing a culture that fosters a systems approach, consumer-centred care, continuous improvement and innovation in delivery of clinical care.	Ensure wide consultation (consumers, nutrition and non-nutrition staff) and engagement in the development of nutrition quality improvement plans. Develop a nutrition policy (or guidelines relating to the management of malnutrition) that are adhered to by all staff across all levels of the health service.	Recruit nutrition 'champion' at executive level and within quality and risk / clinical governance department. Multidisciplinary nutrition committee established and reporting through same quality and risk path at your health service as mandatory accreditation areas (pressure injuries, falls prevention). Nutrition policy (or guidelines relating to the management of malnutrition) developed and implemented. Liaise with Commonwealth and state health departments to champion for nutrition within policy, performance and strategy units.	
Organisational and committee structures, systems and processes are in place	Health services have a policy, guidelines or framework that outlines the organisation's commitment to quality and safety improvement.	Develop a nutrition policy (or guidelines relating to the management of malnutrition).	Nutrition policy (or guidelines relating to the management of malnutrition) developed and implemented – with referencing to other nutrition-related policies and local guidelines within your health service. Other nutrition-related policies and local guidelines developed and implemented, for example: • enteral nutrition • total parenteral nutrition • management guidelines for acute re-feeding syndrome	NSQHS 1.8, 8.1, 10.1 EQuIPNational 12.1, 12.3, 12.4, 12.5., 12.7.1

(cont.)

Elements of clinical governance systems	What should this look like?	Implications for *malnutrition* governance	Examples of how this could be achieved	Accreditation standard (NSQHS[12] and EQuIPNational[14])
Organisational and committee structures, systems and processes are in place (cont.)			• medically assisted hydration and nutrition • falls prevention and management • pressure injury management • external food policy.	NSQHS 1.8, 8.1, 10.1 EQuIPNational 12.1, 12.3, 12.4, 12.5., 12.7.1
	Management committees support and monitor implementation of quality and safety polices and participate in decision making.	Establish multidisciplinary nutrition committee to assist with 'driving' nutrition quality plans by facilitating opportunities to collaborate and share successful strategies. Establish multidisciplinary nutrition committee to drive implementation of nutrition policy (or guidelines relating to the management of malnutrition).	Multidisciplinary nutrition committee established. Nutrition policy (or guidelines relating to the management of malnutrition) developed and implemented.	
	Clinical governance committee structure provides an avenue for escalation of significant quality and safety issues where indicated.	Multidisciplinary nutrition committee able to escalate priority of nutrition-related quality issues where indicated.	Recruit nutrition 'champion' at executive level and within quality and risk department. Multidisciplinary nutrition committee established and reporting directly to executive.	
Measure performance and monitor quality and safety systems within the service	Measurement of clinical performance to determine if short-term priorities and long-term strategic goals are achieved.	Monitor compliance with nutrition policy (or guidelines related to management of malnutrition). Develop processes for monitoring malnutrition care KPIs.	Set KPIs and monitor – refer to Chapter 2 of this toolkit for examples.	NSQHS 1.8, 8.1, 10.1 EQuIPNational 12.2.1, 12.5, 12.6.3, 12.7.1
	Clinical performance reported through executive to the board as determined by the organisation focus and degree of improvement or risk presented.	Multidisciplinary nutrition committee able to escalate priority of nutrition-related quality issues where indicated and feed through to executive and board level.	Multidisciplinary nutrition committee established and reporting directly to executive.	

(cont.)

Elements of clinical governance systems	What should this look like?	Implications for *malnutrition* governance	Examples of how this could be achieved	Accreditation standard (NSQHS[12] and EQuIPNational[14])
Report, review and respond to performance to support continuous improvement of quality and safety within the service	System in place for reporting performance measures and progress against goals and priority strategies.	Develop processes for monitoring malnutrition care KPIs.	Set KPIs and monitor – refer to Chapter 2 of this toolkit for examples. Processes established for Victorian Health Incident Management System (VHIMS) reporting and patient satisfaction monitoring and responding.	NSQHS 1.8, 8.1, 10.1 EQuIPNational 12.2.1, 12.5, 12.6.3, 12.7.2
	Rigorous internal and external monitoring and review of quality and safety activities established.	Develop processes for monitoring malnutrition care KPIs. Evaluate nutrition quality activities with accreditation standards.	Set KPIs and monitor – refer to Chapter 2 of this toolkit for examples. Gap analysis of nutrition care against accreditation standards completed.	
	Developed or enhanced self-(internal) regulation, ensuring all priority quality and safety strategies are implemented and that performance is measured, monitored and issues responded to.	Build continuous nutrition education into programs for all staff (non-dietetic) involved in the nutrition care and support of patients at mealtimes. Ensure malnutrition assessment education and training for dietitians. Benchmark nutrition KPIs and compare performance over time and in comparison with like health services.	Non-nutrition staff education and training program established. Annual competency undertaken for dietetics staff in malnutrition diagnosis and prescribing nutritional supplements on the National Inpatient Medication Chart (NIMC). Set KPIs and monitor – refer to Chapter 2 of this toolkit for examples.	
Roles and responsibilities are clearly defined and understood by all participants in the system	Strong leadership and visible commitment to quality and safety at all levels of the health system.	Establish integrated nutrition-focused training for non-dietetic staff. Ensure malnutrition assessment and management education and training for dietitians.	Non-nutrition staff education and training program established. Involvement of non-nutrition specific disciplines in nutrition education and training programs. Annual competency undertaken for dietetics staff in malnutrition diagnosis.	NSQHS 8.1, 10.1 EQuIPNational 12.5.2, 12.7.2

(cont.)

Elements of clinical governance systems	What should this look like?	Implications for *malnutrition* governance	Examples of how this could be achieved	Accreditation standard (NSQHS[12] and EQuIPNational[14])
Roles and responsibilities are clearly defined and understood by all participants in the system (cont.)	Clearly defined roles and responsibilities to reduce ambiguity in organisational processes.	Build continuous nutrition education into programs for all staff (non-dietetic) involved in the nutrition care and/or support of patients at mealtimes. Ensure malnutrition assessment education and training for dietitians.	Non-nutrition staff education and training program established. Annual competency undertaken for dietetics staff in malnutrition diagnosis.	NSQHS 8.1, 10.1 EQuIPNational 12.5.2, 12.7.2
	Opinion is sought from consumers through a range of strategies including participation in quality committees and improvement activities.	Ensure consultation and engagement with consumers to support development of nutrition quality improvement plans.	Multidisciplinary nutrition committee members include consumer representative. Survey consumers/patients about their experience with nutrition care delivery	
Continuity of care processes ensure there is continuity across service boundaries	Arrangements in place ensure that governance of clinical care is seamless across different healthcare sectors and between health services.	Ensure consultation and engagement with external health services as required to support continuity of nutritional care outside of existing health service. Use standardised nutrition terminology to communicate effective nutrition care. Develop nutrition policy – incorporating discharge planning.	Collaborate with neighbouring health services to ensure standardised terminology on discharge documentation. Nutrition documentation protocol or guidelines. Nutrition policy (incorporating discharge planning) developed and implemented.	EQuIPNational 12.1, 12.2, 12.4, 12.5.1, 12.8.1, 12.8.2

6. Enhancing nutrition governance practices for malnutrition care – establishing a multidisciplinary committee overseeing health service malnutrition management

A significant step in addressing malnutrition governance within your health service is to establish a multidisciplinary committee to oversee and support nutritional care within the organisation.[15]

A multidisciplinary nutrition committee can support a multidisciplinary team approach to identify, manage and prevent malnutrition and to create a positive team culture supportive of patient safety and quality improvement initiatives. There is also an important role to ensure compliance to national accreditation standards relevant to nutrition care. This can be achieved by making recommendations to executive to address identified risk or gaps in accordance accreditation standards and then leading the development of improvement initiatives. Ongoing monitoring of performance against these standards is then a crucial component of the committee's role.

Depending on your health service's clinical governance and/or quality committee structure, it is strategic to advocate for the nutrition committee to report to or be positioned alongside other clinical risk or accreditation standard committees (such as pressure injuries, falls and medication safety) with direct links to the executive clinical governance/quality committee. When linked with reporting to the executive level, the committee provides direct opportunities to communicate and help shape organisational strategic direction and priorities.

The nutrition committee may be a 'stand-alone' committee or a subcommittee / working group of an existing committee concerned with patient safety and/or quality of care. Being able to integrate a nutrition agenda within an existing committee may be a helpful way forward for health services reporting overburden for key stakeholders or where committee structures are being rationalised. This will still ensure the nutrition care needs of patients are supported in a systematic manner.

For those health services that have established a multidisciplinary committee, there is further information to follow for ensuring optimal function of your multidisciplinary committee. It may also be useful to refer to Appendix 1, which provides a self-appraisal tool to check that your multidisciplinary committee considers all key elements. This may provide guidance when next reviewing your multidisciplinary nutrition committee.

Tasks to consider when establishing a multidisciplinary nutrition committee

Although there may be multiple ways to go about this, the following is a guide to support you in the process of establishing your own multidisciplinary committee overseeing malnutrition management within your health service (Figure 2).

Figure 2: Process for establishing a multidisciplinary nutrition committee

Recruit key stakeholders

When determining committee membership it is important to consider wide representation across key departments. The following provide some examples of departments/disciplines to be approached for involvement:

- executive sponsor*
- nutrition and dietetics – manager* and project dietitian (senior clinician)*
- medical – director/consultant*
- nursing – director / nurse unit manager*
- quality /clinical risk manager (or representative)*
- speech pathology – manager / senior clinician
- director of allied health
- nurse education manager (or representative)*
- food services – manager* and food service dietitian (as applicable)
- nutrition nurse champions from each ward or representatives to feed back to larger group of nurses*
- consumer representative*
- volunteer representative – to assist with development of volunteer meal assistant programs (as applicable).

Note that '*' denotes those departments/disciplines that could be considered core to the establishment of the committee. Consider also including representation from a range of clinical streams in your health service as issues may vary across acute, subacute and residential care settings.

The executive sponsor/chair must have significant influence in the organisation so that decisions made can be successfully implemented.

Proven nutrition 'champions' or supporters ideally from a medical or nursing background will be helpful to lead and facilitate change.[18,19] They are often in a good position to engage other staff in the process and therefore are an ideal candidate for chair of the committee.

Consider also whether there is benefit in having 'e-mail members' of the committee who will provide feedback on meeting minutes or documents within an agreed timeframe but do not necessarily attend the committee meetings.

Establish committee processes including a clear reporting structure

Directly reporting to executive level at your health service will assist with raising the profile of nutrition and help to ensure the priorities and strategic direction are well communicated. This may be achieved through biannual progress reports and/or presentation to an executive level committee meeting. Consider also the process for escalation of reporting – a risk-rated exception report may be helpful when an actual or perceived threat is identified.

Decisions required:

- How frequently will the committee meet?
- What will be the duration of the meetings?
- What will be the committee quorum?

The general consensus from health services that have an established multidisciplinary committees indicates meetings should occur monthly to every two months, and run for 30–60 minutes. A quorum will consist of half + one of the listed members (or their representative) of the committee.

Develop terms of reference that align with accreditation standards and organisation priorities

Once the above reporting structure and processes are determined this can be formalised with the terms of reference (TOR) and tabled for discussion at your first committee meeting.

Complete a gap analysis against accreditation standards and develop an action plan

Carrying out a gap analysis will help you determine a specific plan for your health service and guide the work of the committee, thus ensuring nutrition-related accreditation standards are met. When developing the action plan risk rating can be helpful to prioritise actions. See Appendix 2 for a gap analysis template and Appendix 3 for an action plan template, which will formalise the plan for work that needs to be completed. Refer also to Appendix 4 for a checklist to help ensure successful completion of a gap analysis and action plan.

Preparing an agenda with standing items may also be helpful for guiding your committee meetings. Examples of set agenda items include:

- reports from the nutrition department, food services department and quality/clinical governance unit/department
- progress towards completing a local gap analysis of relevant nutrition-related accreditation standard(s)
- a clinical incident update
- an update on recommendations from in-depth case review and root cause analysis events and complaints
- an update on KPI monitoring including audit results.

Establishing shared access to folders on your health service's computer network will be convenient for storing information and facilitating collaboration.

Examples of existing health service nutrition committee terms of reference

The following provide some examples of existing health service TOR. It is, however, important to keep in mind that TOR should be tailored to your own individual health service needs.

Examples of existing health service nutrition committee terms of reference:

Nutrition TOR - Alfred.pdf

Nutrition EAG TOR- Eastern Health.pdf

How do you enhance the function of your multidisciplinary committee?

The following provide some strategies to enhance the function of a multidisciplinary nutrition committee.

Have relevant and engaged committee members

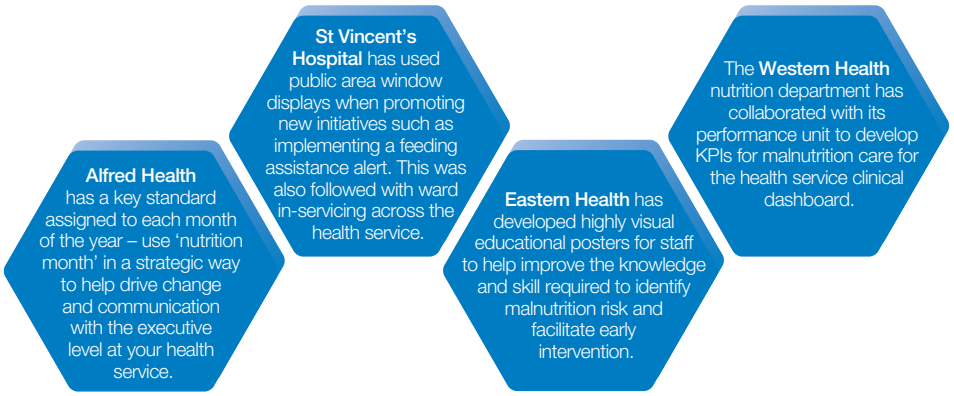
Ensure there is representation from appropriate stakeholders to guarantee your committee has the required expertise. Without the engagement of senior medical and nursing leadership it will be difficult to influence variation in healthcare delivery[18]

Engaging committee members in their role is crucial to success. The following strategies may be useful to employ:

- Recruit a non-nutrition department representative to the chair role – they should be a 'nutrition champion' or strong supporter of nutrition.
- Involve the committee in the development of the TOR to make certain there is investment.
- Assign responsibilities for tasks – involve members in completing the gap analysis and action plan.
- Encourage committee members to set annual goals about personal contributions to improve accountability.
- Encourage committee members to see incentives for their involvement in the committee such as opportunities to align different departments across the health service.
- Ensure a robust action plan is developed that will also clearly highlight progress and achievements.
- Use standing agenda items that will capture attention and interest – regular presentation of audit results, clinical incident data.
- Storytelling – using case studies to highlight the motivation for change and provide information on the prevalence of malnutrition in your own health service.
- Informing but not directing solutions – providing opportunities for the committee to problem solve together to ensure ownership.
- Submit successful interventions or approaches to seminars, workshops or conferences. Nominate your research and quality improvement projects for awards. Ensure multidisciplinary authorship so the committee is recognised for its work and involvement.
- Establish regular patient meal-tasting sessions with the food services department, inviting committee members to attend. This will allow them to become familiar with patient menus and promote mealtime socialisation.

Commit to your action plan – utilising the multidisciplinary skills and resources within the committee and externally as the need presents

- Consider how action plans will be delivered and what will guarantee success.
- Work with key departments such as medical and nursing education units when developing staff education programs and training information/materials.
- Link into established systems within your health service to support achievement of your goals:
  - clinical governance and quality department templates and tools
  - performance unit / decision support / clinical costing / information technology departments for access to electronic monitoring and performance systems to facilitate development and collection of performance indicators
  - Redesign Care team processes and approach



Review processes in a timely manner

Nominate a timeframe to review and evaluate the committee's effectiveness. TOR should be updated annually. Policy and procedures related to the committee should be updated every three years or earlier if required.

7. Enhancing nutrition governance practices for malnutrition care – establishing a health service malnutrition policy

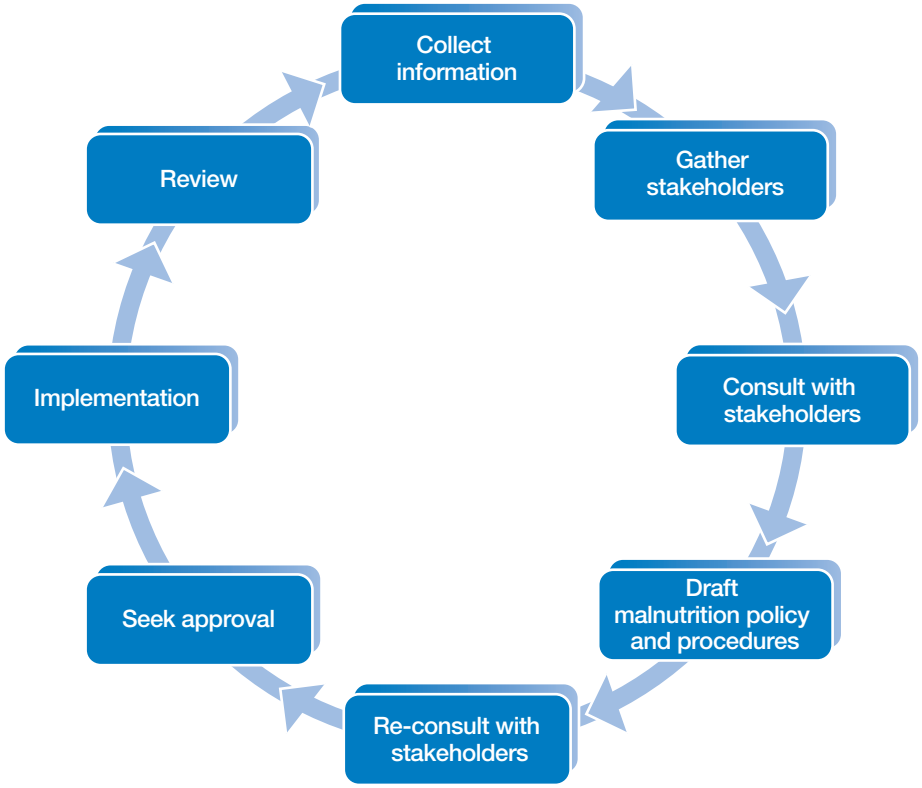
A well-written malnutrition policy and procedure in conjunction with other nutrition-related policies and local guidelines increases your health service's accountability and transparency regarding nutrition practices. Nutrition policy supports strong governance practices and provides a framework for complying with accreditation standards. Inconsistencies and inefficiencies are likely to develop without strong policy and procedures in place.

For those health services that have already developed their malnutrition policy it may be useful to refer to Appendix 5, which provides a malnutrition policy self-auditing tool to check that your malnutrition policy includes all key areas addressed in the steps outlined in Figure 3. This may provide guidance when next reviewing your malnutrition policy.

Steps to consider when writing or reviewing malnutrition policy and procedures

Although there may be multiple ways to go about this, the following is a guide to support you in the process of writing your policy.

Figure 4: Steps to developing a malnutrition policy and procedures



i. Collect information

Ensure you have all the information you need to develop an accurate document. Your health service will have an established template to guide this process.

Are there any existing policies/procedures that will need to be cross-referenced?

Do you have references to support your malnutrition policy and procedures?

ii. Gather stakeholders

Across the majority of health services where a malnutrition policy is established, nutrition departments have led the development of the policy; however, it is important to engage representation from other key areas across your health service. Such areas where representation may be helpful include:

- food services department – including support staff who deliver meals
- staff from quality and clinical governance
- nursing staff
- medical staff
- allied health staff
- volunteer department
- senior management
- multidisciplinary nutrition committee (as applicable to your health service).

iii. Consult with stakeholders

Involving key stakeholders will assist in determining existing processes. To embed a multidisciplinary approach to malnutrition across your health service all relevant disciplines/departments need an opportunity to provide input into the development of the malnutrition policy. Opportunities to 'group brainstorm' issues involved may be helpful.

Some key questions to pose in brainstorming with your stakeholders could include:

- *What is the purpose of writing a malnutrition policy? Why do we need this policy? What is the scope of this policy?*
- *What are the objectives for the health service in managing malnutrition?*
- *What information should be included in the policy? What key headings will be useful?*

See Appendix 6 for ideas about suitable headings/framework for your malnutrition policy and procedure.

iv. Draft malnutrition policy and procedure

It may be helpful to have one person take the lead in compiling information from the stakeholder brainstorm. Alternatively you may prefer to divide the workload into different sections and assign them to individuals for draft completion. Setting a timeline for reviewing the draft will assist in ensuring focus for this task.

Consider the following during the drafting process:

- *Are the keywords or headings used effectively to assist the reader?*
- *Does the format in which you are presenting the information best convey your message? Could diagrams, flowcharts or photographs help further communicate your message?*

- *Is the policy written using simple, clear, concise language? Does it avoid overly technical descriptions?*
- *Does any terminology need to be further defined?*
- *Are the procedure steps in the correct sequence? Do they accurately reflect the precise actions required? Are staff roles and responsibilities clearly defined?*
- *Where reference is made within the policy to other documents – have examples of completed documentation been attached (as appropriate) or linked to the policy?*
- *Is the policy patient-focused?*
- *How frequently will the policy be reviewed? Has this information been included?*

v. Re-consult with stakeholders

Allow an opportunity for stakeholders to provide feedback on the draft policy and procedure document. Set timelines for responses. Where there is an established multidisciplinary committee of which stakeholders are likely to be involved, table the draft for discussion.

vi. Seek approval

Take the revised document to executive staff for review and approval. Ideally there will be a nutrition champion already linked to a multidisciplinary committee to support this process in a timely manner. Endorsed polices should include a cover note as to who authorised the policy and the date this occurred.

vii. Implement

Implementation is an essential step to embed the policy within your health service. Raising awareness of the malnutrition policy is key to its successful implementation.

How are you going to assist existing staff to be aware of the policy?

Including policy discussions on agendas for staff/multidisciplinary meetings will also provide an opportunity to review the policy and any issues related to the new policy. Brochures, flyers, email alerts or webcasts on your health service intranet may also be an effective means of communicating and alerting staff to the new policy. Check your malnutrition policy is easy to locate within your health service electronic policy catalogue.

How will new staff members be made aware of the policy? Incorporating the new policy within staff orientation and training manuals may be a helpful way of ensuring a consistent approach.

Do staff need further support or training as part of the implementation process?

Providing a commitment to ongoing training may be necessary to ensure staff have the knowledge and skills to implement the policy. Delivering targeted training to different staff groups is an opportunity to highlight different roles and responsibilities in multidisciplinary nutrition care.

For example:

- nursing in-services – completing malnutrition screening tools, use of weighing equipment and referral processes
- medical staff – documentation of patient malnutrition in clinical records and discharge summaries
- ward-based multidisciplinary teams – protected mealtimes and feeding assistance
- support staff – delivering correct meal trays within reach of patients and opening packaging
- volunteers – mealtime assistance and feeding.

Consider face-to-face as well as other training methods such as e-based materials and webinars to capture out-of-hours staff.

How will you monitor implementation of the policy?

Auditing, self-report or observation may be helpful techniques to confirm these processes have been effective in embedding the policy into practice. KPIs may be set for different aspects of the policy such as malnutrition risk screening. For further information on this refer to Chapter 2 of this toolkit – *Key performance indicators for monitoring malnutrition care*.

viii. Review

Review the policy as per the set date. When the policy is no longer relevant or appropriate repeat these steps to revise the existing policy or to develop a new policy.

Examples of existing health service nutrition policies

The following provide some examples of existing health service nutrition policies. It is, however, important to keep in mind that policies should be tailored to your own individual health service needs.

Examples of local health service nutrition policies:

Ident & Mx of Malnutrition - STV.pdf

Maln Identification & Mx - Eastern.pdf

8. Where can I obtain further information about clinical governance?

Australian Commission on Safety and Quality in Health Care 2012, *Safety and quality improvement guide standard 1: governance for safety and quality in health service organisations*, ASQHC, Sydney http://www.safetyandquality.gov.au/wp-content/uploads/2012/10/Standard1_Oct_2012_WEB1.pdf

Bismark M, Studdert D 2014, 'Governance of quality of care: a qualitative study of health service boards in Victoria, Australia', *BMJ Quality & Safety*, no. 23, pp. 474–482.

Brennan N, Flynn M 2013, 'Differentiating clinical governance, clinical management and clinical practice', *Clinical Governance: An International Journal*, no. 18, pp. 114–131.

Travaglia J, Debono D 2011, 'Clinical governance: a review of key concepts in the literature', *Clinical Governance: An International Journal*, no. 16, pp. 62–77.

NSW Health Department 2001, *The clinicians toolkit for improving patient care* http://www0.health.nsw.gov.au/pubs/2001/clintoolkit.html

Victorian Government, Department of Human Services 2009, *Victorian clinical governance policy framework – a guidebook* http://www.health.vic.gov.au/clinrisk

Appendix 1: Multidisciplinary nutrition committee self-auditing tool

Does your multidisciplinary committee include the following key elements?	Yes	In progress / partially achieved	No	Comments:
Committee development and implementation				
Were all key stakeholders approached to be members of the committee? Is there appropriate representation from all departments/disciplines?				
Is there a non-nutrition department representative as chair?				
Does the committee report to the executive level of your health service?				
Is there a process for escalation of reporting if there is an actual or perceived threat identified?				
Are there established terms of reference for the committee?				
Have the terms of reference been agreed upon by the committee?				
Does the agenda consist of standing items reporting on clinical incidents and key performance indicator monitoring? Are there recommendations from in-depth case review and root cause analysis events and complaints included on the agenda?				
Are there any enterprise risks that have been identified or are owned by the nutrition committee? Has a risk rating tool been used?				
Is there a shared drive/folder on the computer network for storing information to allow collaborative work on documents by all committee members?				
Were all committee members involved in completing the gap analysis and action plan? Does the action plan link to the health service's strategic direction?				
Do you employ strategies to ensure strong engagement of your committee members such as problem solving as a committee and presenting case studies?				
Does your committee routinely access the multidisciplinary skills within the membership? Does the committee work with other key departments as required?				
Is the committee actively building links with established systems/ processes within your health service to support achievement of actions? Is there a clear structure for implementing recommendations?				
Committee review				
Are the committee's terms of reference updated annually?				
Is there a planned/scheduled review and evaluation of the effectiveness of the committee?				
Is an annual report completed on the work of the committee and forwarded to the executive?				
Is there a planned audit schedule for monitoring malnutrition key performance indicators?				

Appendix 2: Gap analysis template

This criterion will be achieved by:	Action required to meet criterion	Prompt points for completing gap analysis	Possible examples of evidence that may exist within your health service	Gap identified?	Action required (by whom, by when)
Example: *1.1* *Developing, implementing and reviewing policies, procedures and/or protocols, including the associated tools that are based on current national and international guidelines*	*1.1.2* *Policies, protocols and processes incorporate nutrition screening and assessment tools consistent with best practice*	*Check that policies, procedures and/or protocols on nutrition screening and assessment tools that are consistent with best practice are accessible to the clinical workforce*	*All key nutrition-related policies and screening tools are accessible via the intranet.*		
		Provide results/examples of observational audits that monitor compliance with nutrition screening and assessment tool use	*Mealtime assistance and food consumption (meals and mid meals).*	*Limited resources to perform observational audits of sufficient numbers at appropriate sites.*	
		Provide results/examples of documentation audits that monitor compliance with nutrition screening and assessment tool use	*Completion rates of malnutrition screening tool audit.* *Patients at nutrition risk referred to dietitian audit.* *Referred patients seen by dietitian within 48 hours and validated tool used to document malnutrition (SGA) audit.* *Weight measurements on admission and at least weekly audit.*	*Limited resources to perform observational audits of sufficient numbers at appropriate sites.* *No audits looking at use of validated assessment tool (SGA).* *Limited audits available across sites.* *Planned implementation of new malnutrition screening tool not yet completed.*	*Project officer to review note on action plan within next month.*
		Confirm that education resources and records of attendance at training on the use of policies, procedures and/or protocols by the workforce are available	*Nutrition department record of nutrition education completed and copies of presentations included. Presentations cover the content of nutrition policies and protocols.* *Nurse education – intern training – patient support services coordinators.*	*Confirm evidence of training for this criteria?*	*Dietitian project officer to check with relevant staff within next month.*

Appendix 3: Action plan template

Risk rating	What needs to be done?	What risks and barriers exist?	What strategies can be used to implement changes?	Who is responsible?	What are the timeframes?
Example:					
Major/possible = high risk to nutrition committee	*Auditing associated with nutrition care*	*Limited resources to perform audits associated with nutrition care*	*Develop a hierarchy of audits to ensure resources are allocated to the most critical audits.*	*Dietitian and quality representative and chair of nutrition committee*	*1 month*
			Develop list of departments responsible for specific audits: • *nursing* • *medical* • *nutrition* • *food services / support services.*	*Dietitian and quality representative and chair of nutrition committee*	*1 month*
			Develop formal KPIs for audits.	*Dietitian and quality representative from committee and dietetics manager*	*3 months*
			Complete audit of nutrition risk screening using the validated Malnutrition screening tool (MST) and referral to dietitian of patients identified at nutrition risk.	*Dietitian and nurse representative from nutrition committee*	*3 months*
			Develop report on clinical coding of malnutrition by unit. Aim of report is to provide feedback to wards and improve documentation of malnutrition in medical records.	*Quality representative from nutrition committee and dietetics manager*	*3 months*
			Finalise process of hospital-wide audits with the Quality and Risk Unit including communication strategy for staff to complete audits, timeframes for completion and collation of audit results.	*Dietitian and quality representative from committee* *Dietetics manager*	*4 months*
			Educate staff on the audit process and the tool to use to complete it.	*Quality representative from committee*	*5 months*
			Develop a feedback loop process for audit results to be presented at nutrition committee and to relevant staff to improve practice.	*Dietitian and quality representative and chair of nutrition committee*	*6 months*

Appendix 4: Checklist for successful completion of a gap analysis and action plan

	Action required	In progress	Completed	Not applicable
Planning				
Obtain consensus from multidisciplinary committee as to whether gap analysis should be completed against only mandatory standard (NSQHS 1.8, 8.1, 10.1) or whether to broaden scope to include EQuIP Standard 12 or draft nutrition standard.				
Gather relevant reference materials/resources. Seek assistance from your health service quality and risk department re: appropriate tools or use Appendix 4.				
Completing the gap analysis				
Assign multidisciplinary committee members with responsibility for a section of the gap analysis.				
Work on the gap analysis referring to the standard documents for examples of evidence.				
Store 'active' template in shared folder easily accessible by all multidisciplinary nutrition committee members to review.				
Agenda gap analysis for discussion and further review with multidisciplinary nutrition committee.				
Risk-rate each of the gaps in order to inform a detailed action plan.				
Agreement on action plan				
Prepare a project plan in form of a Gantt chart with key deliverable dates.				
Prepare rationale for 'not appropriate/relevant' identified gaps for consideration by executive level.				
Chair of multidisciplinary committee (or subset of committee) meets with quality and risk managers to highlight issues.				
Seek assistance from the quality and risk department to get nutrition onto higher level organisation-wide quality improvement plans and risk registers.				
Report gaps up to executive committee to get buy-in from higher level management.				
Undertaking the action				
Identify relevant units/departments that will be required to undertake audits against the 'actions required' that support each of the standard criterion.				
Oversee actions as identified from the individual units/department gaps.				
Identify and encourage innovations associated with each of the standard criterion and progress these to completion.				
Monitoring and evaluating				
Collate audit results, identify trends and provide an analysis on each of the audits. Forward data in report form to executive level.				
Reference your health service's existing tools for commissioning, diagnosing and evaluating quality improvement projects.				

Appendix 5: Malnutrition policy self-auditing tool

Does your malnutrition policy include the following key elements?	Yes	In progress / partially achieved	No	Actions required
Policy development, implementation and review				
Were key stakeholders consulted during the development of this policy? Was there appropriate representation from all departments?				
Is the policy easy to access within your health service?				
Were there processes put in place to ensure that existing staff were made aware of the policy? Was a communication strategy developed – brochures, flyers, webcasts? Was training provided to staff prior to implementation?				
Are there systems in place to ensure new staff into the organisation are made aware of the policy? Is this information incorporated into staff orientation manuals?				
Is there a plan in place for ongoing monitoring of the policy implementation? Is there regular auditing and performance monitoring?				
Is there a planned review date for the policy to ensure it remains relevant and appropriate?				
Are key stakeholders involved in reviewing the policy? Is there a process in place to ensure this will occur?				
Policy content				
Is the title accurate to express the primary contents of the policy? Is it easily understood by staff?				
Does your policy provide a description of your health service's commitment to managing malnutrition?				
Does your policy include the objectives of your health service in managing malnutrition?				
Is the scope of the policy clearly defined?				
Is the policy patient-focused?				
Are the procedure steps in the correct sequence? Do they accurately reflect the precise actions required? Are responsibilities clearly defined?				
Where reference is made within the policy to other documents to be used, have examples of completed documentation been attached in appendices (as appropriate) or linked to the policy?				
Have you cross-referenced all relevant existing policies/procedures with your health service?				
Is your policy evidence-based? Does it include up-to-date references to support your practices?				
General policy readability				
Are the keywords or headings used effectively to assist the reader?				
Does the format in which you are presenting the information best convey your message? Have diagrams, flowcharts or photographs been used to help further convey your message?				
Is the policy written using simple, clear, concise language? Does it avoid overly technical descriptions? Where terminology is used, is it clearly defined?				

Appendix 6: Recommended outline for malnutrition policy

Identification and management of malnutrition policy

Policy

Policy statement – *includes purpose of policy; may include scope if not already under separate section.*

Objectives

Scope – *for example, inpatients or all patients. References vulnerable group (such as culturally diverse, patients with dysphagia). Exclusions sometimes included within the policy statement.*

Definitions – *for example, malnutrition, nutrition screening. May include acronyms if not already in separate section.*

Acronyms – *may be included with definitions such as BMI, MST.*

Procedure

1. **Identify patients at risk of malnutrition on admission to the health service (malnutrition screening)**
   - 1.1 Acute and subacute services
   - 1.2 Ambulatory care such as day units (chemotherapy and radiotherapy), outpatient clinics
   - 1.3 Residential care (as applicable to your health service)
2. **Referring to the dietitian**
   - 2.1 Acute and subacute services
   - 2.2 Ambulatory care such as day units (chemotherapy and radiotherapy), outpatient clinics
   - 2.3 Residential care (as applicable to your health service)
3. **Documentation of malnutrition (nutrition assessment and diagnosis)**
4. **Provision of appropriate food and nutrition therapy (nutrition intervention and care planning)**
   - 4.1 Food and fluid provision
   - 4.2 Eating environment and providing assistance at mealtimes
   - 4.3 Patient information and communication
   - 4.4 Staff education and training
5. **Surveillance of signs of malnutrition risk during admission (nutrition monitoring)**
6. **Including nutrition as a focus in discharge planning**
7. **Clarifying staff roles and responsibilities with respect to nutritional care of patients**

For example: *Treating/medical unit, nursing staff, dietitian, dietitian assistant, pharmacist, support/patient service assistant, volunteers, consumers, allied health, chef and food services staff. Refer to Chapter 3, section 3:* Utilising a team approach to identify, prevent and manage cancer malnutrition *and* Chapter 4: Nutrition service delivery models.

8. **Governance**

For example: *Incident reporting, nutrition committee.*

9. Defining policy compliance measures (nutrition evaluation)

For example: *Key performance indicators – including frequency of audits. Refer to Chapter 2, section 4:* Examples of defined key performance indicators for malnutrition care.

10. Other nutrition-related policies and local guidelines

Provide links within the document such as information about enteral nutrition, total parenteral nutrition (TPN), re-feeding syndrome, oral nutrition supplement, patient meal and menu procedures, pressure injury prevention, falls prevention, external food policy.

References

For example: Watterson C, Fraser A, Banks M, et al. 2009 'Evidence-based practice guidelines for the nutritional management off malnutrition in adult patients across the continuum of care', *Nutrition & Dietetics*, no. 66: S1–34.

Appendices

For example: *Nutrition screening tool*

Appendix 7: Examples of existing health service documents

Examples of local health service nutrition committee terms of reference:

- Nutrition is Everyone's Business Working Group Terms of Reference – Alfred Health
  Nutrition TOR – Alfred
- Terms of reference: Eastern Health Nutrition Expert Advisory Committee – Eastern Health
  Nutrition EAG TOR – Eastern Health

Examples of local health service nutrition policies:

- Identification and management of malnutrition – St Vincent's Hospital Melbourne
  Ident and Mx of Malnutrition – STV
- Malnutrition identification and management – Eastern Health
  Maln Identification and Mx – Eastern

AlfredHealth

Nutrition is Everyone's Business Working Group
Terms of Reference

1) Role/Purpose

- To oversee a strategy to improve the provision of optimal provision for inpatients, with a focus on the assessment and care for patients with malnutrition and patients at risk of malnutrition. For the purposes of this group and the associated strategy, malnutrition refers to under-nutrition.

2) Function

- To establish and implement the strategy (Nutrition is Everyone's Business) with a focus on clinical care and food intake inclusive of:
    - Malnutrition risk screening
    - Ensuring patients are set-up for meals and are provided with assistance as required
    - Comprehensive multi-disciplinary assessment and care planning
    - Referral to a dietitian as required
    - Efficient use of oral supplements
- Oversee the gap analysis of the draft Victorian Nutrition standard in relation to food as a treatment
- Develop KPIs and a reporting structure to monitor performance
- The scope of this working group is to oversee the strategy for the ward based clinical care in relation to food as a treatment
- Elements outside the scope for the working group include:
    - Enteral nutrition and TPN
    - Food quality, performance of food services, and the production and distribution of food and fluids (e.g. thickened water)
    - Obesity management
- The scope of the work can broaden later (or form work under a revised governance structure) when the gaps in the priority areas have been closed or adequately progressed.

3) Membership

- Executive Director Nursing Services (chair)
- Director of Allied Health
- Director of Nursing and Site Coordination Sandringham Hospital
- Nutrition Manager
- Dietitian reps x2
- Clinical Program Director RACC
- HOU Gastroenterology
- General medicine medical rep
- Clinical Services Director - TBD
- Surgical rep
- Director of Nursing Clinical Practice
- Nursing education rep
- Nurse managers x3 – the Alfred, Caulfield Hospital, Sandringham Hospital
- HOU Renal
- Clinical governance rep
- Medical admin rep

4) Meetings

- The working group will meet monthly for 1 hour.
- The reporting structure is TBD.

21/10/2013

easternhealth

TERMS OF REFERENCE: Eastern Health Nutrition Expert Advisory Committee

DATE: Reviewed August 2012

1. Role

   The Eastern Health Nutrition Expert Advisory Committee will ensure the quality and safety of the clinical care by:

   a) Setting the best practice in international standards in nutritional care across Eastern Health.
   b) Monitoring organisation wide performance against standards in nutritional care.
   c) Make recommendations to improve performance that will address identified performance gaps.

2. Reporting
   Minutes of the Expert Advisory Committee shall be:

   a) Distributed to members of the Committee no later than two weeks from the date of the most recent meeting.
   b) The Eastern Health Nutrition Expert Advisory Committee will forward Committee recommendations to EH Executive for consideration for implementation via line management.
   c) An annual report of the committee outcomes will be presented to the Eastern Health Clinical Executive Committee as per EH schedule of Reporting

3. <u>Function/Objectives</u>

   The Eastern Health Nutrition Expert Advisory Committee shall:

   - Develop and review organisation's standards of practice for nutritional care in line with best practice (evidence based) and accreditation and other relevant standards, relevant legislation and regulations.
   - Recommend organisation wide policies/procedures relating to nutrition.
   - Develop and review clinical guidelines for the management of nutritional care.
   - Develop and monitor organisational performance measures and monitor external benchmarking targets.
   - Review variations in practice and compliance with established clinical guidelines through review of incident clusters, trends and audits as well as serious adverse events.
   - Benchmark organisation wide performance and propose recommendations for action to address variance in nutritional care including identification of system risks for active management, continuous or periodic monitoring.
   - Undertake or participate in relevant internal/external audits, review of external correspondence, guidelines and standards received to identify variance, risks or opportunities for improvement.
   - Consider and endorse agreed action from improvements and opportunities from correspondence received.

- Review relevant recommendations from incident investigation, including appropriate actions for inclusion in Operational & Improvement Plans.
- Consider and foster new research initiatives in nutritional care.
- Minutes and reports of the Eastern Health Tasteful Food Provision group will be received.

4. Membership

The membership of the Committee shall be:

- Executive Director
- Program Director -Quality, Planning & Innovation
- Quality, Planning & Innovation
- Associate Director Allied Health (Dietetics)
- Acting Manager Dietetics PJC/WH Angliss
- Senior Clinician Clinical Expert in Nutrition & Dietetics
- Clinical Expert in Parenteral Nutrition
- Gastroenterologist
- Gastroenterologist
- Maroondah Hospital Support Services Manager
- Director of Operations Support Services
- CYMHS Eating disorder services
- Aged Care Mental Health
- DON Continuing Care
- Associate Director Allied Health (Speech Pathology)

a) The membership of the Committee shall be determined by the Eastern Health Clinical Executive Committee, and is based on expertise of Eastern Health employees or on an Eastern Health organisational position.
b) Substitutes, deputies and others may attend as agreed by the Chair
c) By invitation of the Chair, others may attend for all or part of one or more meetings of the Committee as a resource or in an advisory capacity. Any member of the committee may seek the Chair's permission for a non-member to attend part of all of the meeting for the purposes of ensuring the committee meets its role
d) Members are deemed to have resigned from the Committee on their resignation from the position on which their membership is based.

5. Subcommittees
   - EH Tasteful Working group

6. Meetings

The Committee will meet bi-monthly and more frequently if it is deemed necessary. In addition, the Chair of the Committee will call a meeting of the Committee if so requested by any member of the Committee.

6 Quorum

A quorum shall consist of the majority of members of the Committee.

7. Review

a) The Terms of Reference and the membership of the Committee, including attendees, shall be reviewed annually by the Committee with any changes to be approved by the Clinical Executive Committee
b) Review of the Committee's performance shall be conducted annually and reported to the Clinical Executive Committee.

St. Vincent's Hospital (Melbourne)
Caritas Christi Hospice
St. George's Health Service
Prague House

IDENTIFICATION AND MANAGEMENT OF MALNUTRITION

Policy

Policy Statement

Malnutrition is prevalent in hospitals and is associated with adverse clinical outcomes, such as functional decline. It is the responsibility and role of all staff to ensure patients receive good nutritional care to prevent malnutrition. This policy has been produced to inform St Vincent's staff about the management of inpatients with, or at risk of, malnutrition consistent with national and international best practice standards.

Objectives

To assist staff to effectively identify and manage patients with or at risk of malnutrition by:

- Undertaking malnutrition risk screening on admitted multi-day patients using a validated tool.
- Making timely referrals to the Dietitian for patients who are identified as malnourished or at risk of malnutrition
- Documenting the presence of malnutrition in the patient medical history
- Providing patients with appropriate food and/or alternate nutrition therapy during their hospital stay
- Surveillance of nutritional status and poor nutritional intake during hospital stay
- Including Nutrition as a focus in discharge planning
- Clarifying staff roles and responsibilities with respect to nutritional care of patients
- Defining policy compliance measures

Scope

This policy is a guide to optimise the management of inpatients of St Vincent's with or at risk of malnutrition. The management of patients with other nutrition-related morbidity such as diabetes, obesity, poor wound healing, eating disorders and other conditions requiring therapeutic diets, or outpatients, is beyond the scope of this policy.

Definitions

Malnutrition:

For the purposes of this policy malnutrition refers to protein-energy undernutrition, which is a state of nutrition where a deficiency in macronutrients causes measurable effect on tissue body form (body shape, size, and composition) and function and clinical outcome.

Acronyms

BMI

Body Mass Index

DoH

Department of Health (Victoria)

DRG

Diagnostic Related Grouping

GEM

Geriatric Evaluation and Management

MST

Malnutrition Screening Tool

SGA

Subjective Global Assessment

SSA

Support Service Assistant

VHIMS

Victorian Health Incident Management System

AKPS

Australian-Modified Karnofsky Scale

Procedure

1. Identify patients at risk of malnutrition on admission to hospital

All patients are to be weighed on admission by nursing staff. Suitable weigh equipment (stand on scales, chair scales, hoist scales, bariatric scales) should be available throughout St Vincent's. Use of the St Vincent's red edged 'Weight Chart' form (SV 660) is recommended to monitor weight changes over time.

1.1 St Vincent's Acute Wards

All patients admitted to the acute wards at St Vincent's are to be screened for malnutrition within 72 hours of their hospital admission. This can be undertaken using the validated Malnutrition Screening Tool (MST) which is found on the Nursing Admission Risk Assessment Tool. Refer to Appendix 1 for details.

1.2 St Vincent's and St Georges Subacute Wards

All patients admitted to these units are assessed by the Dietitian within 72 hours of admission. The exception is musculoskeletal rehabilitation patients where patients are screened for malnutrition using the MST on the Multidisciplinary Assessment Form.

1.3 St Vincent's Mental Health

Patients admitted to the Mental Health Acute Inpatient Unit are provided with a physical health assessment which includes metabolic monitoring (weight and BMI calculation). Patients identified with malnutrition or unintentional weight loss will be referred to the Dietitian and for further medical review where appropriate.

1.4 Caritas Christi Hospice

Those patients whose goals of care indicate they are likely to be discharged or that extra nutritional attention is appropriate will undergo nutrition screening using the MST. The goal of care is determined on admission and during weekly interdisciplinary meetings. Patients identified with malnutrition or unintentional weight loss will be referred to the Dietitian and for further medical review where appropriate.

2. Referring to the Dietitian

2.1 Patients at risk of malnutrition (MST score >2) will be referred to the unit Dietitian

2.2 Referrals may be made by LAN paging, verbal referral, or faxing referrals to the Nutrition Department, ext 3765. Upon receipt, Dietitians will undertake nutritional assessment and will develop an individualised treatment plan within 24 working hours.

2.3 Dietitians are available Monday to Friday (8:30am to 5pm), Saturday (9am to 5pm), Sunday 'on call' service (There is no weekend service available at SGH however messages left on Nutrition Department phone ext 8336 will be actioned on the next working day).

Caritas Christi Hospice

Referrals for patients on the 6th floor, Fitzroy campus are made as per 2.2.

Referrals for patients of Caritas Christi, Kew campus are made by the medical team or Nurse Unit Manager to the Nutrition Department.

3. Documentation of Malnutrition

The accurate documentation of a patient's nutritional status enhances communication with the treating team and optimise patient care. This will also ensure Health Information Services assign the correct code and DRG allocation.

The following terminology will be used to document malnutrition in a patient's medical history:

- *Severe protein-energy malnutrition*

  In adults, BMI < 18.5kg/m2 or **unintentional loss of weight (≥ 10%)** with evidence of suboptimal intake resulting in **severe** loss of subcutaneous fat and/or severe muscle wasting.

- *Moderate protein-energy malnutrition*

  In adults, BMI < 18.5kg/m2 or **unintentional loss of weight (5-9%)** with evidence of suboptimal intake resulting in **moderate** loss of subcutaneous fat and/or moderate muscle wasting.

- *Mild protein-energy malnutrition*

  In adults, BMI < 18.5kg/m2 or **unintentional loss of weight (5-9%)** with evidence of suboptimal intake resulting in **mild** loss of subcutaneous fat and/or mild muscle wasting.

4. Provision of appropriate food and nutrition therapy

4.1 Food provision

Food provision is a core component of clinical care. It is important that patients receive a correct meal to match the requirements of the diet code to ensure patient safety and optimal intake. The diet code is indicated by the patient's clinical condition, and/or cultural requirements e.g. high energy/protein, texture modified diet, Halal, diabetic diet.

Dietitians may prescribe high energy/protein oral nutrition supplement drinks or snacks to assist in meeting nutritional needs.

It is important that meal choice is provided via a menu that meets appropriate standards, and food preferences are communicated by the patient or carers to staff completing menus.

To help meet patient cultural needs or food preferences, visitors wishing to bring in external food can do so. Storage and reheating facilities are available on each floor. Refer to the "External Food Policy". Patients can be given the "Can I bring food in for patients?" brochure.

Alternative nutrition therapies such as enteral or parenteral nutrition should be considered if a patient's nutrition requirements are unable to be met via oral nutrition alone after 3 days.

4.2 Providing Assistance at Mealtimes

All patients are to receive assistance at mealtimes should they require it. This may include some/all of: correct positioning, meal tray set up, opening portion packs and feeding. A blue meal dome visual alert can be arranged for patients needing hands on assistance with feeding, or prompting and encouragement to finish a meal (Excludes Caritas Christi and Mental Health). This can be arranged by either contacting the Dietitian Assistant or Dietitian.

Minimising interruptions, such as ward rounds and tests, during mealtimes is preferred, as is limiting missed meals or fasting periods. Rostering nursing meal breaks to maximise available staff to assist at patient mealtimes is desirable.

Meal Assistance volunteers can be arranged to assist patients at meal times. Refer to the "Meal Assistance Volunteer" protocol.

Caritas Christi Hospice

The following initiatives ensure patients receive assistance with meals:

- ½ hour protected meal time
- Patients needing to be fed by clinical staff are identified on their personalised menu and staff handover sheet
- Sleeping patients are woken at meal times unless specified otherwise (an Australian Modified Karnofsky Scale (AKPS) of 40 and above is a guide)
- Patients with an AKPS of 40 or above are encouraged to sit out of bed for meals.
- The "Don't go hungry in hospital" information brochure will be given to patients with the appropriate goal of care.

5. Surveillance of signs of malnutrition risk during admission

5.1 Patients are to be weighed on admission and at least weekly thereafter. Patients with unintentional loss of weight of 2kg or more during admission are to be referred to the Dietitian.

Caritas Christi Hospice
Patients identified for nutrition screening will be weighed (bathroom scales) on admission and weekly, thereafter.

5.2 Monitoring of oral intake is to be undertaken and documented. If a patient reports a poor appetite and is consistently eating <3/4 of meals then the patient is to be referred to the Dietitian. Food charts can be used to monitor oral intake. Hardcopies are available on wards or they can be printed off the intranet (Eforms/Nutrition Forms/Food and Fluid Record Forms).

5.3 The following brochures are available for patients to improve their understanding of the importance of eating well while in hospital (Appendix 2)

- "Don't Go Hungry in Hospital" (available in English, Arabic, Chinese, Greek, Italian, Vietnamese) – downloadable via the intranet
- "Can I bring food in for patients?" – contact Food Service Department or Nutrition Department

6. Including Nutrition as a focus in discharge planning

6.1 The patient's ongoing risk of malnutrition to be identified and long-term management strategies incorporated into the discharge or transfer plan.

These strategies may include:

- Information about nutrition included in the GP and other care providers' discharge summary
- Education of patient and family and referral to community dietetic services
- Referral for the provision of Meals on Wheels, information on other home delivered meal options and access to community support services
- Arrangement of oral nutrition supplements for discharge

7. Clarifying staff roles and responsibilities with respect to nutritional care of patients

It is the responsibility and role of all staff to ensure patients receive good nutritional care to prevent malnutrition. Specifically:

Discipline	Role
Treating / Medical Unit	• Malnutrition screening and referral of at risk patients to Dietitians and other disciplines to improve nutritional status • Management of medical and psychiatric issues relating to poor nutrition intake • Nutrition supplements recommended by Dietitians can be prescribed on the drug chart to improve compliance with consumption

Treating / Medical Unit	• Documentation of nutrition issues – Admission: include weight and weight history, appetite, physical signs of malnutrition – Progress Notes / Treatment Plan: include nutrition issues (malnutrition, weight loss, oral intake, enteral/parenteral nutrition) and management plan – Discharge Summary: document in patient discharge summary nutrition diagnosis and nutrition management plan
Nursing Staff	• Weighing patients • Performing malnutrition screening using the MST and referring at risk patients to the Dietitian (score >2) • Updating Nutrition Diet and Fluid signs above the patient's bed. • Checking external food stored in ward fridges is appropriately labelled as per the "External Food Policy". • Documenting intake during shift, maintaining food and fluid intake charts. • Identifying patients who may benefit from receiving assistance at mealtimes. • Providing patients with assistance if required at mealtimes e.g. positioning, opening portion packs, feeding, encouraging • Minimising distractions that may interrupt meal times and limit patients' intake of meal
7.2 *Dietitian*	• Perform a nutritional assessment for referred patients, using validated assessment tools, i.e. SGA • Determine nutrition diagnosis and develop individualised treatment plan. This may involve prescribing a therapeutic diet and nutritional supplement drinks and snacks, identifying patients who may benefit from receiving assistance at mealtimes, providing patient, staff and carer education, nutritional counselling. • Document nutrition diagnosis and treatment plan, and liaise with the treating medical team, ward (i.e. Nursing, SSAs, Allied Health) staff and kitchen staff to facilitate nutritional care. • Monitor nutritional status and progress of referred patients. This involves regular meal time rounds and recommending food and fluid intake charting and regular weighing. • Involvement in discharge planning and on-referral to community Dietitian as appropriate.

Dietitian Assistant (St Vincent's) *Diet Aid (St George's)*	• Visit all patients daily to take meals orders. • Record patient food preferences so they are available to other team members. • Update diet code changes and meal and supplement orders in a timely fashion. • Identify patients who may benefit from receiving assistance at mealtimes and arrange a Blue Meal Dome alert. • Report ongoing poor and inappropriate patient meal ordering to the unit Dietitian. • Monitor consumption of nutritional supplement drinks and snacks and offer substitutes as per local procedural guidelines
Pharmacist	• Assist medical team to manage polypharmacy that may affect oral intake (e.g. nausea, appetite suppression or stimulant). • Advise on medicine and enteral feed interactions.
Support Service Assistant (Fitzroy) or *Patient Service Assistance (Kew)*	• Meals, snacks and nutrition supplement drinks are delivered to patients by SSAs and Food Service Staff. Meals will be delivered in front of patients with the tray table height adjusted to a suitable level, unless otherwise requested by nursing staff. Nutritional supplements and drinks will be delivered within reach of patients. This includes patients in isolation rooms. • Perform mid meal service delivery (morning tea, afternoon tea and supper), including distribution of prescribed nutritional supplement drinks, snacks and supper cake. • PSA at Kew only: provide assistance with meal set up and opening portion packs
Volunteers	• "Angel Volunteers" can be arranged to provide feeding assistance to patient who are alert and do not have dysphagia. Refer to the "Volunteer Meal Assistance Policy"
Allied Health	• Occupational Therapists: assess and implement strategies to assist with eating independently, shopping and cooking. • Physiotherapists: improve patient' mobility which helps preventing muscle loss and functional decline associated with poor nutritional intake. • Social Workers: assess and implement strategies to assist with finances and help with preparing and providing meals post discharge (e.g. Home help for shopping or Home delivered meals e.g. Meals on Wheels).

	• Speech Pathologists: assess patients for dysphagia and provide recommendations on the appropriate texture of food and fluids for patients with chewing and swallowing impairment.
Executive Chef and Food Service Staff	• Prepare and cook meals according to recipes to meet DoH Nutrition Standards for menu items in Victorian Hospitals and Residential Aged Care Facilities.

8. Defining policy compliance measures

The following compliance measures are monitored by the Nutrition Department and the Food Services Department and are tabled at the St Vincent's Nutrition Committee meetings. The Nutrition committee will analyse and trend data and implement actions for improvement. A "by exception" report is tabled at the St Vincent's Executive Clinical Improvement and Innovation Committee.

- Completion rates of malnutrition risk screening
- Audits of weight monitoring for all patients unless clinically inappropriate
- Nutrition related incidents that put patients at risk of malnutrition reported via the VHIMS riskman program.
- Patient menus that meet/do not meet relevant DoH standards
- Patient feedback about hospital meal quality via:
  - DoH Meal Service Questionnaire
  - Victorian Patient Satisfaction Monitor Survey
  - Internal Food and Nutrition Client Feedback form (available on the intranet under eForms/Nutrition)

9. Other Nutrition Related Policies and Local Guidelines

- Enteral Nutrition
- Total Parenteral Nutrition
- Management Guidelines for Acute Refeeding Syndrome
- Medically Assisted Hydration and Nutrition
- Volunteer Meal Assistance Policy
- Falls Prevention and Management
- Pressure Ulcer Prevention
- St Vincent's Mental Health Metabolic Monitoring Guidelines
- External Food Policy
- Residential Services Nutrition and Hydration policy

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1. Adams NE, Bowie AJ, Simmance N, Murray M, and Crowe T 2008, 'Recognition by medical and nursing professionals of malnutrition in elderly hospital patients', *Nutrition and Dietetics*, Vol 65, pp. 144-150.

2. 'Evidence based practice guidelines for the nutritional management of malnutrition in adult patients across the continuum of care'. *Nutrition and Dietetics* 2009, Vol 66 (Suppl 3), Supplement 1.

3. Ferguson M, Capra S, Bauer J, Banks M 1999, 'Development of a valid and reliable malnutrition screening tool for adult acute hospital patients'. *Nutrition* , Vol 15, Issue 6, pp 458-464.

Appendices

Appendix 1: Malnutrition Screening Tool (MST)

Have you lost weight recently without trying?

☐ No Score = 0 ☐ Unsure Score = 2

☐ Yes If yes, how much in kilograms (kg)?

- ☐ 1-5 kg Score 1
- ☐ 6-10kg Score 2
- ☐ 11-15kg Score 3
- ☐ Greater than 15 kg Score 4

Have you been eating poorly because of a decreased appetite?

☐ No = zero ☐ Yes = 1 **Total score**: …..

Refer to the Dietitian if total score >2

Authorship Details

Name:	**Position:**
Primary Policy Author(s):	
Ms Clara Newsome	Senior Dietitian
Ms Alison Bowie	Chief Dietitian
Ms Natalie Simmance	Chief Dietitian
Others Consulted, including Committee's:	
Nutrition Committee	
Nutrition Department	
Total Parenteral Nutrition Team	
Allied Health Heads of Department	
Ms Jacqueline Bilo	Acting General Manager Aged & Community Care
Ms Jenny Fitzgerald	Group Manager Allied Health & Community Programs
Ms Melissa Evans	General Manager Surgical Services
Head of Department Responsible for policy:	
Ms Alison Bowie	Chief Dietitian
Ms Natalie Simmance	Chief Dietitian

Eastern Health Practice Guideline

Title

Malnutrition identification and management

Performance Standard Sponsorship

Executive Sponsor	Title	Executive Director CCCMH
	Name	Neth Hinton
Director Sponsor	Title	Associate Director Allied Health (Dietetics)
	Name	Anita Wilton
Coordinating Author	Title	Associate Director Allied Health (Dietetics)
	Name	Anita Wilton
	Contact number	0488 373 291

Commissioning

Is this practice guideline new	Yes ☒ Continue with Commissioning steps No ☐ Date first developed Proceed to development / review section
Purpose of new practice guideline	To outline the manner in which malnutrition is identified and managed in Eastern Health
Strategic Direction (select best fit)	Strategic Direction 1 - A Provider of Great Healthcare ☐ Strategic Direction 2 - A Great Patient Experience ☒ Strategic Direction 3 - A Great Place to Learn & Work ☐ Strategic Direction 4 - A Great Partner with our Communities ☐ Strategic Direction 5 - A Great Achiever in Sustainability ☐
Have you considered relevant: Legislation ☐ External benchmarks ☐ External standards ☒ Risk Register Item ☒ Other ☐ Details EQuiPNational Standard 12 Draft DoH Victorian Nutrition Standard Risk register number 1128	
Are there existing performance standards relevant to this topic?	Yes ☐ Detail No ☒
Which standard would this practice guideline align to?	Nutritional Care

Commissioning sponsor approval to develop Performance Standard (*Completed by Sponsor noted above*)	
Will this new performance standard help EH achieve a desired outcome?	Yes ☒ No ☐
Is the proposed policy alignment the best fit?	Yes ☒ No ☐
Have resource requirements for the development and implementation of this new performance standard been considered / allocated	Yes ☒ No ☐
Approval to proceed with development	Yes ☒ No ☐
Date Commissioned: April 2013	Priority for Development 1 ☒ 2 ☐ 3 ☐
Reason (if No)	

Development / Review

Scope of Practice Guideline	Clinical Guideline / Drug Protocol EH Wide ☒ Program specific ☐ Directorate specific ☐	Professional Guideline ☒	Corporate Procedure ☐
Date review commenced			
Key external information sources consulted: Legislation ☐ External benchmarks ☐ External standards ☒ Risk Register Item ☒ Other ☐ Details EQuiPNational Standard 12 Draft DoH Victorian Nutrition Standard Risk register number 1128			
Key Stakeholders consulted in development / review *eg. IPAC, OH&S, Support Services, ICT, Residential Care, Corporate Counsel.*	Name	Title EH Dietetics – Professional Leadership Group Nutrition EAC	
Implementation plan developed and attached?	Yes – Performance standard is new or significantly revised ☒ No – Performance standard has undergone only a minor revision ☐		
Performance standards to be removed following approval	Document Numbers & Titles		
Further comments/ notes			

Key search words	Malnutrition nutrition assessment screening

Title

Malnutrition identification and management

1. **Context** (How does this Practice Guideline relate to and support the achievement of the relevant Eastern Health Standard?)

The intent of this Practice guideline is to ensure that malnutrition is identified and managed during care provided. Eastern Health has a responsibility to optimise the nutrition of their consumers/patients, in order to support wellbeing and recovery, and to prevent malnutrition.

A key focus of this Practice Guideline is the identification of and management of malnutrition whilst in the healthcare setting. However, if consumers / patients enter Eastern Health with malnutrition, or it subsequently develops, it should be identified and managed as outlined in this document.

Malnutrition is prevented through the provision of nutritious foods and fluids and through avoiding processes such as extended periods of fasting or neglible food and fluid intake. Good nutrition is essential to the wellbeing and recovery of the consumer / patient, and to ensure length of stay is not unnecessarily lengthened. Nutritional needs are determined during assessment and nutritional care is planned and delivered according to consumer/patient need. Good nutrition is an aspect of appropriate and effective care delivery, and integral in promoting resistance to infection and skin integrity. The dietary requirements of consumers / patients with diverse needs and from diverse backgrounds is taken into account in planning and delivery of nutritional care. The prevention of malnutrition in the healthcare setting is a managed and identified multifactorial risk, and if malnutrition does develop, is a reportable incident that is investigated.

2. **Definitions of terms** (Include the definition of any relevant or specific terms used within the practice guideline which may require clarification for the reader)

Malnutrition – a state of nutrition in which a deficiency of energy, protein, and other nutrients causes measurable adverse affects on tissue/body form (body shape, size and composition) and function and clinical outcome[1].

Malnutrition Screening – routine application of a validated malnutrition-screening tool to identify malnutrition risk leading to appropriate nutritional care planning.

Assessment of nutritional status – nutritional assessment completed by a credentialled dietitian, or other health professional, trained in malnutrition identification and assessment competencies, which includes analysis of anthropometric, biochemical, clinical, dietary and physical domains.

Oral nutrition support –provision of energy and protein dense foods and fluids for consumption by patients to assist in meeting nutritional requirements.

Enteral nutrition support – provision of nutritionally complete or supplementary liquid nutrition via the enteral route using either a naso-gastric; naso-jejunal or gastrostomy tube

Nutrition support product – specially formulated energy and protein dense food/fluid products designed for dietary supplementation

Parenteral nutrition support - provision of nutrition via intravenous route

Mealtime assistance – provision of practical support including the opening of packages,meal setup and encouragement to eat of patients at meal times to assist in maximising oral intake.

Subjective Global Assessment (SGA) – A standard evidence based method of assessment for the presence and degree of malnutrition completed by a credentialled dietitian or other health professional whose competency in malnutrition identification and assessment has been assessed.

3. **Name of EH Standard to which Practice Guideline relates** (Which EH Standard does this Practice Guideline link to? All Practice Guidelines must link to an organisational standard)

   Nutritional care

4. **Processes** (Describe the processes/procedures to be followed in order to achieve the Practice Guideline and/or attach the relevant process map/s. Include details of other standards and non-aligned practice guidelines which must also be complied with where relevant. This includes any document or information which constitute best practice as supported by research)

Eastern Health will identify and manage malnutrition across the continuum of care. The processes described are consistent with practice guidelines endorsed by the Dietitians Association of Australia[1-3].

Malnutrition risk identification and malnutrition management

Prevalence studies of malnutrition in Eastern Health clinical settings were conducted in 2009 – 2011 indicating a varying level of malnutrition risk in the various clinical settings. As a result, a strategy has been developed to identify patients at risk of malnutrition and provide nutritional care. Referral for dietetic assessment and management of malnutrition risk by other members of the health care team can also occur at any part of the care process.

The standard tool used for identification of malnutrition risk is the Malnutrition Screening Tool (MST). The MST is a three-item questionnaire, validated to identify patients at risk of malnutrition in the acute care setting[1]. The screening and outcomes of the screening is documented in the medical record using a printed sticker (Attachment 1).

An MST score of two or more results in referral for dietetic care and commencement of a standard treatment plan. The standard treatment plan consists of provision of small volumes of an energy dense oral nutrition support product three times per day. The oral nutrition support product is served in a cup with a label (Attachment 2) prompting the patient to consume the product, and prompting nursing staff and carers of the increased nutritional risk of these patients. Evidence supports the use of small volumes of oral nutrition support products distributed across the day and mechanisms to prompt patients and staff to improve nutritional status in malnourished and those at risk of malnutrition[4].

The standard tool used for assessment and diagnosis of malnutrition by EH Dietitians is the SGA. Dietitians in EH undergo induction on employment and an annual competency assessment in completion of the SGA. Documentation of the assessment and diagnosis of malnutrition is completed using a standard form (EH 363300 Attachment 3) and in the medical record.

Nutrition assessment

Following the identification of malnutrition risk and referral to the dietetics department, a dietitian will complete nutritional assessment within the timeframe specified on the acute, subacute and ambulatory care Dietetic prioritisation guidelines.

Assessment of nutritional status may include completion of a standard tool for nutritional assessment - the Subjective Global Assessment (SGA), as clinically indicated. Evidence supports the use of the SGA in acute care, adult patients[1]. Malnutrition is diagnosed when a patient has:

- An SGA Score of B – mildly/moderately malnourished, or
- An SGA Score of C – severely malnourished, or
- A BMI ≤ 18.5kg/m^2, or
- Unintentional loss of weight (≥ 5%) with evidence of suboptimal intake resulting in loss of subcutaneous fat and muscle wasting

Malnutrition management

Following diagnosis of malnutrition, a treatment plan is formulated by the dietitian in partnership with the patient and/or carer and other members of the healthcare team. The treatment plan may use oral, enteral and/or parenteral nutrition support in order to meet calculated nutritional requirements for weight maintenance or restoration, and concurrent management of the potential risk of refeeding syndrome. Additional considerations include the needs of patients from diverse backgrounds in the development and implementation of the care plan. Patients and/or carers are consulted so that the plan of care includes their needs.

The dietitian is also responsible for monitoring and review of treatments and timely discharge planning, which may include dietary education and referrals to community partners as appropriate.

The strategy for management of malnutrition risk identification and nutritional care is (See Appendix 5 Flowchart):

a. Acute Care setting
An Allied Health Assistant (AHA), who has completed malnutrition risk screening competency, conducts malnutrition risk screening of patients using the MST on day 5 of admission. A dietetic referral is completed for patients who are identified as being at risk of malnutrition.

b. Subacute care setting
Nursing staff administer the MST as part of the Model of Care Initial Assessment form (EH 295640 or EH 295600) (MOC), or a competent AHA administers the MST where the MOC is not utilised on day 1 of admission. A dietetic referral is completed for patients who are identified as being at nutritional risk.

c. Residential care setting
On the day of admission, the Nurse in Charge assesses the resident's nutrition and hydration needs and personal food preferences, which are documented into an interim care plan. The resident's admission weight is recorded.
Within the first month of admission, the resident's Named Nurse completes a comprehensive assessment of the resident's nutrition and hydration via Autumncare and a corresponding care plan is formulated. The care plan is reviewed every month.
Resident weight is monitored monthly as a clinical KPI and the data is collated quarterly as part of the current suite of Department of Health clinical indicators. Referral to a dietitian is completed for any resident identified at risk of malnutrition. Nutritional assessment using the Mini Nutritional Assessment is conducted at Edward Street Nursing Home within 48 hours of referral receipt by dietetics

d. Mental health care setting

i. Aged mental health -acute care
A competent AHA conducts malnutrition risk screening of all patients using MST and refers to Dietetics if the MST score is two or more.

ii. Aged mental health-residential
The nutrition screening procedure is the same as described above for the residential care setting. Resident weight is monitored monthly and a referral made to the dietitian for assessment if ≥3kg is lost, or weight loss occurs over three consecutive months. The Mini Nutritional Assessment is not used in this setting.

iii. Adolescent and adult persons mental health
No formal malnutrition screening processes are in place in this setting. Nutritional care is provided on referral to dietetics.

e. Ambulatory care setting
Management of malnutrition within the ambulatory setting commences following internal/external/self referrals for dietetic services for patients with or without existing malnutrition.

f. Transition Care Program (TCP)

Residential TCP:

1. On admission, nursing staff complete resident's food and fluid requirements and measure body weight.
2. Residents who were diagnosed with malnutrition during an inpatient admission continue to receive nutritional care and are monitored by facility care staff. A completed Nutrition Discharge Summary (EH 36300) is used to handover nutritional care from the EH acute or subacute care to TCP.
3. Referral to a dietitian is completed for any resident identified at risk of malnutrition.
4. Patients are weighed monthly. Nursing staff refer to Dietitian if patient has lost more than 2 kg in one month or has had consecutive loss of weight. Nutrition assessment including SGA will be completed.
5. Where a patient has an existing discharge summary from the discharging hospital and there has been no change to their nutritional management whilst in TCP, nursing staff forward hospital discharge summary to Residential Care Facility. Where there has been a change in the nutritional care, the TCP Dietitian provides a Nutrition Discharge Summary (EH 36300 Attachment 4)

Community TCP

1. Management of malnutrition continues following external referral for dietetic services and includes Nutrition assessment and SGA if appropriate.

2. Patients who had no dietetic input during their acute/sub acute care are screened on admission to Community TCP. TCP Community Case Managers complete the Short Nutritional Assessment Questionnaire. A SNAQ score of less than or equal to 14 results in referral to TCP Dietitian who will complete nutritional assessment including SGA if appropriate.
3. Patients with a malnutrition diagnosis are weighed on admission and on discharge and, if necessary monthly.
4. Patients being discharged from Community TCP are referred to appropriate Ambulatory Services and/or the Nutrition Discharge Summary is sent to the patient's general practitioner.

g. Eastern Health Integrated Renal Service (EHIRS)
Nutritional screening and assessment is undertaken by dietitians in the EHIRS as part of routine care, with annual completion of nutritional assessment using the SGA for all patients.

5. Roles, Responsibilities & Behaviour (What roles do staff and consumers/carers have and what are their specific responsibilities relating to achievement of the Practice Guideline? What are the behaviours required of staff and consumers/carers in order to deliver the Practice Guideline? Alternative roles may need to be specified in more detail depending on the Practice Guideline.)

Staff Group	Roles and Responsibilities
CEO	Governance
Executive Directors (including professional officers)	Governance
Executive Clinical Directors	Governance
Clinical Directors	Governance
Head of Unit	n/a
Expert Advisory Committee	Governance
Directors, Program Directors, Associate Program Directors	Monitor compliance and take remedial action
Department/Unit Managers	Facilitate complicance with standard
Front line service delivery and support staff	Compliance with standard

6. Skills, Knowledge & Competencies (What information do staff need to know in order to support the achievement of the Practice Guideline? What do particular professional groups need to know? What do consumers/carers need to know to participate at an individual care level or program level? What training is required to support achievement of the Practice Guideline? How will this be delivered?)

Staff Group	Skills, Knowledge Competency Required	Training Required	Delivery Mechanism	Responsibility	Timeframe
Nursing staff	Health and future needs assessment / Model of Care MST completion	Completion of nutrition section on form Rationale for completion	Face to face education Face to face	Professional group Dietetics	Annual
Nursing staff	Referral to dietetics	Mechanism and response time	Face to face	Dietetics	annual
Dietitian	- nutritional assessment - treatment of malnutrition - management of	Competency in SGA Knowledge of EH practice guidelines	Face to face group training and electronic training	Associate Director (Dietetics)	Annual

	refeeding syndrome				
Associate Director (Allied Health) Dietetics	Evidence base for malnutrition screening and intervention	Professional bodies	Seminars Professional development	Director Allied Health Professional body	Annual
Allied Health Assistant Dietetics	- Malnutrition screening - Initiation of standard treatment	On the job	Skills Acquisition Package	Associate Director (Dietetics)	
Food service staff	Appropriate food provision for malnutrition treatment	Training in malnutrition treatment through food provision	Face to face On the job	Dietetics Support Services	Annual

7. **Tools & Techniques** (What tools e.g. forms, documents exist to support the achievement of this Practice Guideline? How will the information and knowledge be managed, stored and shared?)

The following forms and documents support this standard. They are included in the EH Dietetics Toolkit which is available electronically for all dietitians in EH in a shared folder. Information about the tools are disseminated through EH Dietetics meetings.

Nutrition Assessment form EH393610
Model of Care Nutrition Assessment form EH295640 and EH295600 (sub acute)
MST sticker
MST located within Model of Care document (sub acute)
Drink Me sticker
SGA form EH363300
Nutrition Discharge form EH36300
Dietetic documentation practice guideline
Food charts
Visual menu
Record of Attendance at EH dietitian meetings
EH dietitian meeting notes and electronic folder

8. **Measures** (What measures and mechanisms will be used to monitor compliance with the processes and performance against the Practice Guideline? Who is responsible for collecting the data and reporting it to the appropriate person and/or governance committee)

Measure	Target	Date Target Due	Frequency of measurement	Person (role) responsible for collection	Person (role) accountable for target	Reporting line (committee)
Number of patients who are screened for malnutrition	100% of patients who are inpatient in acute program greater than 5 days 100% of patients admitted to subacute and residential	Not applicable	monthly	Allied health assistant (Dietetics)	Associate Director Allied Health (Dietetics) Chief Nursing Officer	Expert Advisory Committee Nutrition

	care					
Incidence of referral to dietitian as a result of malnutrition screening	No target	Not applicable	monthly	Dietitians Allied health assistant (Dietetics)	Associate Director Allied Health (Dietetics)	Expert Advisory Committee Nutrition
Number of patients diagnosed with malnutrition as a result of malnutrition risk screening	No target	Not applicable	monthly	Dietitians Allied health assistant (Dietetics)	Associate Director Allied Health (Dietetics)	Expert Advisory Committee Nutrition
ICD coding for malnutrition	100% of patients diagnosed with malnutrition have been coded as malnourished	Not applicable	Annual	Health Information services and Associate Director Allied Health (Dietetics)	Associate Director Allied Health (Dietetics)	Expert Advisory Committee Nutrition
Documentation audits of dietetic practice	Malnutrition where identified will be documented according to professional practice	Not applicable	Annual	Associate Director Allied Health (Dietetics)	Associate Director Allied Health (Dietetics)	Allied Health Council
SGA training compliance	100% Dietitians will undergo training in SGA completion on induction and be measured annually for competence	Not applicable	Annual	Associate Director Allied Health (Dietetics)	Associate Director Allied Health (Dietetics)	Allied Health Council
Training of Allied health assistants in Malnutrition risk screening	100% of AHA employed in a Dietetic role will undergo training in Malnutrition risk screening	Not applicable	Annual	Associate Director Allied Health (Dietetics)	Associate Director Allied Health (Dietetics)	Allied Health Council
Training of Nursing staff in Malnutrition risk and management	100% of Nursing staff employed where the Model of Care includes malnutrition risk screening will undergo training in completion	Not applicable	Annual	Associate Director Allied Health (Dietetics)	Associate Director Allied Health (Dietetics)	Expert Advisory committee Nutrition
Training of food service staff in	100% of food service staff	Not applicable	Annual	Associate Director Allied	Associate Director Allied	Expert Advisory committee

food provision related to malnutrition management	will undergo training in food provision related to malnutrition management			Health (Dietetics)	Health (Dietetics)	Nutrition

9. **Level of Supporting Evidence Available** (For Clinical Guidelines only – Level I –IV. Provide details.)

Victorian Nutrition Standard and Guide for use in Hospitals - Draft.
Equip National Standards

10. **Practice Guideline Risk Rating** (What is the risk of not meeting this EH Practice Guideline? Link to existing Eastern Health Risk/s)

What may potentially happen if the <Insert standard name> is breached or standard not achieved using EH Risk Tables and Matrix .	Consequence Rating	Likelihood Rating	Risk Rating
Increased length of stay Increased physical disability related to poor recovery Development of pressure injury	High	Almost certain	Major

11. **References** (List references used in the development of the Practice Guideline.)

1. Watterson, C., Fraser, A., Banks, M., Isenring, E., Miller, M., Silvester, C., ... & Ferguson, M. (2009). Evidence based practice guidelines for the nutritional management of malnutrition in adult patients across the continuum of care. *Nutrition and Dietetics*, *66*(s3), S1-S34.
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12. **Development History** (Detail the history of development and review including a summary of major changes.)

13. **Attachments** (List attachments below. Please note: All flowcharts and images must be included as separate attachments.)

Attachment 1 Malnutrition Screening Tool Sticker
Attachment 2 Nutrition Support Product Label
Attachment 3 SGA Nutrition Assessment form
Attachment 4 Nutrition Discharge Form
Attachment 5 Flowchart of Standard treatment of Malnutrition in EH Acute and Subacute settings
Attachment 6 Table of standard management of malnutrition

14.

Endorsement and Approval

Confirmation of Practice Guideline Scope		
Clinical Guideline / Drug Protocol EH Wide ☒ Program specific ☐ Directorate specific ☐	Professional Guideline ☒	Corporate Procedure ☐
Director Sponsor	Director Allied Health – Melanie Taylor	
Associate Director QPI	Verity Speed	

Endorsement by relevant committee			
Name(s) of Endorsing Committee(s) *e.g. Quality & Strategy committee, Expert Advisory Committee as appropriate to scope of performance standard.*	Conditions of endorsement	Date Endorsed	Please notify coordinating author of endorsement and relevant conditions
Allied Health Council		3 June 2013	
Nutrition EAC		17 April 2013	

Approval by relevant committee			
Performance Standard approved for	1 Year only (Risk rating = Extreme) ☐ 2 Years only (Risk rating = High) ☐ 3 Years only (Risk rating = Moderate or Low) ☐		
Alignment of Practice Guideline EH Wide *i.e.relevant/applicable to staff across more than one directorate* Program or Directorate specific Professional Practice Guideline Corporate Procedure	Clinical Executive Committee Program / Directorate Quality & Strategy Committee *Specify* Professional Council *Specify* Corporate Quality & Strategy Committee	Include date approved ☐ ☐ ☐ ☐	Please notify coordinating author and Policy system manager

Publishing

Date performance standard approval notified to policy system manager	
Date performance standard forwarded to policy administrator	
Date performance standard published on Objectify	

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Chapter 2: Key performance indicators for malnutrition care

1. What are key performance indicators?

Key Performance Indicators are specific and measureable elements of health and social care that can be used to assess quality of care.[1]

Key performance indicators (KPIs) are a measure of performance, based on standards, determined through evidence-based academic literature or through the consensus of experts when evidence is unavailable.[1]

According to The Joint Commission in the United States, KPIs are not intended be direct measures of quality but instead alert us to opportunities for improvement. For the purposes of health service accreditation, KPI monitoring may provide the 'evidence' for meeting individual criterion within the standards. Setting KPIs for malnutrition care allows health services to demonstrate that there are appropriate monitoring processes in place to measure compliance with the required standards of nutritional care.

2. Why is it important to monitor key performance indicators?

Since the measurement of performance itself contributes to improvement, it is necessary to monitor performance indicators in order to improve the quality and safety of healthcare delivery.

In order to facilitate a coordinated approach there should be hospital-level structures and processes in place to develop, monitor and report on overall hospital performance in your health service. Hospital performance measures include clinical indicators to monitor the safety and quality of patient care. This should include malnutrition care because malnutrition satisfies established safety and quality criteria for preventability, high patient and health service impact and clinical priority.[2]

The Australian Commission on Safety and Quality in Health Care (ACSQHC) has recently commissioned work to develop a set of high-priority complications that occur in hospital. The commission is considering the recommendation that malnutrition, together with other identified high-priority complications, be supported as a national set of complications for routine local monitoring and review, as a method to improve safety and quality in providing healthcare services.[2]

The literature supports using performance indicators for nutrition care to improve hospital performance. Nutrition risk screening increased significantly in Dutch hospitals after the introduction of a performance indicator and the obligation to report under-nutrition screening results to the Health Care Inspectorate. Higher rates of screening were found to be more common in hospitals that had greater numbers of patient admissions and thus likely larger clinical teams, clearly defined referral pathways to a dietitian, and using quick-and-easy validated malnutrition screening tools.[3]

Key performance indicators can also be established and monitored for the following.

Benchmarking

KPIs will help identify where performance is good and meeting desired standards and, in contrast, where there are opportunities for improvement. This information could be reviewed over time as change occurs in practice. There is also capacity, where KPIs are similarly defined, for health services to document the standard of care provided against that provided in similar organisations.

Accountability

Data captured as a result of KPI monitoring can be used within the health service to involve and inform clinicians, thus enhancing accountability and encouraging performance improvement for all stakeholders. The key benefits to be gained from using performance indicators do not lie in the collection of the data but in the data analysis and the actions taken to achieve ongoing improvements in clinical practice.[4]

3. How can key performance indicators be developed for malnutrition care?

A number of factors should be considered when developing and evaluating KPIs. Working with experts from your hospital-level clinical data / decision support / performance unit to establish and monitor KPIs for nutrition care is essential.

Define the audience and use for measurement	What is the goal of the measurement? Is the goal for benchmarking internally for quality improvement and monitoring purposes or externally against standards or other organisations? Ensure when comparing data that you have been consistent in your collection of data across the health service. Who is the audience? Audience can influence the unit of analysis or the way in which the result is presented.
Consult with stakeholders and advisory group	What are the needs of the stakeholders? What information can they provide? What information can data capture/analysis staff at my health service provide? Consulting with stakeholders throughout the data development process: • contributes to the acceptance of the selected KPIs • facilitates agreement about data elements • helps them get familiar with the data and standards.
Choose the area to measure	How important is the problem? Are there patient safety concerns? Is there potential for improvement? What is the priority for your health service? The applicability of KPIs will need to be considered individually for each health service – for example, where screening rates are known to be low it may be important to focus on monitoring malnutrition risk screening first and plan at a later date to monitor dietetic referrals generated.
Determine selection criteria	The set of KPIs used must provide a comprehensive view of the service without placing an excessive burden on health services and an individual department to collect data. Does the KPI measure what it is supposed to measure? Does the KPI provide a consistent measure? Is the KPI supported by scientific evidence or the consensus of experts? Can the required data be collected or accessed readily and is it worth the resources? Will the data be collected electronically or manually? Is there availability of existing collection mechanisms? How often will the data be collected, and by whom? Are small changes in practice reflected in the results? What useful decisions can be made from the KPI? Do we have a set of KPIs that measure different aspects of the service?
Define the indicator	See Appendix 1 for a template with the type of detail that could be included when defining a KPI and Appendix 2, which provides an example of a clinical KPI using this template. These templates are optional but could form part of your evidence for accreditation purposes. Targets should be: • realistic but also challenge service delivery towards improvement • SMART (specific, measureable, achievable, relevant, time-bound) • based on an agreed acceptable level of performance.
Develop the minimum dataset	Develop this based on the essential data required to set up the KPI. Only the minimum amount of data required to enable effective decision making should be collected.

Refer to Appendix 3 for a KPI checklist that can be completed to ensure the above factors are considered in the development process.

4. Examples of defined KPIs for malnutrition care

The following table contains examples of defined KPIs for measuring and monitoring the performance of nutrition care in your health service. As mentioned previously it is important to choose the priority areas of focus for your health service, as it will not be possible to monitor all KPIs simultaneously. This area of focus could be based on your health service's strategic plan, mandatory accreditation criteria, an identified clinical risk or incident, or to confirm identified gaps in practice and measure improvements over time.

In order to keep these examples applicable to multiple settings, please note the underlined words in the table below refer to where there is potential for multiple applications. For example, 'inpatient' may be substituted to read 'outpatient'; 'ward' may be substituted to read 'unit' or 'ambulatory chemotherapy or radiotherapy centre' or 'outpatient clinic'.

Frequency and volume of data collection will be variable on individual health service needs – below is a suggested minimum requirement. The far column provides cross-referencing to where these KPIs might be reflected within accreditation standards. Some health services may elect to audit a subset of patients within clinical specialties such as 10 patients per ward per month, or more or less frequently as resources allow or audit results indicate. Refer to sections 5 and 6 of this chapter, where further information is provided about data collection methods and data considerations when using KPIs.

KPI title:	KPI description: (Note: multiple applications of this KPI as per 'Application' column)	KPI target: (variable and dependent upon health service)	Information required to complete calculation: (Numerator divided by denominator expressed as a percentage) • numerator (N) • denominator (D) (* information required for multiple KPI purposes) Note: A subset of patients could be selected for audit, such as 10 bedside charts per ward per month	Data collection frequency: (variable and dependent upon health service – suggested minimum requirement)	Responsibility for collection:	Data collection method:	Application Where could information be collected?	Accreditation Standard Draft Victorian nutrition standard[5] = VNS NSQHS[6] + EQuIPNational[7]
Screening								
Malnutrition risk screening completed	% inpatients admitted to x ward screened for malnutrition risk within 24 hours	100% inpatients admitted to x ward screened for malnutrition risk within 24 hours	(N) Number of inpatients admitted to x ward for the month screened for risk of malnutrition (using a validated tool) within 24 hours (D) Number of inpatients admitted to x ward for the month*	Monthly	Nursing (delegated by NUM on ward) or allied health assistant (AHA)^ ^ dependent upon who is responsible for screening	Electronic – as component of existing bedside audit tool Manual file audit – by dietetic staff	**Ward** or **Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2, 1.2.4, 2.1, 2.2.2, 3.1.2 EQuIPNational 12.5, 12.6.1, 12.6.2, 12.7.1 NSQHS standard 1.8, 8.1, 10.1
Malnutrition risk re-screening completed	% inpatients in x ward with LOS ≥ 7 days re-screened weekly for malnutrition risk	100% inpatients with LOS ≥ 7 days re-screened weekly for malnutrition risk	(N) Number of inpatients in x ward with LOS ≥ 7 days re-screened for malnutrition (using a validated tool) (D) Number of inpatients in x ward with LOS ≥ 7 days*	Monthly	Nursing (delegated by NUM on ward) or AHA^	Electronic – as component of existing bedside audit tool Manual file audit – by dietetic staff		VNS 1.1.2, 1.2.4, 2.1, 2.2.2 EQuIPNational 12.5, 12.6.1, 12.6.2, 12.7.1 NSQHS standard 1.8, 8.1, 10.1

(cont.)

Weight recording completed	% inpatients on x ward weighed and recorded within 24 hours of admission	100% inpatients on x ward weighed and recorded within 24 hours of admission	(N) Number of inpatients on x ward for the month weighed and with weight recorded within 24 hours of admission (D) Number of inpatients admitted to x ward for the month*	Monthly	Nursing (delegated by NUM on ward)	Electronic – as component of existing bedside audit tool Manual file audit – by dietetic staff	**Ward** or **Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2, 1.2.4, 2.1, 2.2.2, 3.1.2 EQuIPNational 12.5, 12.6.1, 12.6.2, 12.7.1 NSQHS standard 1.8, 8.1, 10.1
Weekly weight recording completed	% inpatients on x ward with LOS ≥ 7 days re-weighed weekly	100% inpatients on x ward with LOS ≥ 7 days re-weighed weekly	(N) Number of inpatients on x ward with LOS ≥ 7 days re-weighed (D) Number of inpatients on x ward with LOS ≥ 7 days*	Monthly	Nursing (delegated by NUM on ward)	Electronic – as component of existing bedside audit tool Manual file audit – by dietetic staff		VNS 1.1.2, 1.2.4, 2.1, 2.2.2, 3.1.2 EQuIPNational 12.5, 12.6, 12.7.1 NSQHS standard 1.8, 8.1, 10.1
Dietitian referral for 'at risk' patients completed	% inpatients identified as 'at risk' (from malnutrition screening) referred to dietitian	100% inpatients identified as 'at risk' (from malnutrition screening) referred to dietitian	(N) Number of inpatients on x ward are identified as 'at risk' (positive *Malnutrition screening tool* (MST) score as per health service policy) and referred to dietitian (D) Number of inpatients on x ward are identified as 'at risk' (positive *Malnutrition screening tool* (MST) score as per health service policy)	Monthly	Nursing (delegated by NUM on ward) or Dietetics department (delegated by department manager)	Electronic – as component of existing bedside audit tool Electronic – journey board or referral system (if available in your health service)		VNS 1.1.2, 1.2.4, 1.4.1, 2.1.1, 2.1.2, 2.2.2 EQuIPNational 12.5, 12.6.1, 12.6.2, 12.7.1 NSQHS standard 1.8, 8.1, 10.1

(cont.)

Prolonged fasting	% inpatients on x ward do not exceed ≥ 3 days fasting with no alternate nutritional support	100% inpatients on x ward do not exceed ≥ 3 days fasting with no alternate nutritional support	(N) Number of inpatients on x ward who undergo a fasting period ≥ 3 days with no alternate nutritional support (D) Number of inpatients on x ward who undergo a fasting period	Monthly	Dietetics department (delegated by department manager)	Electronic – by meal ordering systems or patient administration system	Inpatient **ward**	VNS 1.1.2, 1.2.1, 1.2.4, 1.4.2 EQuIPNational 12.5, 12.6.3
Assessment and diagnosis								
Prevalence of malnutrition diagnosis#	% discharged patients assigned ICD-10 malnutrition codes E40-E46 by clinical coder	30% discharged patients assigned ICD-10 malnutrition codes E40-E46 by clinical coder (Note: target may vary depending on patient population in each setting)	(N) Number of discharged patients with LOS ≥ 3 days assigned ICD-10 malnutrition codes E40-E46 by clinical coder (D) Number of discharged patients with LOS ≥ 3 days # Malnutrition as defined by ICD-10 malnutrition codes E40–E46 LOS ≥ 3 days chosen to exclude same day or overnight stay patients	Monthly	Performance / clinical data unit (delegated by department manager) and dietetics department (delegated by department manager)	Electronic (using data collected by clinical data unit)	**Ward** or **Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2, 2.2 EQuIPNational 12.5
Validated assessment tool used for malnutrition diagnosis	% patients assessed by dietitian using a validated tool for the diagnosis of malnutrition	100% patients assessed by dietitian using a validated tool for the diagnosis of malnutrition	(N) Number of patients assessed by dietitian for the month where assessment included use of a validated tool for the diagnosis of malnutrition (D) Number of patients assessed by dietitian for the month*	Annually (Consider completing audit concurrently with malnutrition point prevalence audit)	Dietetics department (delegated by department manager)	Manual file audit – by dietetic staff Electronic file audit – by dietetic staff		VNS 1.1.2, 1.2.4, 1.4.1, 2.2.1, 2.2.2, 3.1.2 EQuIPNational 12.5, 12.6.1

(cont.)

Malnutrition point prevalence#	% inpatients admitted to x ward diagnosed with malnutrition by dietitian	30% inpatients admitted to x ward diagnosed with malnutrition by dietitian (Note: target may vary depending on patient population in each setting)	(N) Number of inpatients admitted to x ward with LOS ≥ 3 days diagnosed with malnutrition by dietitian (D) Number of inpatients admitted to x ward with length of stay (LOS) ≥ 3 days #Malnutrition as defined by SGA or ICD-10 criteria LOS ≥ 3 days chosen to exclude same day or overnight stay patients	Annually	Dietetics department (delegated by department manager)	Manual file audit – by dietetic staff Electronic file audit – by dietetic staff	**Ward** or **Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2, 2.2 EQuIPNational 12.5, 12.6.1

[#] Refer to Appendix 4 for an example of the processes involved in undertaking a malnutrition point prevalence and clinical coding audit within a cancer-specific public hospital.

Intervention								
Clinical documentation audits:								
Nutrition care plan completed#	% inpatients assessed on x ward by dietitian have nutrition care plan	100% inpatients assessed on x ward by dietitian have nutrition care plan	(N) Number of inpatients assessed on x ward by dietitian with a nutrition care plan (D) Number of inpatients assessed on x ward by dietitian # Nutrition care plan should follow consistent structure/format	Biannually	Dietetics department (delegated by department manager)	Manual file audit – by dietetic staff Electronic file audit – by dietetic staff	**Ward** or **Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2, 1.2.4, 1.4.1, 2.2.1, 2.2.2, 3.1.2 EQuIPNational 12.5, 12.6.1
Patient / consumer input into nutrition care plan	% inpatients on x ward who have input into their nutrition care plan	100% inpatients on x ward assessed by dietitian have had input into their nutrition care plan	(N) Number of inpatients on x ward assessed by dietitian with evidence of input into the development of their nutrition care plan (D) Number of inpatients on x ward assessed by dietitian with a nutrition care plan	Biannually	Dietetics department (delegated by department manager)	Manual file audit – by dietetic staff		VNS 1.1.1, 1.1.2, 1.4.1, 3.1.1, 4.2.1 EQuIPNational 12.3, 12.5

(cont.)

Mealtime audits								
Correct meal supplied as per nutrition care plan	% inpatients on x ward receive correct food items as per nutrition care plan	100% inpatients on x ward receive correct food items as per nutrition care plan	(N) Number of inpatients admitted to x ward who receive a meal with correct food items as per nutrition care plan (D) Number of inpatients admitted to x ward receive a meal and have a nutrition care plan	Biannually	Dietetics department (delegated by department manager)	Observational mealtime audit – by food services / dietetic staff	**Ward or Ambulatory Centre** (chemoTx/ radioTx)	VNS 1.1.2, 1.1.4, 1.2.1, 1.2.4, 1.3.1, 1.4.1, 1.4.2, 3.1.2 EQuIPNational 12.5, 12.6.3
Nutritional supplement delivery as per nutrition care plan	% inpatients on x ward receive correct nutritional supplements as per nutrition care plan	100% inpatients on x ward receive correct nutritional supplements as per nutrition care plan	(N) Number of inpatients on x ward who received correct nutritional supplements as per nutrition care plan (D) Number of inpatients on x ward prescribed nutritional supplements*	Biannually	Dietetics department (delegated by department manager)	Observational mealtime audit – by dietetic staff		VNS 1.1.2, 1.2.4, 1.3, 1.4.1, 1.4.2, 3.1.2 EQuIPNational 12.5, 12.6.3
Mealtime assistance alert **(as applicable to your health service)**	% inpatients on x ward needing mealtime assistance had mealtime assistance alert in place at previous meal	100% inpatients on x ward needing mealtime assistance had mealtime assistance alert in place at previous meal	(N) Number of inpatients on x ward for the month needing mealtime assistance had mealtime assistance alert# in place at previous meal (D) Number of inpatients on x ward for the month needing mealtime assistance* # Mealtime assistance alert = bedside signage or a specially coloured meal dome, serviette or meal tray to signify a patient needs assistance at mealtimes.	Biannually	Dietetics department (delegated by department manager)	Observational mealtime audit – by dietetic staff	Inpatient ward	VNS 1.1.2, 1.2.4, 1.3.1, 1.4.2, 1.4.3, 3.1.2 EQuIPNational 12.5

(cont.)

Mealtime assistance provided	% inpatients on x ward needing assistance at mealtimes and received assistance with their previous meal	100% inpatients on x ward needing assistance at mealtimes and received assistance with their previous meal	(N) Number of inpatients on x ward for the month needing assistance at meals and received assistance with their previous meal (D) Number of inpatients on x ward for the month needing feeding assistance* (*Assistance may include from nursing, health professional, assistant or volunteer)	Biannually	Dietetics department (delegated by department manager)	Observational mealtime audit – by dietetic staff Electronic – as component of bedside audit tool	Inpatient ward as per page 65	VNS 1.1.2, 1.2.4, 1.4.2, 1.4.3, 3.1.2 EQuIPNational 12.5, 12.7.1
Monitoring and evaluation								
Clinical documentation audits:								
Timely Dietitian review completed	% inpatients reviewed by dietitian within recommended timeframe	100% inpatients reviewed by dietitian within recommended timeframe*	(N) Number of inpatients admitted to x ward reviewed by dietitian for the month where timeframe for review has been met (D) Number of inpatients admitted to x ward reviewed by dietitian for the month *(*As applicable to your health service documentation policy or best practice guidelines. For example, minimum weekly review for long-stay inpatients or weekly review for oesophageal cancer patients receiving chemo-radiation therapy)*	Biannually	Dietetics department (delegated by department manager)	Manual file audit – by dietetic staff Electronic –activity statistics management program	**Ward or Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2, 1.2.4, 2.2.2, 1.4.2 EQuIPNational 12.5, 12.6.1, 12.6.3
Nutrition discharge plan completed	% inpatients admitted to x ward with ongoing nutrition care needs has nutrition discharge plan	100% inpatients admitted to x ward with ongoing nutrition care needs has nutrition discharge plan	(N) Number of inpatients admitted to x ward, with ongoing nutrition care needs with a nutrition discharge plan (D) Number of inpatients admitted to x ward with ongoing nutrition care needs	Biannually	Dietetics department (delegated by department manager)	Manual file audit – by dietetic staff		VNS 1.1.2, 2.2.2, 3.1.2, 3.2 EQuIPNational 12.4, 12.5, 12.8

(cont.)

Mealtime audits								
Food consumption / plate wastage	% inpatients admitted to x ward who complete 75% or more of their meal tray	80% inpatients admitted to x ward who receive meal tray complete 75% or more of their meal tray	(N) Number of inpatients admitted to x ward receiving a meal tray who complete 75% or more of their meal tray (D) Number of inpatients admitted to x ward receiving a meal tray *As per Williams (2011) – 'Some attempts have been made to develop targets for acceptable plate waste levels, ranging from 10–30%, but ultimately it is important for each institution to monitor their own performance and strive to find effective ways to improve the nutritional intakes of their vulnerable patients.'* [8] Nutritional intake can be calculated from food consumption according to local nutritional analysis of meals and menus.	Biannually	Dietetics department (delegated by department manager)	Observational mealtime audit – by dietetic staff (in conjunction with food services staff)	**Ward or Ambulatory Centre** (chemoTx/ radioTx)	VNS 1.1.4, 1.2.4, 1.3.1, 1.4.2, 1.4.4, 3.1.2 EQuIPNational 12.5, 12.6.3
Nutritional supplement consumption	% inpatients on x ward consume all nutritional supplements prescribed	80% inpatients on x ward consume all nutritional supplements prescribed	(N) Number of inpatients on x ward who consumed all prescribed nutritional supplements (D) Number of inpatients on x ward prescribed nutritional supplements*	Biannually	Dietetics department (delegated by department manager)	Observational mealtime audit – by dietetic staff (in conjunction with food services staff)		VNS 1.1.2, 1.2.4, 1.3, 1.4.2, 3.1.2 EQuIPNational 12.5, 12.6.3
Missed meals	% inpatients on x ward who were missed one or more meals in the previous 24 hours	0% inpatients on x ward missed one or more meals in the previous 24 hours	(N) Number of inpatients on x ward who were eligible to receive a meal but missed one or more meals in the previous 24 hours (for example, meal didn't arrive or missed eating meal as off ward at meal delivery time) (D) Number of inpatients on x ward in the last 24 hours who were eligible to receive a meal (Eligible – defined as patient not fasting)	Biannually	Dietetics department (delegated by department manager)	Observational mealtime audit – by dietetic staff (in conjunction with food services staff / food services dietitian)		VNS 1.1.4, 1.2.4, 1.4.2, 3.1.2 EQuIPNational 12.5, 12.6.3

(cont.)

Interruptions to mealtimes	% inpatients on x ward who were interrupted during observed mealtime period	≤ 20% inpatients on x ward were interrupted during observed mealtime period	(N) Number of inpatients on x ward who were interrupted during observed mealtime period (D) Number of inpatients on x ward during the observed mealtime period Interruptions defined as: ward round, medication round, taking vital observations or blood test, visit by health professional, transport to investigation such as x-ray	Biannually (as minimum)	Dietetics department (delegated by department manager)	Observational mealtime audit – by dietetic staff Electronic – as component of existing bedside audit tool	**Ward or Ambulatory Centre** (chemoTx/ radioTx) as per page 67	VNS 1.2.4, 1.4.2, 3.1.2 EQuIPNational 12.5
Patient / consumer satisfaction with meal service	% inpatients on x ward who are satisfied (scored ≥ 80%) with the taste of meals	80% inpatients on x ward were satisfied (scored ≥ 80%) with the taste of meals	(N) Number of inpatients on x ward completing meal satisfaction survey who report being satisfied (scored ≥ 80%) with the taste of meals in hospital (D) Number of inpatients on x ward completing meal satisfaction surveys	Monthly	Food services department (delegated by department manager)	Mealtime satisfaction survey – by food services staff	**Ward or Ambulatory Centre** (chemoTx/ radioTx) Satisfaction may be applied to taste or temperature, serving size, presentation, accuracy of food items on meal tray	VNS 1.1.4, 1.2.1, 1.4.4, 1.4.2, 1.4.4 EQuIPNational 12.5.2 NSQHS Standard 2.8
Access to nutrition and dietetic services								
Dietitian response time to referral	% inpatients on x ward referred to dietitian is assessed within 24 hours	100% inpatients on x ward referred to dietitian is assessed within 24 hours	(N) Number of inpatients on x ward assessed by dietitian for the month where assessment occurs within 24 hours (D) Number of inpatients on x ward assessed by dietitian for the month* Response time for KPI may be set locally based on setting and priority tool used	Quarterly	Dietetics department (delegated by department manager)	Electronic – referral system (if available in your health service) Manual file audit – by dietetic staff	**Ward or Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2, 1.2.4, 1.4.1, 2.1.1, 2.2.2, 3.1.1 EQuIPNational 12.5, 12.6.1

(cont.)

Waiting times for outpatient clinics – high priority patients	% high-priority patients referred to dietetics outpatient clinic who receive an appointment within 2 weeks	100% high-priority patients referred to dietetic outpatient clinic receive an appointment within 2 weeks	(N) Number of high-priority patients referred to dietetic outpatient clinic over the past quarter who received an appointment within 2 weeks of initial referral date (D) Number of high priority patients referred to dietetic outpatient clinic over the past quarter	Quarterly	Dietetics department (delegated by department manager)	Manual file audit – by dietetic staff Electronic –patient administration system or activity management program (if available at your health service)	**Ambulatory Centre** (chemoTx/ radioTx) or **outpatient clinic**	VNS 1.1.2 EQuIPNational 12.9
Staff education								
Staff education and training	% food services staff who have attended or completed a nutrition education training program	100% food services staff who have attended or completed a nutrition education training program	(N) Number of food services staff employed who have attended or completed a nutrition education training program (D) Number of food services staff employed	Annually	Jointly between dietetics department (delegated by department manager) and food services department	Education review audit – by dietetic staff Electronic -reporting from e-learning modules (if available at your health service)	Staff – may include food services, nursing, medical, allied health, AHAs, support staff.	VNS 1.1.2, 1.1.3, 1.1.4, 1.2.4, 2.1.1 EQuIPNational 12.5, 12.6.3, 12.7.2
Competency training for dietitians	% dietetic staff who have undertaken annual competency for malnutrition assessment	100% dietetic staff have undertaken annual competency for malnutrition assessment	(N) Number of dietitians employed who have undertaken annual competency for malnutrition assessment (D) Number of dietitians employed	Annually	Dietetics department (delegated by department manager)	Education review audit – by dietetic staff	Annual competency may also include credentialing for National Inpatient Medication Chart (NIMC) prescribing, advanced scope of practice (as per local health service)	VNS 1.1.2, 1.1.3, 1.2.4, 2.1.1, 2.2.1 EQuIPNational 12.5, 12.6.3, 12.7.2

Some food services audits have been included in the above table but further expansion of this was outside of the scope of this toolkit. Food services audits, however, are helpful to monitor consumer satisfaction and overall 'patient experience'.

5. How might this information be collected?

The method of data collection will vary between health services. The table below is a proposed way for collecting this information – it serves only as a potential model for trial. Increasingly health services report moving away from manual towards electronic methods of auditing / data collection as these provide a more time-efficient use of resources.

Data collection method	What information could be captured? (KPI title) * denotes where information could be captured via multiple data collection methods	Links to examples
Electronically (where available at individual health services)		
Electronic – as component of existing bedside audit tool	Malnutrition risk screening completed* Weight recording completed* Malnutrition risk re-screening completed* Weight completed weekly* Mealtime assistance provided* Interruptions to mealtimes*	Bedside audit tool - Qld Health.pdf Bedside audit tool - Western Health.pdf
Electronic – journey board or internal referral system	Dietitian referral for 'at risk' patients* Dietitian response time to referral*	
Electronic – file audit by dietetic staff	Validated nutrition assessment tool used to diagnose malnutrition*	
Electronic – patient administration and/or clinical information system	Prevalence of malnutrition diagnosis Frequency of review/intervention by dietitian* Waiting times for outpatient clinics – high-priority patients*	Maln code audit - Latrobe Reg.xls
Electronic – meal ordering system	Prolonged fasting*	
Electronic – reporting from e-learning modules	Staff education and training*	
Manually		
Manual file audit – by dietetic staff	Malnutrition risk screening completed* Weight recorded completed* Malnutrition risk re-screening completed* Dietitian referral for 'at risk' patients* Weight recorded weekly* Validated nutrition assessment tool used to diagnose malnutrition Malnutrition point prevalence Documentation of a nutrition care plan Frequency of review/intervention by dietitian* Prolonged fasting* Patient/consumer input into nutrition care plan Nutrition discharge plan completed Nutrition follow-up (or onward referral) completed Dietitian response time to referral* Waiting times for outpatient clinics – high-priority patients*	Audit template - STV.xlsx MST Audit tool - Eastern Health.xls

(cont.)

Mealtime satisfaction survey – by food services staff	Patient/consumer satisfaction with meal service	Meal satisfaction survey - STV.pdf
Observational mealtime audit – by food services staff (incorporating mid-meal service)	Correct meal supplied as per nutrition care plan * Food consumption / plate wastage* Nutritional supplement consumption* Missed meals*	Supplement Delivery Audit Tool - STV.docx FS Wastage Template-STV.xlsx
Observational mealtime audit – by dietetic staff (incorporating mid-meal service)	Correct meal supplied as per nutrition care plan* Nutritional supplement delivery as per nutrition care plan Mealtime assistance alert* Mealtime assistance provided* Food consumption / plate wastage* Nutritional supplement consumption* Missed meals* Interruptions to mealtimes*	Meal time audit template - GV Health. Meals Audit Tool - PeterMac.xlsx
Education review audit – by dietetic staff	Staff education and training Competency training for dietitians	

6. Data considerations when using key performance indicators

- The collection of the data will vary depending upon individual health service priorities and resourcing/time for data collection. Could these tasks be delegated? What other staff could assist in compiling this information? Should you be advocating for additional funding within individual departments to support this work?
- In examples of defined KPIs, the denominator was often the entire ward population; however, instead of collecting data on all patients for the month a selected subset could be collected such as 10 bedside patient charts audited per ward per month.
- Ideally KPI data should be collected by the department in a position to take action and influence the achievement of the KPI target. This does, however, open the auditing process to bias. For example: Where malnutrition risk screening is completed by nursing staff, these staff should be given responsibility to complete the audit of malnutrition risk screening completion.
- Using mobile data management system devices may aid collecting, analysing and reporting data such as SurveyMonkey, iPad applications.

7. How frequently should key performance indicators be reviewed?

It is important to review KPIs at timed intervals to ensure refinement of the process and improved data availability. As health services are continually evolving it is important that KPIs respond to these changes.

The identification of appropriate indicators should be an iterative process and should involve an assessment of issues such as the usefulness of the data, availability of existing collection mechanisms and resources required for collection.[4]

8. How can key performance indicator data be disseminated?

Communicating the results of the audits is an important step in the process. Results should be presented to allow the intended audience to easily interpret and use the information generated by the measure. Consider providing feedback of specific audit results to local clinical wards and units as well as aggregated results across the wider health service to facilitate focused improvement programs in areas of greatest need.

Where will information on the results of the audits be disseminated?
What will be the platform for distributing this information to the wider health service?
What strategies will assist in feeding this information through to the highest level?

Refer to Chapter 1: *Malnutrition governance* for further information about disseminating this information. Appendix 2, 3 and 4 within Chapter 1 also provide a gap analysis and action plan template and a checklist for successfully completing these tools.

9. Advancing practice in performance monitoring

Each health service will be at different stages in KPI monitoring. The following provides some ideas for future areas of improvement, particularly where well-established systems are currently in place for monitoring malnutrition care.

Documentation of KPIs	*Does this already exist formally as is presented in Appendix 1 or a similar format?*
Benchmarking	Develop an action plan around steps to be undertaken to progress benchmarking. This process would likely involve the sharing of information as collected from Appendix 1 to ensure the data is defined so there is comparison of 'like with like'.
Review existing audit tools	Create modifications or fine-tune data-capturing tools. If not already in existence, explore ways to increase efficiency by capturing multiple data elements at the same time.
Review data collection systems	*Is there a more effective and efficient way of capturing and analysing data?* Where some data is collected manually, consider discussing with stakeholders ideas for ways to compile data. *Are there opportunities to move from manual paper-based surveys to an electronic application (such as collected using iPad applications or SurveyMonkey)*? This may aid data compilation and allow for easier analysis.
Review existing KPIs	With changes in data availability further details may be able to be captured that more appropriately reflect what you wish to monitor. *Is it still appropriate that data is collected at current intervals?* *Could some be increased to more frequent review and others less frequent review?* This could be based on degree of success in meeting KPI targets. *Does the target need to be reviewed?* *Are the current targets still appropriate?* *Could additional KPIs that further reflect the effectiveness of dietetic input and clinical outcomes be incorporated into the auditing cycle?*
Review how existing KPI data is disseminated	*Could information be distributed more widely within your health service?* *How could you go about achieving this?* Create an action plan – refer to Chapter 1: Malnutrition governance.

10. Where can I obtain further information about key performance indicators?

Australian Institute of Health and Welfare 2007, *A guide to data development*, Cat. No. HWI 94
http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442458038

Australian Commission on Safety and Quality in Health Care 2013, *Final report – Identify, specify and group a national set of high-priority complications which occur in hospital for routine local review and to inform Joint Working Party consideration of appropriate potential approaches to ensuring safety and quality in the provision of healthcare services*
http://www.safetyandquality.gov.au/wp-content/uploads/2014/06/National-set-of-high-priority-hospital-complications-Dec-2013.pdf

Health Information and Quality Authority 2013, *Guidance on developing key performance indicators and minimum data sets to monitor healthcare quality*
http://www.hiqa.ie/publications/guidance-developing-key-performance-indicators-kpis-and-minimum-data-sets-monitor-healt

Malnutrition Matters 2012, *Meeting quality standards in nutritional care. A toolkit for commissioners and providers in England*, Ailsa Brotherton, Nicola Simmonds and Mike Stroud on behalf of BAPEN Quality Group Commissioning Nutritional Care
http://www.bapen.org.uk/professionals/publications-and-resources/commissioning-toolkit

NSW Health Department 2001, *The clinicians toolkit for improving patient care*
http://www0.health.nsw.gov.au/pubs/2001/clintoolkit.html

The Canadian Journal of Hospital Pharmacy 2011, *Should key performance indicators for clinical services be mandatory?*
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3053195/

World Health Organization 2005, *Mental health information systems (mental health policy and service guidance package)*
http://www.who.int/mental_health/policy/mnh_info_sys.pdf

Appendix 1: Key performance indicator template

1	KPI title	Exact title of the KPI
2	KPI description	Description of the KPI including a description of the target population
3	KPI rationale	Rationale for the measurement of the KPI
4	KPI target	Indicate the target for the KPI – a target should be set for the KPI to inform progress towards an acceptable level of performance.
5	KPI calculation	Indicate how the KPI will be calculated. This should contain information on the numerator and denominator. This should also contain information on the inclusion and exclusion criteria. The target population is called the **denominator** and includes all services users or events that qualify for inclusion in the measurement process. The subset of the target population that meets the criteria as defined in the indicator is called the **numerator**.
6	Data source(s)	Indicate what data source(s) will be used for the KPI; for example, data sources include administrative databases, medical records, national health information resources and/or survey data.
7	Data collection frequency	Indicate how often the data to support the KPI will be collected. ☐ Daily ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐ Other – give details:
8	Tracer conditions	Indicate the terminology to be used to identify what should be included in the data. This should include synonyms, International Classification of Disease (ICD) and SNOMED (Systematised Nomenclature of Medicine Clinical Terms) where applicable.
9	Minimum dataset	Indicate what core data items (with definitions) should be collected for the purpose of reporting the KPI.
10	State–national comparison	Indicate if this KPI is known to be collected in other Victorian health services or in other health services outside of Victoria and therefore allows for national comparison.
11	KPI monitoring	Indicate how often the KPI will be monitored and by whom.
12	KPI reporting frequency	Indicate how often the KPI will be reported. ☐ Daily ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐ Other – give details:
13	KPI report period	Indicate the period to which the data applies: ☐ Current (for example, daily data reported on that same day of activity, monthly data reported within the same month of activity) ☐ Monthly in arrears (June data reported in July) ☐ Quarterly in arrears (quarter 1 data reported in quarter 2) ☐ Rolling 12 months (previous 12-month period) ☐ Other – give details:
14	KPI reporting aggregation	Indicate the level of aggregation – this refers to the combination of results to provide a broader picture of performance, for example, over a geographical location. ☐ Health service wide ☐ Individual health service sites ☐ Other – give details:

(cont.)

15	KPI is reported in which reports?	Indicate where the KPI will be reported; for example, the KPI may be reported in yearly service plans or in monthly performance reports.
16	Web link to data (where available)	Indicate the link to where the data is located (where relevant).
17	Additional Information	Any other relevant information relevant to the KPI
	Contact details for person responsible for the KPI	Name: Designation: Contact details:
	Details of the approval process for the KPI	Name: Date: Version: Review date:

Adapted from Health Information and Quality Authority 2013[1]

Appendix 2: Key performance indicator template – worked example

1	KPI title	*Malnutrition risk screening completed on admission*	
2	KPI description	*Percentage of inpatients admitted to oncology ward/unit screened for malnutrition risk using validated screening tool (MST) within 24 hours*	
3	KPI rationale	*Malnutrition is common (30 per cent prevalence rate for Australian inpatients and higher for cancer patients), often overlooked by medical and nursing staff, and is associated with increased morbidity and mortality, increased length of hospital stay and increased healthcare costs. Completing malnutrition risk screening within 24 hours of admission to hospital allows early identification and referral to a dietitian for assessment and nutrition care planning.*	
4	KPI target	*100 per cent of inpatients admitted to oncology ward/unit are screened for malnutrition risk using a validated screening tool (MST) within 24 hours*	
5	KPI calculation	*Numerator divided by denominator expressed as a percentage* *Numerator: Number of inpatients admitted to oncology ward/unit (or selected subset of) screened for malnutrition risk using a validated tool within 24 hours* *Denominator: Number of inpatients admitted to oncology ward/unit (or selected subset of)*	
6	Data source(s)	*Administrative data* *Medical records* *Bedside risk assessment tool*	
7	Data collection frequency	Indicate how often the data to support the KPI will be collected. ☐ Daily ☐ Weekly ☑ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐ Other – give details:	
8	Tracer conditions	*Not applicable*	
9	Minimum dataset	*UR number:*	*Unique health identifier*
		Date patient admitted to ward/unit:	*The date on arrival*
		Date patient malnutrition risk screen completed on ward/unit:	*The date on the completed malnutrition risk screening form*
		Screening delay reason:	*Identifies a justified reason for delay in completing malnutrition risk screening form*
10	State–national comparison	*Not routinely collected by all Victorian health services or national health services thus difficult to compare at either a state or national level at this time.*	
11	KPI monitoring	*This will be monitored on a monthly basis by nursing staff (as delegated by the nurse unit manager) on the oncology ward/unit.*	
12	KPI reporting frequency	Indicate how often the KPI will be reported. ☐ Daily ☐ Weekly ☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☑ Other – give details: *Every second month at multidisciplinary nutrition committee*	
13	KPI report period	Indicate the period to which the data applies. ☑ Current ☐ Monthly in arrears ☐ Quarterly in arrears ☐ Rolling 12 months ☐ Other – give details:	

(cont.)

14	KPI reporting aggregation	Indicate the level of aggregation – this refers to the combination of results to provide a broader picture of performance, for example, over a geographical location. ☑ Health service wide ☐ Individual health service sites ☐ Other – give details:
15	KPI is reported in which reports?	*This KPI will be reported in the monthly performance report for the oncology ward/unit and these are frequently reported to the multidisciplinary committee overseeing nutrition management within the hospital.*
16	Web link to data (where available)	*Not applicable*
17	Additional Information	*Monthly KPI data is sent to the dietetics department.*
	Contact details for person responsible for the KPI	*Name: Jane Smith* *Designation: Nurse Unit Manager – Oncology Ward/Unit* *Contact details: jane.smith@healthservice.org.au*
	Details of the approval process for the KPI	*Name: Jane Smith* *Date: 14/03/2014* *Version: 1* *Review date: 14/3/2016*

Adapted from Health Information and Quality Authority 2013[1]

Appendix 3: Key performance indicator checklist

	Action required	In progress	Completed	Not applicable
KPI development				
Do you have the audience for your KPI clearly defined? Do you have a clear goal for measurement?				
Have you consulted with stakeholders? (including your multidisciplinary nutrition committee – as applicable)				
Have you established what the priority is for your health service? Which KPI will be most important to your health service to monitor?				
Have you considered the scope of the KPI (ward, day chemo unit, outpatient clinic)?				
Have you clearly defined the indicator – using KPI template (Appendix 1) to assist?				
Have you researched the target level? Is it a 'SMART' target?				
Data collection				
Have you developed the minimum dataset for your KPI?				
Have you determined who will take responsibility for data collection?				
Have you considered how frequently data will be collected?				
Have you considered electronic data available versus manual data collection?				
Have you determined how the data will be collected? Have you consulted with other health services to determine how data is captured and monitored?				
Is there an existing audit tool or shared tool that can be applied to your health service? Does an organisation specific audit tool need to be developed?				
Have you determined how frequently you will review the KPI and associated target?				
Have you considered the resourcing involved in collecting this data?				
Data application				
Have you considered how this KPI will assist in meeting accreditation standards and how this could be reported up within your health service?				
Have you determined how information on the outcome of the KPI monitoring will be disseminated?				

Appendix 4: Determining malnutrition and malnutrition risk prevalence in health services – building a case for improving nutrition care

Undertaking a malnutrition audit and calculating potential loss of hospital revenue as a result of uncoded malnutrition has helped some health services secure funding for additional nutrition and dietetic resources.[9–14] Malnutrition coding contributes to casemix funding within public hospitals. Further information about casemix funding can be found at <www.health.vic.gov.au/abf/history>. Literature has identified that between 12 and 56 per cent of audited patients would have hypothetical changes in Australian refined diagnosis-related groups (DRG) if malnutrition had been correctly diagnosed, documented and coded. This has the potential to result in financial reallocations leading to hypothetical increases in overall casemix funding.[9–14] Where health service national weighted activity unit (NWAU) targets (previously known as weighted inlier equivalent separations (WIES)) have already been met, there will be no potential for malnutrition coding to increase hospital reimbursement. Whereas in services that are below NWAU targets, such work may help to build business cases for additional nutrition service resources by demonstrating considerable financial gains.

The information below provides an example of how to complete this type of audit. Refer also to Figure 1.

Step 1. Complete a malnutrition audit (malnutrition point prevalence)

A malnutrition audit is undertaken to estimate the level of malnutrition risk and diagnosed malnutrition within a chosen setting (such as an acute oncology hospital). Length of time for the audit may vary from a day to a month; however, ideally collect data over a number of weeks to ensure an appropriate sample. Patients included in the audit should receive usual nutrition care separate from the audit (such as screening, referral to a dietitian for nutrition assessment, and documentation of malnutrition).

Screen (using MST, for example) all available admitted patients for malnutrition risk.

If MST $\geq$ 2 (at risk of malnutrition) – complete nutrition assessment using a validated nutrition assessment tool (such as PG-SGA or SGA) to determine whether the patient meets diagnostic criteria for malnutrition (refer to Chapter 3, section 6: *Nutrition assessment and malnutrition diagnosis*).

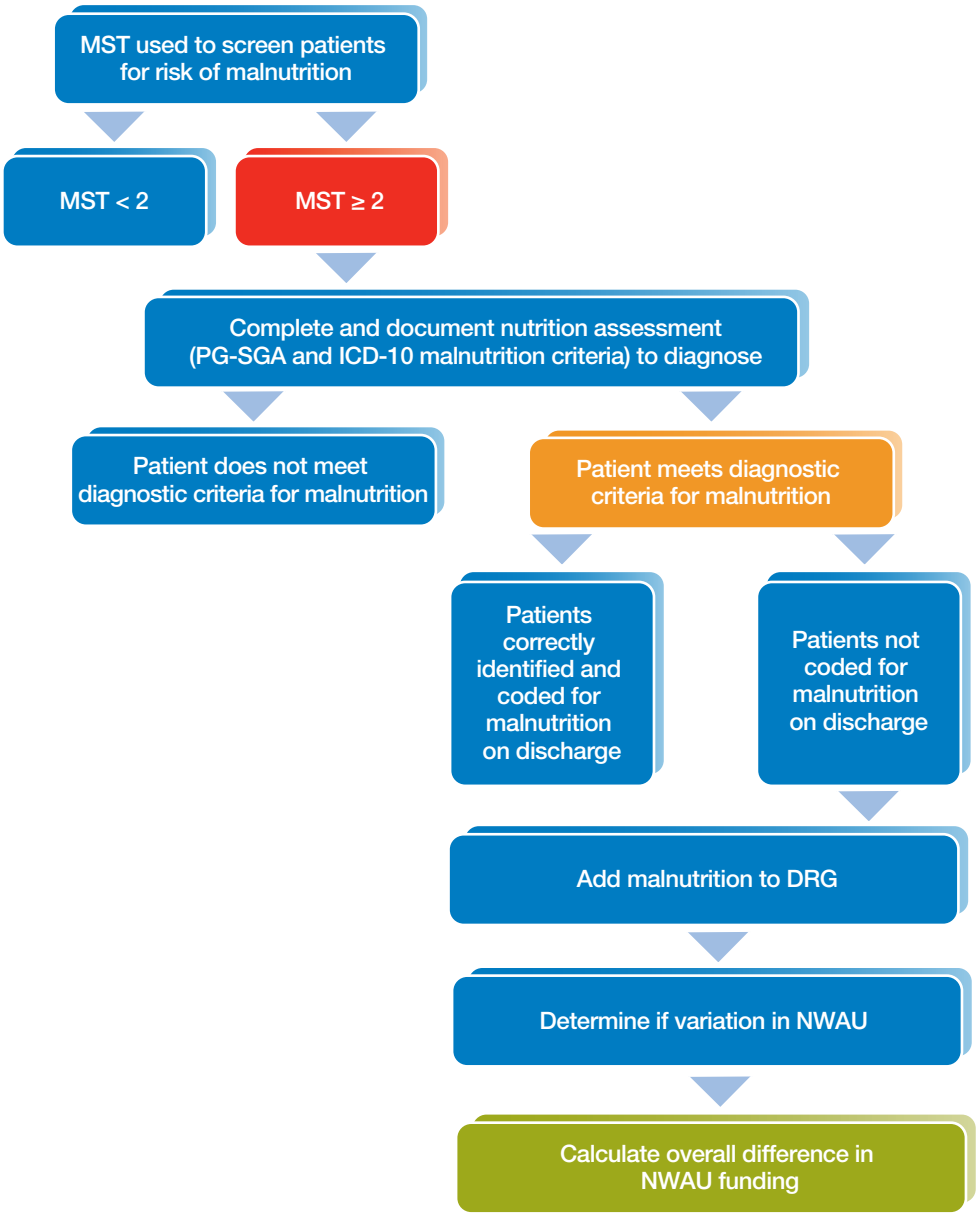
Step 2. Complete a malnutrition coding audit (prevalence of malnutrition diagnosis)

A coding audit is undertaken to determine the change, if any, to the NWAU value if malnutrition is added to the DRG. This identifies the missed opportunity for revenue in the absence of routine malnutrition screening and diagnosis. Collaborate with your health service hospital coders and clinical costing support staff for assistance with gathering this data.

1. Forward the UR numbers of patients diagnosed with malnutrition in the audit to the hospital coding staff. Ask them to determine whether these same patients were coded for malnutrition on discharge. If they were not coded, ask coding staff for reasons (such as no documentation of malnutrition).
2. Of those patients who were diagnosed with malnutrition in the audit but were not coded, ask coders to hypothetically (and retrospectively) add malnutrition to see if the DRG code and NWAU funding changes. Calculate the difference in revenue, if any, the correct coding of malnutrition would have made to hospital funding.

Refer to Chapter 3 of this toolkit for further information about how protein-energy malnutrition (PEM) can be diagnosed and documented.

Figure 1: Summary of the flow of data collection involved in completing a malnutrition and coding audit



The data collected from malnutrition and coding audits may be utilised further by calculating annual projections and estimates of resources required to identify and treat malnutrition. These audits rely on the use of validated nutrition screening, assessment and documentation processes, which will be discussed in further chapters within this toolkit. To further assist in this work, refer to Chapter 3 (section 4), which discusses strategies to increase malnutrition risk screening compliance and section 6, which explores strategies for ensuring that malnutrition diagnoses are identified by clinical coding staff.

Appendix 5: Examples of existing health service documents

Electronic data collection tools:

- Queensland Bedside Audit 2013 – Inpatient – Queensland Health
  Bedside audit tool – Qld Health
- Bedside audit tool – Western Health
  Bedside audit tool – Western Health
- Malnutrition Coding Audit Tool – Latrobe Regional Health Service
  Maln code audit – Latrobe Regional Hospital

Manual data collection tools:

- Manual file audit template – St Vincent's Hospital Melbourne
  Audit template – STV
- MST audit tool – Eastern Health
  MST audit tool – Eastern Health
- Meal satisfaction survey – St Vincent's Hospital Melbourne
  Meal satisfaction survey – STV
- Ward supplement delivery audit tool – St Vincent's Hospital Melbourne
  Supplement delivery audit tool – STV
- Food service plate wastage audit tool – St Vincent's Hospital Melbourne
  FS Wastage Template – STV
- Meal time audit template – Goulburn Valley Health
  Meal time audit template – GV Health
- Meal time audit tool – Peter MacCallum Cancer Centre
  Meals Audit Tool – Peter Mac

QUEENSLAND BEDSIDE AUDIT 2013 - INPATIENT

Queensland Government

A3 Correct A3 Incorrect ● Correct ◉ Incorrect

Hospital / Facility

(Please enter your Hospital / Facility name or code)

Ward Name

Affix patient label OR complete UR Number and DOB

UR NUMBER | **DATE OF BIRTH**

If Unoccupied bed, leave blank

Section 1 - Demographics

1.0 **Audit Date** ___/___/_____

1.1 **Bed Status**

- ○ Occupied
- ○ Occupied (Patient Absent)
- ○ Occupied (Non Participating)
- ○ Unoccupied → GO TO Question 2.0

1.2 **Patient Sub population** Categorise the patient into one of the following specific populations

- ○ Aged Care (in MPHS)
- ○ Paediatric
- ○ Special Care Nursery (SCN)
- ○ ICU- Neonatal (NICU)
- ○ ICU- Adult (AICU)
- ○ Mental Health (in Mental health unit)
- ○ Maternity- antenatal
- ○ Maternity- intrapartum
- ○ Maternity- postnatal
- ○ Palliative Care / End Of Life
- ○ Day Procedure
- ○ All Other

Section 2 - Bed Area Safety

2.0 What type of bed rail is present?

Tip: N/A for cot, bassinet, trolley and stretcher. To identify potential patient safety entrapment risk.

- ○ Horizontal
- ○ Horizontal Joyce 900 with corrective action
- ○ Horizontal Joyce 900 without corrective action
- ○ Split - Solid
- ○ Split - Open
- ○ Vertical - Rigid with extension
- ○ Vertical - Rigid without extension
- ○ Vertical - Flexible with extension
- ○ Vertical - Flexible without extension
- ○ Other
- ○ No bed rail → GO TO Question 2.3
- ○ Bed not present → GO TO Question 2.3
- ○ N/A → GO TO Question 2.3

2.1 Can the bed rail be fixed into a mid position? ○ Yes ○ No

2.2 Is a manufactured bed rail cover fitted? ○ Yes ○ No

2.3 What support surfaces are present at the bedside?
Select all devices that are present

Bedding
- ○ Standard pressure reducing foam mattress
- ○ Pressure reducing overlay - powered
- ○ Pressure reducing overlay - unpowered
- ○ Alternating mattress - replacement
- ○ Alternating mattress - overlay
- ○ Special / self adjusting mattress
- ○ Specialty bed system
- ○ Vinyl mattress
- ○ Other

Chair
- ○ Pressure reducing chair
- ○ Cushion - Air/ Gel
- ○ Cushion - Foam
- ○ Cushion - Other
- ○ Other

Positioning
- ○ Heel elevator
- ○ Extra pillow
- ○ Bed cradle
- ○ Sheepskin
- ○ Other

If Unoccupied, END OF AUDIT

2.4 Is the nurse call system within reach of the patient? ○ Yes ○ No ○ N/A

Tip: N/A for AICU, NICU, SCN, HDU, CCU, occupied patient absent, should not be within reach

2.5 Is there a mobility aid within reach of the patient? ○ Yes ○ No ○ N/A ○ Independent

Tip: N/A for AICU, NICU, SCN HDU, CCU, occupied patient absent, should not be within reach

If Occupied (Patient Absent) or Occupied (Non Participating), GO TO Question 6.0

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Section 3 - Patient Identification

3.0 What method is used to identify the patient? Select only one method	○ Identification (ID) band ○ Photo ID ○ Other technology ○ None present If Photo ID, Other technology, None present, GO TO Question 3.7
3.1 If ID band, is it a single ID band (one only)?	○ Yes ○ No → If No, GO TO Question 3.7
3.2 If a single ID band, is it white or red?	○ Yes ○ No → If No, GO TO Question 3.7
3.3 If a single ID band (white or red), what core identifiers are present on the ID band? Select all that are present	○ MRN ○ Name ○ DOB
3.4 If a single ID band (white or red), are the identifiers in black text on a white background?	○ Yes ○ No → If No, GO TO Question 3.6
3.5 If Yes, are all the identifiers legible?	○ Yes, handwritten ○ Yes, typed ○ No
3.6 If a single ID band (white or red), are the patient identification details correct? Tip: To verify confirm Name & DOB with the patient	○ Yes ○ No ○ Unable to verify at bedside
3.7 Does the patient have any lines for administration of medication / fluids? Select all that are present Tip: with a line attached, not cannula alone	○ Peripheral IV ○ Central venous ○ Epidural ○ Intra arterial ○ Subcutaneous ○ Other ○ None present → If None present, GO TO Question 4.0
3.8 If a line is present, which line routes are all labelled correctly by route and line change due date? Select all that are correct Tip: For Epidural check catheter inserted date, not line change due date	○ Peripheral IV ○ Central venous ○ Epidural ○ Intra arterial ○ Subcutaneous ○ Other
3.9 Are any line change due dates overdue?	○ Yes ○ No ○ N/A for Epidural

Section 4 - Patient Questions

Ask "Have you seen a poster or DVD or been provided with a brochure or written information about:"	
4.0 "the Australian Charter of Health Care Rights?" Tip: N/A for AICU, NICU, SCN, comatose, cognitively impaired, deaf/mute patient & patient of non english speaking background	○ Yes ○ No ○ Don't know ○ N/A If N/A, GO TO Question 4.14
4.1 "how to prevent falls?"	○ Yes ○ No ○ Don't know ○ N/A
4.2 "how to prevent pressure injuries?"	○ Yes ○ No ○ Don't know ○ N/A
4.3 "how you can get help if you are concerned you are getting worse or not improving?"	○ Yes ○ No ○ Don't know ○ N/A
4.4 "how you can provide feedback on your care? eg. comments or concerns"	○ Yes ○ No ○ Don't know ○ N/A
Ask "Has a staff member explained:"	
4.5 "the Australian Charter of Health Care Rights?"	○ Yes ○ No ○ Don't know ○ N/A
4.6 "how to prevent falls?"	○ Yes ○ No ○ Don't know ○ N/A
4.7 "how to prevent pressure injuries?"	○ Yes ○ No ○ Don't know ○ N/A
4.8 "how you can get help if you are concerned you are getting worse or not improving?"	○ Yes ○ No ○ Don't know ○ N/A
4.9 "how you can provide feedback on your care? eg. comments or concerns"	○ Yes ○ No ○ Don't know ○ N/A
4.10 **Ask "Doctors and nurses may discuss with each other aspects of your care. Were you involved in any of these discussions in the last 24 hours?"**	○ Yes ○ No ○ Don't know ○ N/A
Ask "Have you been involved in developing a plan:"	
4.11 "to prevent you falling while in hospital?"	○ Yes ○ No ○ Don't know ○ N/A
4.12 "to prevent you developing a presssure injury while in hospital?"	○ Yes ○ No ○ Don't know ○ N/A
4.13 "for your nutritional needs while in hospital?"	○ Yes ○ No ○ Don't know ○ N/A
4.14 **Ask "At your last meal did you need assistance?"** Tip: Assistance includes setting up, opening of food packaging, supervision and/or full feeding; N/A for patient medically unable to eat, AICU, NICU, SCN, comatose, deaf/mute patient & patient of non english speaking background	○ Yes ○ No ○ Don't know ○ N/A If N/A, GO TO Question 4.21

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Section 4 – Patient Questions continued

4.15 **Ask "At your last meal did you receive assistance?"** ○ Yes ○ No ○ Don't know ○ N/A

If No, Don't know or N/A, GO TO Question 4.18

4.16 **If Yes, Ask "Who provided that assistance?"** Select all that apply ○ Staff ○ Non staff

4.17 **If Yes, Ask "Did you think the assistance was timely?"** ○ Yes ○ No

4.18 **Ask "Have you missed one or more meals in the last 24 hours?"** ○ Yes ○ No ○ Don't know ○ N/A

Tip: A meal is breakfast, lunch or dinner and does not include snacks; N/A for palliative care/end of life

If No, Don't know or N/A, GO TO Question 4.21

4.19 **If Yes, Ask "If you missed one or more meals why did you miss the meals?"** Select all that apply ○ Procedure ○ Test ○ Operating Theatre ○ Nausea / Vomiting ○ Refused ○ Other

4.20 **If Yes, Ask "If you missed one or more meals were the meals replaced?"** ○ Yes, staff replaced ○ Yes, non staff replaced ○ Yes, but refused ○ No

4.21 **Ask "Have you been in any pain while you've been in this ward?"** ○ Yes ○ No ○ Don't know ○ N/A

Tip: N/A for AICU, NICU, SCN, comatose, cognitively impaired, deaf/mute patient & patient of non english speaking background

If No, Don't know or N/A, GO TO Question 5.0

4.22 **If Yes, Ask "Do you think the staff did everything they could to help control your pain?"** ○ Yes ○ No ○ Don't know ○ N/A

Section 5 - Skin Inspection

Tip: Patients in Mental Health Units can undergo a skin inspection however, are not included in the pressure injury prevalence indicators.

5.0 Has verbal consent been obtained for full skin inspection? ○ Yes ○ No → If No, GO TO Question 6.0

5.1 If Yes, what type of non surgical wound/s are present? Select all that apply

○ Pressure Injury → If Pressure Injury, GO TO Question 5.2

○ Skin Tear ○ Incontinence Associated Dermatitis (IAD) ○ Other

○ Chronic Vascular Ulcer ○ None present

If Skin tear, IAD, Other, Chronic Vascular Ulcer or None present, GO TO Question 6.0

5.2 If a Pressure Injury is present, record the stage, site, side of body and whether the injury was present on admission

Tip: If there is no documentation to indicate if the pressure injury was present on admission, then it is to be recorded as No. If necessary, check the patient's record to ensure accurate reporting. **'Yes' to Present on Admission means acquired before admission to ward.**

Stage	Pressure Injury Site	Left/ Mid/Right	Present on Admission
○ 1 ○ 2 ○ 3 ○ 4 ○ UPI ○ SDTI ○ Mucosal	○ Occiput ○ Ear ○ Nose ○ Lips / Mouth ○ Scapula ○ Humeral Head ○ Lower Arm / Hand ○ Elbow ○ Finger ○ Spine ○ Ischium ○ Sacrum / Coccyx ○ Trochanter / Hip ○ Knee ○ Lower Leg ○ Ankle ○ Heel ○ Foot ○ Toe ○ Other	○ L ○ M ○ R	○ Yes ○ No
○ 1 ○ 2 ○ 3 ○ 4 ○ UPI ○ SDTI ○ Mucosal	○ Occiput ○ Ear ○ Nose ○ Lips / Mouth ○ Scapula ○ Humeral Head ○ Lower Arm / Hand ○ Elbow ○ Finger ○ Spine ○ Ischium ○ Sacrum / Coccyx ○ Trochanter / Hip ○ Knee ○ Lower Leg ○ Ankle ○ Heel ○ Foot ○ Toe ○ Other	○ L ○ M ○ R	○ Yes ○ No
○ 1 ○ 2 ○ 3 ○ 4 ○ UPI ○ SDTI ○ Mucosal	○ Occiput ○ Ear ○ Nose ○ Lips / Mouth ○ Scapula ○ Humeral Head ○ Lower Arm / Hand ○ Elbow ○ Finger ○ Spine ○ Ischium ○ Sacrum / Coccyx ○ Trochanter / Hip ○ Knee ○ Lower Leg ○ Ankle ○ Heel ○ Foot ○ Toe ○ Other	○ L ○ M ○ R	○ Yes ○ No
○ 1 ○ 2 ○ 3 ○ 4 ○ UPI ○ SDTI ○ Mucosal	○ Occiput ○ Ear ○ Nose ○ Lips / Mouth ○ Scapula ○ Humeral Head ○ Lower Arm / Hand ○ Elbow ○ Finger ○ Spine ○ Ischium ○ Sacrum / Coccyx ○ Trochanter / Hip ○ Knee ○ Lower Leg ○ Ankle ○ Heel ○ Foot ○ Toe ○ Other	○ L ○ M ○ R	○ Yes ○ No
○ 1 ○ 2 ○ 3 ○ 4 ○ UPI ○ SDTI ○ Mucosal	○ Occiput ○ Ear ○ Nose ○ Lips / Mouth ○ Scapula ○ Humeral Head ○ Lower Arm / Hand ○ Elbow ○ Finger ○ Spine ○ Ischium ○ Sacrum / Coccyx ○ Trochanter / Hip ○ Knee ○ Lower Leg ○ Ankle ○ Heel ○ Foot ○ Toe ○ Other	○ L ○ M ○ R	○ Yes ○ No
○ 1 ○ 2 ○ 3 ○ 4 ○ UPI ○ SDTI ○ Mucosal	○ Occiput ○ Ear ○ Nose ○ Lips / Mouth ○ Scapula ○ Humeral Head ○ Lower Arm / Hand ○ Elbow ○ Finger ○ Spine ○ Ischium ○ Sacrum / Coccyx ○ Trochanter / Hip ○ Knee ○ Lower Leg ○ Ankle ○ Heel ○ Foot ○ Toe ○ Other	○ L ○ M ○ R	○ Yes ○ No

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Documentation Audit

If the Bedside Chart is not available GO TO Question 12.0

Section 6- Pressure Injury Prevention

6.0 Is there evidence at the time of the audit that the patient has been on the ward for more than 8hrs?
Tip: N/A for aged care in MPHS patient; may not be applicable for long stay patient
○ Yes ○ No ○ Unable to determine ○ N/A

6.1 Is there documented evidence at the bedside that a pressure injury risk assessment was undertaken on admission to the ward?
Tip: For aged care in MPHS 'on admission' is defined as within the last 3 months; long stay patient is defined as per your local policy/ guideline. If patient transferred between wards, you may need to use facility admission documentation.
○ Yes ○ No → If No, GO TO Question 6.4

6.2 If Yes, within what timeframe from ward admission was the pressure injury risk assessment undertaken?
Tip: Not applicable for aged care in MPHS patient; may not be applicable for long stay patient
○ < 2 hr ○ < 4 hr ○ < 8 hr ○ < 12 hr ○ < 24 hr ○ > 24 hr ○ Not available ○ Not applicable

6.3 If Yes, what is the patient's documented category of risk?
○ Not at risk ○ At risk ○ High risk ○ Very high risk

6.4 Is there documented evidence at the bedside that a comprehensive skin inspection was undertaken on admission to the ward?
Tip: Comprehensive skin inspection is not just a risk score or screening tool, it involves checking for signs of erythema, blanching response, localised heat, oedema, induration and skin breakdown over all the body.
For aged care in MPHS patient 'on admission' is defined as within the last 3 months; long stay patient is defined as per your local policy/ guideline. If patient transferred between wards, you may need to use facility admission documentation.
○ Yes ○ No → If No, GO TO Question 6.6

6.5 If Yes, within what timeframe from ward admission was the comprehensive skin inspection undertaken?
Tip: Not applicable for aged care in MPHS patient; may not be applicable for long stay patient
○ < 2 hr ○ < 4 hr ○ < 8 hr ○ < 12 hr ○ < 24 hr ○ > 24 hr ○ Not available ○ Not applicable

6.6 Is there documented evidence at the bedside of a Pressure Injury Prevention and Management Plan?
Tip: Plan includes intervention/s to reduce risk of pressure injury. Complete for all patients
○ Yes ○ No

Section 7 - Malnutrition Prevention

7.0 Is the patient's weight on admission to the ward documented at the bedside?
Tip: For aged care in MPHS 'on admission' is defined as within the last 3 months, long stay patient is defined as per your local policy/ guideline.
If patient transferred between wards, you may need to use facility admission documentation.
○ Yes ○ No ○ N/A ○ Clinically inappropriate to weigh

7.1 If the LOS is greater than 7 days, has a follow up weight on Day 7 or more been documented at the bedside?
Tip: N/A for aged care in MPHS and LOS ≤ 7 days
○ Yes ○ No ○ N/A

7.2 Is there documented evidence at the bedside that the patient was screened for nutrition risk on admission to the ward?
Tip: N/A for AICU, NICU, SCN, palliative / end of life, all Maternity patients
Within 6 months for patients with long stay Continuous Waterlow or within 3 months for aged care in MPHS; for long stay patients as defined in your local policy/ guideline. If patient transferred between wards, you may need to use facility admission documentation.
○ Yes ○ No ○ N/A → If N/A, GO TO Question 8.0

7.3 If the LOS is greater than 7 days or there has been a change of health status, has a follow up nutrition risk screen been documented at the bedside?
Tip: N/A for LOS ≤ 7 days or no change in health status
○ Yes ○ No ○ N/A

7.4 If screened (on admission or follow up), what is the patient's current documented malnutrition risk?
○ At risk ○ Not at risk

7.5 Is there documented evidence at the bedside of a nutrition care plan?
Tip: Plan may include Diet +/- supplements, monitoring of weight and food intake
○ Yes ○ No ○ N/A

7.6 Is there documented evidence at the bedside that the patient requires some level of feeding assistance?
Tip: Assistance includes setting up, opening of food packaging, supervision and/or full feeding
○ Yes ○ No ○ Independent

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Section 8 - Recognition and Management of the Deteriorating Patient (RMDP)

8.0 Is there evidence at the bedside that the patient has an observation chart for recording core vital signs? ○ Yes ○ No ○ N/A
Tip: N/A for Maternity- intrapartum, palliative care/ end of life, aged care in MPHS, subacute services
If No or N/A, GO TO Question 9.0

8.1 If Yes to observation chart, Select only one option
- ○ Is it a single parameter tool (track and trigger)? eg. MECC
- ○ Or is it an aggregate scoring system (scoring, non track and trigger)? eg. MEWS
- Or is it a combination system? - ○ Q- ADDS ○ CEWT ○ Other
- ○ Or is it a non track and trigger, non scoring system?

8.2 Which observations were recorded at least 8 hourly during the past 24 hours? Select all parameters that have been recorded
Tip: Observations recorded at least once during the past 24 hours for paediatric and patients in Mental Health unit

Respiratory Rate	○ Yes	○ No	
O2 Saturation	○ Yes	○ No	
Blood Pressure	○ Yes	○ No	
Heart Rate	○ Yes	○ No	
Temperature	○ Yes	○ No	
Consciousness	○ Yes	○ No	
O2 Flow Rate	○ Yes	○ No	○ N/A
Other	○ Yes	○ No	○ N/A
Respiratory Distress	○ Yes	○ No	○ N/A
Cap Refill	○ Yes	○ No	○ N/A

8.3 For all observations recorded, were they plotted and trended? ○ Yes ○ No ○ N/A
Tip: Observations graphed as dots with connecting lines; N/A if no observations recorded

8.4 If the observation chart has a scoring system, was the last set of observation scores summed up? ○ Yes ○ No ○ N/A
Tip: N/A for non scoring systems
If No or N/A, GO TO Question 9.0

8.5 If Yes, was the last set of observation scores summed up correctly? ○ Yes ○ No ○ N/A
Tip: Include patients who did not have all observations recorded

Section 9 - Medication Safety

9.0 If the patient is aged 12 years or under, is there evidence at the bedside that the patient has a Paediatric National Inpatient Medication Chart? ○ Yes ○ No ○ N/A
Tip: N/A for patient over 12 years of age

9.1 Is the patient identification (minimum of Name, DOB, MRN, Address) completed on all pages of the medication chart? ○ Yes ○ No ○ N/A (long stay chart)
If No or N/A, GO TO Question 9.3
Tip: N/A for patient with no evidence of medication chart at the bedside or with long stay medication chart ○ N/A (no medication chart)
GO TO Question 9.7

9.2 If Yes, if any pages of the chart have a patient identification label, is the patient's name handwritten below each label? ○ Yes ○ No ○ No labels present

9.3 Is there evidence at the bedside that the medication history was documented in the medication chart or medication action plan (MAP)? ○ Yes ○ No ○ N/A
If No or N/A, GO TO Question 9.5
Tip: N/A NICU, SCN patient

9.4 If Yes, where is the medication history documented? Select all that apply ○ Medication Chart ○ MAP

9.5 Is there documented evidence at the bedside of medication allergies and adverse drug reaction (ADR) status (including nil known & unknown) in the medication chart with a signature? ○ Yes ○ No
Tip: For ADR, a yellow ADR alert sticker must also be on the front and back page of the medication chart

9.6 Is there documented evidence at the bedside of a VTE risk assessment in a medication chart or site specific chart? ○ Yes ○ No ○ N/A
Tip: N/A for patients on long stay medication chart only, paediatric, NICU, SCN

9.7 Is there "Prescribing Intravenous Fluids and Electrolytes for Adults" (4th Edition) at the bedside? ○ Yes ○ No ○ N/A
Tip: N/A for paediatric, NICU, SCN, mental health unit, aged care in MPHS patient

9.8 Is there "Guidelines for Anticoagulation using Warfarin" (Version 7) at the bedside? ○ Yes ○ No ○ N/A
Tip: N/A for paediatric, NICU, SCN, mental health unit, all maternity, aged care in MPHS patient

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Section 10 - Falls Prevention

10.0 Is there documented evidence at the bedside that the patient was screened for history of falling on admission to the ward?

Tip: Screening identifies if the patient is at increased risk of falling and then should be assessed. N/A for AICU, NICU, SCN, HDU, CCU, all Maternity patients

For aged care in MPHS patient 'on admission' is defined as within the last 3 months; long stay patient is defined as per your local policy/ guideline. If patient transferred between wards, you may need to use facility admission documentation.

○ Yes ○ No ○ Tool incomplete ○ N/A

If N/A, GO TO Question 11.0

10.1 Is there documented evidence at the bedside that the patient was assessed for risk of falling on admission to the ward?

Tip: Assessment of risk identifies modifiable risk factors

For aged care in MPHS patient 'on admission' is defined as within the last 3 months; long stay patient is defined as per your local policy/ guideline. If patient transferred between wards, you may need to use facility admission documentation.

○ Yes ○ No ○ Tool incomplete

If No, GO TO Question 10.3

10.2 If assessment of risk is completed, what is the patient's documented risk of falling?

○ At risk ○ Not at risk

10.3 Is there documented evidence at the bedside that there is a multifactorial falls prevention plan (FPP)?

Tip: Documented actions corresponding to each identified risk factor. Complete for all patients

○ Yes ○ No

10.4 Is there documented evidence at the bedside of the level of supervision/ assistance required for mobilisation in the patient's care plan?

Tip: Complete for all patients

○ Yes ○ No ○ Independent

Section 11 - Newborn Patient Identification

11.0 For maternity patient, is the newborn 'rooming in' (at the mother's bedside) on the ward with its mother?

Tip: N/A for non maternity patient

○ Yes ○ No ○ N/A

If No or N/A, GO TO Question 12.0

11.1 If Yes, has the newborn's identification been checked and is correct within 24 hr of birth as documented in the neonatal pathway at the bedside?

○ Yes ○ No

Section 12 - Actions / Escalations

12.0 Select the areas where you identified the need for immediate action & / or escalation of actions to staff for this patient through the audit? Select all areas that apply

○ Bed Area Safety
○ Medication Safety
○ Patient Identification
○ Falls Prevention
○ Pressure Injury Prevention
○ Newborn Patient Identification
○ Malnutrition Prevention
○ Other
○ Recognition and Management of the Deteriorating Patient (RMDP)

Bedside Audit Tool

Ward:_____ Audit Date:_____ Auditor Name:_____

Please refer to the Bedside Audit Tool guideline when completing this audit tool.		Bed No:	Bed No:	Bed No:	Bed No:	Bed No:	Bed No:	% = Total YES/Total Audited x 100
		YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	i.e. 4/6x100=67% (exclude N/A)
Other	Is the patient in a same gender room?	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
Patient Identification & procedure matching	Patient is wearing a correct & legible ID band	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
	Patient is wearing an allergy band [if applicable]	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
Clinical Handover	Functional Maintenance screening tool completed & signed	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Malnutrition Screening Tool (MST) completed on screening tool	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Functional Maintenance care plan completed correctly	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Care plan signed each shift (refer to previous day care plan)	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Changes in patient care documented on care plan	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Discharge destination documented	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
	Estimated Discharge date [EDD] documented on care plan	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
Nutrition	MST completed on care plan	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Weight documented [within the last week] on care plan	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
Preventing and controlling Healthcare infections	IVC removed by due date	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	IVC device form completed every shift	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	IVC filled in on care plan	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
Preventing & Managing Pressure Injuries	All documented Braden strategies observed to be in place	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Braden chart completed	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	

Bedside Audit Tool

		Bed No:	Bed No:	Bed No:	Bed No:	Bed No:	Bed No:	% = Total YES/Total Audited x 100
		YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	i.e. 4/6x100=67% (exclude N/A)
	Braden score is accurate	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
	Braden strategies are documented on Braden chart and care plan	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
		YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
Preventing Falls & Harm from falls	All falls minimisation strategies are observed to be in place	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Falls risk assessment form completed	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Falls score is accurate	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
Medication Safety	Medication chart has all known allergies documented	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	If the patient is ordered regular analgesia, is a pain score documented on the observation chart	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Insulin prescribed as “units” not “U”	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	No entries are recorded as “N/A" on medication chart	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
	All times for administration documented by doctor	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
Recognising & Responding to Clinical Deterioration	All observations including conscious state are recorded	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Observations are taken at Western Health standardised observations times	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	All observations are trended except for temperature	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	
	Does the patient have clinical markers	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	If yes, have they been actioned	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	Is the fluid balance chart completed accurately	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
	The 24 hour fluid balance summary is complete	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	YES/NO/NA	
% + Total YES/Total Audited x100	**i.e. 4/6x100=67% (exclude N/A)**							
Auditors Name & Signature	Sign name to indicate the results have been actioned with the nurse responsible for the patient							

MRN	Patient	Admitted	Discharged	Code	Admit Ward	Disch Ward	LOS	DRG	WIES	DRG without maln code	WIES	DRG affected by maln code	Change to WIES
				E440			7	J60B	1.0117	J60B	1.0117	No	0
				E440			8	B81B	0.9424	B81B	0.9424	No	0
				E46			63	U61A	11.3794	U61A	11.3794	No	0
				E440			5	T60A	2.7501	T60A	2.7501	No	0
				E46			1	R63Z	0.2278	R63Z	0.2278	No	0
				E46			8	E62A	1.7062	E62A	1.7062	No	0
				E46			1	E62A	0.8531	E62A	0.8531	No	0
				E440			5	E62A	1.7062	E62B	1.0857	Yes	0.6205
				E46			16	Z60B	1.9016	Z60B	1.9016	No	0
				E441			31	G67A	4.3358	G67A	4.3358	No	0
				E441			13	G67A	1.0701	G67A	1.0701	No	0
				E46			11	Q61A	1.1545	Q61A	1.1545	No	0
				E441			11	G02A	5.1785	G02B	2.4486	Yes	2.7299
				E440			15	F62A	1.7809	F62A	1.7809	No	0
				E440			36	Z60A	4.395	Z60B	4.7096	Yes	-0.3146
				E441			14	I03B	3.6778	I03B	3.6778	No	0
				E441			14	Z60A	1.7292	Z60B	1.6208	Yes	0.1084
				E440			9	E68A	1.232	E68A	1.232	No	0
				E440			6	G01B	3.5223	G01B	3.5223	No	0
				E440			6	G46B	1.1629	G46B	1.1629	No	0
				E46			27	Z60A	3.0621	Z60A	3.0621	No	0
				E440			7	G67A	1.0701	G67A	1.0701	No	0
				E440			1	R63Z	0.2278	R63Z	0.2278	No	0
				E46			13	G47B	1.7625	G47B	1.7625	No	0
				E440			1	T62A	1.0272	T62A	1.0272	No	0
				E46			15	E65A	1.5515	E65B	1.2265	Yes	0.325
				E46			18	E65A	1.5515	E65A	1.5515	No	0
				E440			35	Z60A	4.2469	Z60A	4.2469	No	0
				E46			16	Z60B	1.9016	Z60B	1.9016	No	0
				E440			8	X06A	2.1108	X06A	2.1108	No	0
				E440			16	Z60A	1.7292	Z60B	1.9016	Yes	-0.1724
				E441			19	Z60A	1.8773	Z60B	2.3228	Yes	-0.4455
				E440			29	E73A	2.9788	E73A	2.9788	No	0
				E440			11	I08B	2.304	I08B	2.304	No	0

Manual file audit template – St Vincent's Hospital Melbourne

Audit Date_____

Floor	UR Number	Nursing Risk Completed		Nutrition Screen Completed		Positive nutrition risk and referral actioned according to MST			Patients Seen by Dietitian but not referred	Patient referred to Dietitian for another reason	Risk undernourished (Nutrition Screen or Dietitian Ax)	Risk undernourished - dietitian assessment within 48 hours		Comment
		Yes	No	Yes	No	Yes	No	NA (not completed)	Yes	Yes	Yes	Yes	No	

Manual file audit template – St Vincent's Hospital Melbourne (cont.)

Audit Date______________________

		Weight Sometime		Weighed within 24 hours of admission			Weighed at least weekly			Comment on Weight
Floor	UR Number	Yes	No	Yes	No	NA	Yes	No	NA	

Manual file audit template – St Vincent's Hospital Melbourne (cont.)

Audit Date_____

Floor	UR Number	Nutrition Care Incorporated into Patient Care Plan		Nutrition Care included in Medical Treatment Plan			Type of Documentation						
		Yes	No	Yes	No	NA (No issues)	Medical Admission	Medical Progress	Medical Discharge	Nurse Progress	Nurse Discharge	Allied Health	Other

MST audit tool – Eastern Health

MST Audit										
Complete this section for all files audited				Complete this section only if MST attempted						
Patient ID *UR numb*	Admitting ward	Was contra-indication to completing MST identified in admission notes (eg NESB, cognitive *1 = Yes, 2 = No, 3 = Unsure*	Was the MST attempted on admission? *1 = Yes, 2 = No*	Was the MST completed accurately? *1 = Yes, 2 = No*	MST Score	Admission date *dd/mm/yy*	Dietitian or AHA involved during admission? *1 = Yes, 2 = No, 3 = Unsure*	Date of involvement *dd/mm/yy*	Comments	

Meal satisfaction survey – St Vincent's Hospital Melbourne

ST VINCENT'S HOSPITAL - MEAL SERVICES QUESTIONNAIRE

NAME
WARD BED DIET
OPERATIONAL

Our aim is to provide our patients with the best possible food services. The information that you choose to provide by completing this form will assist our planning to meet this goal. We would appreciate your responses and any comments at the end of the form. All replies are strictly confidential.

1. How would you describe your appetite?

☐ Good ☐ Poor

2. Have you been in Hospital in the past 12 months?

☐ Yes ☐ No

If yes, please indicate the type of Hospital

☐ Public ☐ Private

3. Are you on a special diets?

☐ Yes ☐ No

4. Did you require assistance eating your meal?

☐ Yes ☐ No

5. Did you receive the help required to eat your meal?

☐ Yes ☐ No

6. Were you given enough time to eat your meal?

☐ Yes ☐ No

7. Were the food service staff friendly and helpful?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

NAME
WARD BED DIET
QUALITY

8. Were your meals enjoyable?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

9. Was the overall tray presentation pleasing?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

10. Were your meals served at a suitable temperature?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

11. Were your beverages served at a suitable temperature?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

12. Was the taste of the meals to your satisfaction?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

13. Was the appearance of your meals acceptable?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

14. Were your meal servings adequate?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

15. Did you receive the food that you ordered?

☐ Always ☐ Mostly ☐ Occasionally ☐ Never

NAME
WARD BED DIET
STRATEGIC

16. Please indicate your age grouping?

☐ Below 20
☐ 21 - 40
☐ 41 - 60
☐ 61 -70
☐ 71 Plus

17. Please idicate your gender?

☐ Male ☐ Female

18. How important are your meals in Hospital?

☐ Very Important ☐ Important
☐ Reasonably Important ☐ No Interest

19. What elements are required to enjoy your meal?

☐ Good Nutritional Value ☐ Tempting Appearance
☐ Specific Cultural Needs ☐ Familiarity with Meal
☐ Temperature of Meal ☐ Flavoursome Taste
☐ Meal Surroundings ☐ Within a Family Group
☐ Other

20. If you have any other suggestions or comments about the food you have received during your stay in the hospital, we would be pleased to hear them.

Thank you for your feedback

Ward supplement delivery audit tool – St Vincent's Hospital Melbourne

Ward Supplement Delivery and Fridge Checks **Date** _____

	10 E	10 W	9 E	9 W	8 E	8 W	7 E	7 W	6 W	5 W	4 E	4 W	Rehab	Gem
SUPPLEMENT DELIVERY Were the correct supplements on the ward? *Yes or No* Morning Tea														
Afternoon Tea														
Was there a delay in supplement delivery? *Yes (Note time) or No* Morning Tea														
Afternoon Tea														
Did the Tea/Coffee cart go around the ward? *Yes or No* Morning Tea														
Afternoon Tea														
Were the majority of supplements delivered? *Yes or No* (*Include number that weren't delivered below*) Morning Tea														
Afternoon Tea														
Were the supplements not delivered placed in the fridge? *Yes or No* Morning Tea														
Afternoon Tea														
WARD FRIDGES Was there an accumulation of supplements in the fridge? *Yes (Note patient names) or No*														
SUPPLEMENT RETURNS Were there any supplements returned to the kitchen on the Tea/Coffee cart? *Yes (not patient names) or No* Morning Tea														
Afternoon Tea														

Comments/Notes

_____

_____

_____

_____

_____

Plate Wastage Audit

Date_____ Care Centre:_____

Veg	0	1/4	1/2	3/4	All	Main	0	1/4	1/2	3/4	All	Dessert	0	1/4	1/2	3/4	All
1						1						1					
2						2						2					
3						3						3					
4						4						4					
5						5						5					
6						6						6					
7						7						7					
8						8						8					
9						9						9					
10						10						10					

Instructions

Audit is to cover each floor from 4-10 with 3 days data collected from each floor
Audit to commence Friday the 1st of November until Thursday the 21st of November 2013
Audit to be conducted for the lunch meal service
General menus to be selected for the audit, each meal tray selected must have main, vegetable and dessert.
10 meal trays to be audited
For each meal tray check what food has not been consumed, if each meal item has been consumed place an X in the box marked ALL
Eg. If items have been half consumed place a X in the box marked 1/2.

Meal time audit template – Goulburn Valley Health

Meal Time Audit

Date: ____/____/_____

BF L D	Ward:	Bed:	Gender (m/f):	Age:	LOS:
Admission Diagnosis:					**Diet:**

During mealtime delivery,				
	Yes	**No**	**N/A**	**Comments**
• Was the right meal type delivered to the patient? (E.g. minced, pureed, cut up, etc.)				
• Was the patient sitting up right in bed?				
• Was there a bad odor in the room?				
• Were there disruptive loud noises around the patient?				
• Did the patient have any visitors?				
• Was the meal tray placed at a reachable distance from the patient?				
• Was assistance provided with opening packets or with eating? o If yes by whom? (E.g. Nurse, Kitchen Staff, Family)				
• If no assistance was provided, do you think the patient would have benefited from some help?				
If the patient was not in bed when the meal was delivered, what is the reason? (E.g. physiotherapy, occupational therapy, taking a shower, went for a scan/procedure, etc.)				

How much did the patient manage from the:	**0**	**¼**	**½**	**¾**	**All**
Soup					
Main Meal					
Dessert					
Supplement (E.g. HP milk, Enlive, sustagen pudding, etc.)					

Comments:

Meal time audit tool – Peter MacCallum Cancer Centre

Meals Audit Tool WARD

Date:		Start:		End:	

Number of staff rostered on over meal time	
Number of staff available to assist patients with meals	

Number of total beds	
Number of open beds	
Number of occupied beds (patients)	

Meal time *(record 1 against meal)*		
	Breakfast	
	Lunch	
	Dinner	

Section 1: Patient Diet Code Information *(Data for sections 1.2 & 1.3 to be collected post meal observation audit)*		ROOM NUMBER																						Total
		1				2	3	4	5				6	7				8				9	10			
		A	B	C	D				A	B	C	D		A	B	C	D	A	B	C	D		A	B	C	
Diet Code	1.1 Write (free text) which diet code is present at the patient's bedside (if any)																									
	1.2 Write (free text) which diet code is present as per Hospro																									
	1.3 Is the Diet Code clinically appropriate (as assessed by Dietitian) *Enter 1 in option that applies*																									0

Section 2: Patient Preparedness PRIOR to meal *Select one option: 1 = status that applies; C = closed bed*		ROOM NUMBER																						Total
		1				2	3	4	5				6	7				8				9	10			
		A	B	C	D				A	B	C	D		A	B	C	D	A	B	C	D		A	B	C	
Ready for tray	2.1 Nil by mouth patient *Do not proceed with audit if selected*																									0
	2.2 Patient is ready to receive tray																									0
	2.3 Patient is NOT ready to receive tray																									0

Section 3: Interruptions DURING meal time *Enter 1 in option that applies (can select more than one)*		ROOM NUMBER																						Total
		1				2	3	4	5				6	7				8				9	10			
		A	B	C	D				A	B	C	D		A	B	C	D	A	B	C	D		A	B	C	
Patient Meal Time Interruptions	Bed Making																									0
	Patient Hygiene																									0
	Nursing Procedures																									0
	Ward Round																									0
	Medicine Round																									0
	Observations																									0
	Handovers																									0
	Toileting																									0
	Patient taken off ward (state where)																									0
	Pathology - bloods taken																									0
	Other *(Enter 1 if applicable and then please specify the other interruption on the next page)*																									0

Section 4: Patient level of assistance identified and observed *Enter 1 in option that applies (select only one). (Data for section 4.4 to be collected post meal observation audit)*		ROOM NUMBER																						Total
		1				2	3	4	5				6	7				8				9	10			
		A	B	C	D				A	B	C	D		A	B	C	D	A	B	C	D		A	B	C	
Assistance	4.1 Patient observed as independent with feeding (no assistance required)																									0
	4.2 Patient observed as requiring limited assistance (e.g. help to open packets, etc)																									0
	4.3 Patient observed as requiring extensive assistance (e.g. requires help to eat meal)																									0
	4.4 Evidence that patient identified/requires assistance with feeding (i.e. medical history, bedside)																									0
	4.5 Feeding assistance provided by nursing staff/other staff																									

Section 5: Patient outcome *Enter 1 in option that applies (select only one)*	ROOM NUMBER																						Total
	1				2	3	4	5				6	7				8				9	10		

Meal time audit tool – Peter MacCallum Cancer Centre (cont.)

		A	B	C	D				A	B	C	D		A	B	C	D	A	B	C	D		A	B	C	
Patient Meal Time Outcome	5.1 Estimate of amount consumed by patient (to closest estimation): 0%, 25%, 50%, 75%, 100%																									0
	5.2 Patient refused meal																									0
	5.4 Patient missed meal *(Enter 1 if applicable and then please specify reason for missed meal on seperate page provided)*																									0

Interruption - Other	
Bed number	Specify other interruption/s

Missed Meals - Reason	
Bed number	Specify reason for missed meals

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Chapter 3: Identification, prevention and management of cancer malnutrition

1. Why is it important to identify, prevent and manage cancer malnutrition?

Results from the Department of Health's multicentre study Investigating Practices Relating to Malnutrition in Victorian Cancer Services project in 2012 determined an overall malnutrition prevalence rate of 31 per cent in cancer patients receiving active treatment.[1]

The same study also showed malnutrition in the oncology population was twice as likely for those patients who were inpatients, with 57 per cent affected compared with 25 per cent of ambulatory care patients.[1] Increased hospital length of stay, readmission rates, morbidity and mortality and higher healthcare costs are all well-acknowledged negative consequences of patient malnutrition.[2–7] Timely and appropriate nutritional care can reduce the prevalence of malnutrition and hospital costs, but unfortunately malnutrition continues to go unrecognised and untreated in many hospitalised patients.[2–4,8]

Nutrition should not be seen as merely supportive care during cancer treatment but as adjunctive therapy. Medical nutrition therapy (MNT) reduces treatment breaks and unplanned hospital admissions resulting in decreased cost compared with usual care.[9] Individualised dietary counselling and/or supplements during and post radiation therapy improves patient-centred outcomes (quality of life, physical function and patient satisfaction).[9] Nutrition counselling from a dietitian and/or dietary supplementation improves nutritional status and quality of life in some patients with gastrointestinal and head and neck cancer.[10] Dietary advice plus nutritional supplements may be more effective than advice alone or no advice on the measure of short-term weight gain in adults with illness-related malnutrition.[3]

This chapter of the toolkit summarises the evidence and recommendations relating to identifying, preventing and managing cancer malnutrition within your health service.

2. What evidence exists to support identification, prevention and management of cancer malnutrition?

The following evidence-based guidelines have been developed for detecting malnutrition and supporting the nutritional management of adult patients with cancer cachexia, patients receiving radiation therapy treatment and patients with head and neck cancer or general cancer.

These guidelines provide a framework for evidence-based nutritional assessments and increase access to appropriate patient-focused nutrition interventions for affected adults that are timely and occur within the health service setting. The guidelines are designed to provide information to assist decision making and are based on the best information available at the date of compilation. In the case of the *Evidence-based guidelines for the nutritional management of patients with head and neck cancer*, these are maintained on the Clinical Oncology Society of Australia (COSA) website using wiki technology, allowing the guidelines to be updated when new literature is published to ensure currency.

- Dietitians Association of Australia (DAA) 2009, *Evidence-based practice guidelines for the nutritional management of malnutrition in adult patients across the continuum of care*[8]
  http://onlinelibrary.wiley.com/doi/10.1111/j.1747-0080.2009.01383.x/abstract
- Updated evidence-based practice guidelines for the nutritional management of patients receiving radiation therapy and/or chemotherapy (2013)[9]
  http://onlinelibrary.wiley.com/doi/10.1111/1747-0080.12013/pdf
- DAA 2006, *Evidence-based practice guidelines for the nutritional management of cancer cachexia*[11]
- http://onlinelibrary.wiley.com/doi/10.1111/j.1747-0080.2006.00099.x/abstract
- *Evidence-based guidelines for the nutritional management of adult patients with head and neck cancer*[12]
  http://wiki.cancer.org.au/australia/COSA:Head_and_neck_cancer_nutrition_guidelines
- The European Society for Clinical Nutrition and Metabolism (ESPEN) 2006, *Guidelines on adult enteral nutrition: non-surgical oncology*
  http://espen.info/documents/ENOncology.pdf
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  http://espen.info/documents/0909/Non-surgical%20oncology.pdf
- The Cochrane Collaboration 2013, *Nutritional interventions for reducing gastrointestinal toxicity in adults undergoing radical pelvic radiotherapy*
  http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009896.pub2/abstract
- The Cochrane Collaboration 2013, *Enteral feeding methods for nutritional management in patients with head and neck cancers being treated with radiotherapy and/or chemotherapy*
  http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD007904.pub3/abstract
- The Cochrane Collaboration 2011, *Dietary advice with or without oral nutritional supplements for disease-related malnutrition in adults*
  http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002008.pub4/abstract
- Practice-based Evidence in Nutrition (PEN): *Cancer – Nutritional implications of treatment toolkit*
  http://www.pennutrition.com
- National Cancer Institute: *Nutrition in cancer care*
  http://www.cancer.gov/cancertopics/pdq/supportivecare/nutrition/HealthProfessional

In addition to the specific nutrition-focused guidelines, there are also evidence-based guidelines from Cancer Council Australia and Cancer Australia for different tumour streams:

- Cancer Council of Australia – clinical practice guidelines
  http://wiki.cancer.org.au/australia/Guidelines
- Cancer Australia – clinical practice guidelines
  http://canceraustralia.gov.au/publications-and-resources/clinical-practice-guidelines

The Victorian Department of Health (Cancer Services) has developed patient management pathways (PMFs) for different tumour streams to reduce unwanted variation in practice. Recently Cancer Council Victoria was commissioned to undertake a review of these PMFs, which are now known as optimal care pathways. These new optimal cancer care pathways (OCCPs) will provide a high-level overview of the optimal cancer care that a person in Victoria should receive based on evidence-based practice. They are due to be completed by the end of 2014 and will include a consumer version.

- Cancer Services Victoria, Department of Health – *Patient management frameworks*
  http://www.health.vic.gov.au/cancer/framework/pmfsnew.htm
- Optimal cancer care pathways
  https://www.cancervic.org.au/for-health-professionals/optimal-care-pathways

On each Victorian region's Integrated Cancer Service website there may be other guidelines developed for an institution/geographical area that will be applicable to that particular region/ institution. See the below website for further details.

- Integrated Cancer Services
  http://www.health.vic.gov.au/cancer/integrated.htm

Further to the above documents, refer also to section 9: *Where can I obtain further information about the identification, prevention and management of cancer malnutrition?*

3. A team approach to identify, prevent and manage cancer malnutrition

All staff have a role and responsibility to ensure patients receive high-quality nutritional care to prevent malnutrition. Creating a culture where stakeholders from all levels of a health service, from clinical and corporate executives to staff at the coalface, value nutrition as a key underpinning of patient care has been recognised as a primary strategy in driving improvement and to effectively address patient malnutrition.[13]

What does the literature say in support of the multidisciplinary team approach?

Models of enhanced multidisciplinary inpatient care have shown sustainable efficiency gains for health services and improved patient outcomes.[14] Multidisciplinary approaches that recognise and specifically address barriers of intake of poor appetite, delirium and feeding dependency may offer more promise as these factors are unlikely to be mitigated by simple provision of oral nutritional supplements, the commonest nutritional support strategy reported in the literature.[15] Following are some national and international examples that support taking an enhanced multidisciplinary approach to providing nutrition care.

- A Canadian survey found that physicians believe a nutrition assessment should be performed when a patient is admitted to hospital, and most feel this is not being done on a regular basis during hospitalisation or on discharge.[16] 'A multi-disciplinary team is needed to address hospital malnutrition, and educational strategies that target physicians are needed to promote better detection and management throughout the hospital stay'.[16]
- Programs such as The Productive Ward, originating from the United Kingdom, are now being implemented in some Victorian health services. This model empowers all staff to question practice and make positive changes to the way they work, promoting a culture of continuous improvement. Included within The Productive Ward package is a 'meals module'. It provides guidance for how to ensure the best experience for patients while making meal delivery quick and easy for staff. This has resulted in less wasted time spent delivering meals – time that can be re-invested to ensure patients receive timely nutritional assessments and staff have time to feed patients who need support.[17]
- Moving from individualised to multidisciplinary nutrition care has been effective in reducing barriers to intake and improving outcomes at The Prince Charles Hospital, Brisbane.[18] Key features of this model, described by Bell et al., include promoting nutrition as a medicine, adopting a coordinated multidisciplinary approach (including medical nutritional interventions and nursing nutrition rounds to administer supplement/encourage intake), enhancing food service systems and improving knowledge and awareness.[18]
- The Eat Walk Engage (EWE) pilot program trialled at Royal Brisbane and Women's Hospital found improvements in the care of older acute inpatients when utilising an interdisciplinary collaborative model focused on enhancing nutrition, mobility and functional recovery and preventing delirium.[19] These collaborative clinical strategies for improving nutritional intake and addressing known barriers to intake (delirium, feeding dependence) are known to underpin successful management of malnutrition.[18]

- A trial undertaken at Royal Adelaide Hospital found that when food services, nursing and dietetic staff implemented a multifaceted intervention combining nutrition screening, provision of oral nutritional supplements and flagging patients for assistance, the rates of screening and patients being weighed on a regular basis improved.[20] While it was possible to change practice, there were difficulties in showing improvements in nutritional decline given the relatively short length of stay of seven to 14 days.[20]
- The Council of Australian Governments Long Stay Older Patients (COAG LSOP) *Best care for older people everywhere* toolkit also promotes a multidisciplinary approach to prevent under-nutrition in older people during hospitalisation.[21] An eight-step interdisciplinary framework of best practice has been developed for Australian hospitals based on previous work in England by Age Concern (Hungry to be Heard).[22] Strategies that involve an interdisciplinary team (such as protected mealtimes and communal dining) optimise nutritional intake.[21]

Refer also to Chapter 1: *Malnutrition governance* for strategies for engaging staff to ensure malnutrition is a priority within your health service.

The following table summarises multidisciplinary care roles involved in providing high-quality nutritional care, all contributing to the identification, prevention and management of patient malnutrition.

Discipline	Role in identifying, preventing and managing cancer malnutrition
Medical	
Medical staff	Assessing patients according to health service procedures. Providing malnutrition risk screening and referring at-risk patients to dietitians and other disciplines to improve nutritional status. Managing medical and psychiatric issues relating to poor nutrition intake. Communicating with dietitians regarding nutrition-related issues. Providing general nutrition information to patients. Including nutrition supplements recommended by dietitians on the inpatient medication chart to improve compliance with consumption. Documenting nutrition issues: • Admission: include weight and weight history, appetite, physical signs of malnutrition • Progress notes / treatment plan: include nutrition issues (malnutrition, weight loss, oral intake, enteral/parenteral nutrition) and management plan • Discharge summary: document the nutrition diagnosis and nutrition management plan
Nursing	
Nursing staff / clinical nurse consultant	Assessing patients according to health service procedures. Weighing patients on admission and at least weekly thereafter. Completing malnutrition risk screening using a validated tool and referring patients to the dietitians and other disciplines to improve nutritional status. Completing re-screening of malnutrition risk at weekly intervals. Identifying patients who may benefit from review by a dietitian for nutrition support to manage the side effects of treatments/medications for improved quality of life. Documenting weight and the malnutrition risk screening score.

(cont.)

Nursing staff / clinical nurse consultant (cont.)	Assigning an appropriate diet meal code to patients on admission and thereafter as determined by patient's condition and in liaison with the dietitian, as appropriate. Updating the nutrition diet and fluid signs above the patient's bed. Communicating with a dietitian regarding nutrition-related issues. Identifying patients who may benefit from receiving assistance at mealtimes and arranging a meal assistance alert (such as signage or a coloured meal dome or tray). Referring patients needing assistance at mealtimes to allied health or nursing assistants or volunteers. Encouraging and assisting patients who are able to sit out of bed for mealtimes. Providing patients with assistance if required at mealtimes such as positioning, opening portion packs and feeding. Minimising distractions that may interrupt mealtimes and limit patients' intake of meals. Documenting patients' intake during shift, maintaining food and fluid intake charts. Providing general nutrition information to patients.
Nursing assistant	Weighing patients on admission and weekly thereafter as directed by nursing staff. Encouraging and assisting patients who are able to sit out of bed for mealtimes. Identifying patients who may benefit from receiving assistance at mealtimes and arranging a meal assistance alert (such as signage or a coloured meal dome or tray). Providing patients with assistance if required at mealtimes such as positioning, opening portion packs and feeding. Communicating with nursing staff regarding patient food/fluid intake during their shift. Minimising distractions that may interrupt mealtimes and limiting patients' intake of meals.
Nutrition and dietetics	
Clinical dietitian	Performing a nutritional assessment for referred patients using a validated assessment tool (such as Subjective Global Assessment or 'SGA') as per department procedures. Determining a nutrition diagnosis and developing an individualised nutrition care plan. This may involve prescribing a therapeutic diet and nutritional supplement drinks and snacks and providing patient, staff and carer education and nutritional counselling. Communicating with the treating team regarding MNT. Documenting the nutrition diagnosis and nutrition care plan, and liaising with the treating medical team, ward (nursing, assistants, allied health) staff and food services staff to coordinate nutritional care. Identifying inpatients who may benefit from receiving assistance at mealtimes and arranging a meal assistance alert (such as signage or a coloured meal dome or tray). Monitoring the nutritional status and progress of referred patients. This involves regular mealtime rounds, providing assistance to patients at mealtimes, and recommending food and fluid intake charting and regular weighing. Involving themselves in discharge planning and on-referral to a community dietitian as appropriate. Involving themselves in training volunteers to provide patient mealtime assistance.

(cont.)

Food services dietitian	Liaising with the nutrition department to ensure the menu meets the nutritional and cultural needs of the patient population. Ensuring the menu meets the Department of Health's Nutrition standards for menu items in *Victorian hospitals and residential care facilities*, or other relevant standard. Monitoring patient safety and quality KPIs with respect to patient food services. Ensuring the food service system is supportive of access to meals and snacks for day chemotherapy and radiotherapy patients in addition to hospital inpatients.
Nutrition / allied health assistant	Completing malnutrition risk screening using a validated tool and referring at-risk patients to a dietitian – as relevant to individual health service procedures. Assisting with weighing patients on admission and at least weekly thereafter. Encouraging and assisting patients who are able to sit out of bed for mealtimes. Identifying patients who may benefit from receiving assistance at mealtimes and arranging a meal assistance alert (such as signage or a coloured meal dome or tray). Transporting patients to communal dining room areas at mealtimes. Reporting ongoing poor and inappropriate patient meal ordering to the unit dietitian. Monitoring consumption of nutritional supplement drinks and snacks and offering substitutes as per local procedural guidelines.
Food services	
Chef / food services staff	Preparing and cooking meals according to approved recipes to meet the Department of Health's *Nutrition standards for menu items in Victorian hospitals and residential aged care facilities*. Ensuring legislative requirements for food safety are achieved and monitored. Ensuring the food system is supportive of access to meals and snacks for day chemotherapy and radiotherapy patients.
Support service assistant / patient service assistant / menu monitor / diet aide	Visiting all patients daily to take meal orders and assist with menu selection. Checking meals ordered match patient diet code information prior to each mealtime. Recording patient food preferences so they are available to other team members. Updating diet code changes and meal and supplement orders in a timely fashion. Delivering correct meals to patients with the tray table height adjusted to a suitable level. Completing mid-meal service delivery (morning tea, afternoon tea and supper), including distribution of prescribed nutritional supplement drinks and snacks. Delivering meals, snacks, drinks and nutritional supplements within reach of patients, unless otherwise requested by nursing staff. Providing assistance with meal set-up and opening portion packs and drinks – as relevant to individual health service procedures.
Other clinical disciplines	
Radiation therapist	Identifying patients who may benefit from assessment and support from a dietitian, particularly regarding managing side effects of treatments for improved quality of life.
Oncology psychologist	Identifying patients who may benefit from assessment and support from a dietitian.

(cont.)

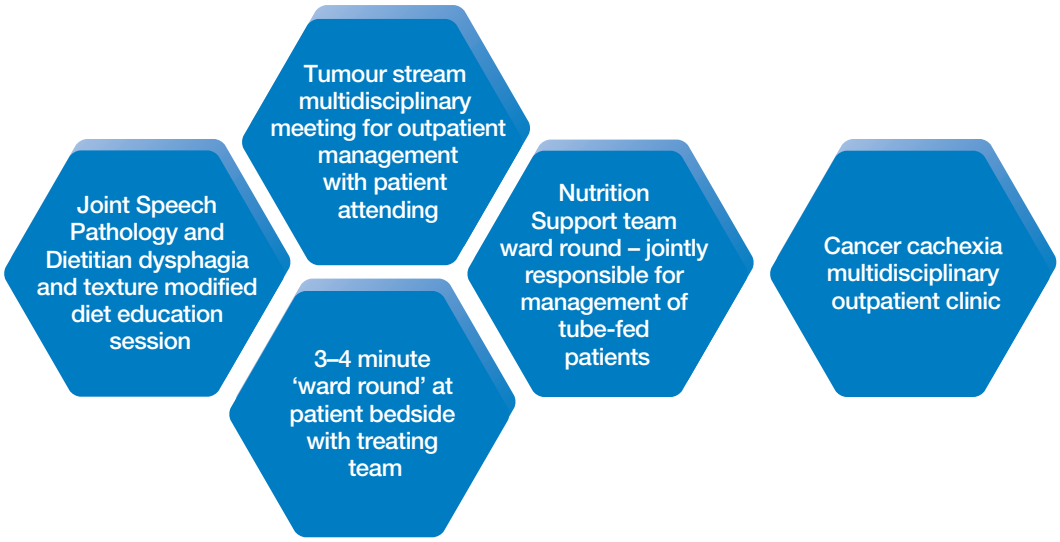
Pharmacist	Assisting the medical team to manage poly-pharmacy that may impact on oral intake (such as nausea, appetite suppression or stimulant). Advising on medicine and enteral feed interactions and other drug–nutrient interactions.
Speech pathologist	Assessing patients for dysphagia, as per department procedures, and providing recommendations for the appropriate texture of food and consistency of fluids for patients with swallowing impairment. Educating patients and/or carers about appropriate food texture and fluid consistency for swallowing impairment. Communicating recommendations for appropriate food texture and fluid consistency with the treating team. Involving themselves in training volunteers for patient mealtime feeding.
Occupational therapist	Assessing and implementing strategies to assist with eating independently, shopping and cooking. Advising on cancer-related fatigue management strategies (energy conservation measures). Encouraging and assisting patients who are able to sit out of bed for mealtimes. Involving themselves in training volunteers for patient mealtime assistance.
Physiotherapist	Improving patient mobility, which helps preventing muscle loss and functional decline associated with poor nutritional intake. Encouraging and assisting patients able to sit out of bed for mealtimes.
Social worker	Assessing and implementing strategies to assist with finances and help with preparing and providing meals post discharge (for example, home help for shopping or home-delivered meals such as Meals on Wheels).
Pastoral care	Identifying patients who may benefit from referral to a dietitian. Communicating with the dietitian and nursing staff regarding patient food/fluid preferences. Identifying patients who may benefit from receiving assistance at mealtimes.
Health information managers and clinical coders	Identifying and assigning ICD-10-AM codes for malnutrition based on information documented in the medical file.
Other	
Volunteers	Providing feeding and general mealtime assistance to patients as per local policies and procedures. Attending training programs on mealtime and feeding assistance.
Hospital administration	Providing leadership and fostering open communication among disciplines to work towards early nutrition intervention and improved hospital treatment practices with the ultimate goal of improving quality of care and reducing costs.

Interprofessional practice models to identify, prevent and manage cancer malnutrition

Interprofessional practice 'is a partnership between a team of health providers and a patient in a participatory collaborative and coordinated approach to shared decision making around health and social issues'.[23]

Interprofessional practice integrates separate discipline approaches into a single consultation – patient history taking, assessment, diagnosis, intervention and short- and long-term management goals are conducted by the team, together with the patient, at the one time.[24] Planning and providing care within an interprofessional practice model has been shown to increase the effectiveness of health professional communication and reduce the prevalence of miscommunication, conflict and preventable adverse events associated with clinical error.[25,26] This can also empower patients by directly involving them in the decision-making process.

Significant outcomes for improving patient malnutrition can be achieved for patients by formalising interprofessional practice models and enhancing collaboration in different settings. The following are some examples of interprofessional practice that can provide enhanced nutrition care for patients receiving treatment within cancer services.



4. Malnutrition risk screening and re-screening

Nutrition screening is defined as

> *… the process of identifying patients with characteristics commonly associated with nutrition problems who may require comprehensive nutrition assessment and may benefit from nutrition intervention'*[8]

[In this instance cancer patients who may be malnourished or at risk of malnutrition, with referrals for overweight and obesity excluded from the scope of this toolkit.]

Screening ensures timely identification of patients who are malnourished or at risk of being malnourished and who would benefit from nutrition support, and allows patients to be prioritised according to those who most need MNT.[11] Having systems and tools in place to support staff identify malnutrition risk factors early and referring to a dietitian for assessment and nutrition care planning promotes a preventative focus to managing cancer malnutrition and offers the best nutritional care for patients.[10]

What screening tool should be used?

It is important to use a screening tool appropriate to the population in which it is to be applied, and is also quick and simple to complete. The *Malnutrition screening tool* (MST) is a two-question, validated screening tool for identifying malnutrition risk in patients with cancer.[11,12] As the MST is a scored tool (the higher the score the higher the risk), this can help with prioritising those patients with the greatest need for referral to nutrition-related services.[8]

Are there patient groups that could be excluded from malnutrition risk screening?

Some cancer and/or treatment types result in a very high risk of developing malnutrition, and thus a mandatory referral to a dietitian could be considered. This includes patients with head and neck cancer or pancreatic cancer or who are undergoing a bone marrow transplant. Side effects from chemotherapy regimens may also place patients at higher nutritional risk.

> 'All patients receiving radiation therapy to the gastrointestinal tract (GIT) or head and neck area should be referred to the dietitian (and/or nutrition support).'[9,12]

If a patient has been referred to the dietitian by another method, such as direct referral from the medical team, then malnutrition risk screening is unnecessary and it is appropriate to progress to nutrition assessment.[8,11]

When could malnutrition risk screening be completed?

Although many patients are admitted to hospital for an inpatient stay during their cancer journey, not all patients will require a hospital stay, particularly soon after initial diagnosis. It is therefore important to consider all treatment settings (inpatient ward, outpatient clinic, ambulatory chemotherapy and/or radiotherapy centre) to ensure patients undergo screening when accessing health services, to enable early identification of malnutrition risk factors.

> 'Malnutrition risk screening should be performed in the outpatient setting during the planning stages of commencing anti-cancer therapies.'[11]

How can screening be completed?

Malnutrition risk screening could be performed by a variety of staff who come into contact with patients at risk of malnutrition such as doctors, nurses, nutrition assistants or administration staff.[11] Who performs malnutrition screening may be dependent on the setting, available workforce or specific health service policies; for example, nutrition/dietetic assistants may conduct screening in rural facilities, whereas nursing staff may do this in tertiary hospitals.[8]

The MST should be incorporated into standard health service processes and documentation such as admission forms, patient information sheets and electronic clinical information systems where available.[8,11] Leistra et al. advises health services to use a quick and easy tool for screening and to embed malnutrition risk screening into a structured multidisciplinary implementation plan.[27]

Examples of malnutrition screening embedded in existing health service forms:


FM Screen Tool-Western.pdf


Patient AdmDC Screen-Bendigo.pdf

Refer to Chapter 4 of this toolkit, *Nutrition service delivery models*, for further details about implementing malnutrition risk screening within health services.

Re-screening – what is recommended?

The literature suggests malnutrition risk screening for ambulatory patients should be repeated during anti-cancer treatment at least fortnightly for patients initially screened at low risk.[8,11]

There is a lack of evidence to determine the required frequency of routine malnutrition re-screening in the inpatient setting; however, expert opinion suggests 'ideally re-screening weekly in hospital or more frequently where there is a clinical concern'.[8]

Examples of malnutrition re-screening prompts within existing health service forms:


FM Care Plan-Western.pdf

It is important to regularly audit compliance with malnutrition risk screening processes and address identified barriers.[8] Refer to Chapter 2 of this toolkit, *Key performance indicators for monitoring malnutrition*, for further details.

How can you increase malnutrition risk screening compliance in your health service?

- Gain support widely within your health service from executive, senior nursing and clinical governance/quality unit staff. Advocate for malnutrition risk screening and regular weighing as core KPIs for your health service. Refer to Chapter 1 of this toolkit, *Malnutrition governance*, and establishing a multidisciplinary nutrition committee and malnutrition policy.
- Embed malnutrition risk screening into a designated staff role. Current practice in the majority of health services is to use a nurse for malnutrition risk screening; however, some other examples include using a dietitian/nutrition assistant, administration staff or an oncologist.
- Incorporate malnutrition screening tools into existing paperwork or processes of which completion is already established – nursing admission forms or generic assessment tools have been used effectively in some health services. Other health services have embedded tools within existing documents encompassing pressure injury and falls risk screening.
- Incorporate malnutrition screening tools into existing cancer-specific screening tools such as a 'supportive care screening' tool. Refer to the above examples of malnutrition risk screening tools that are embedded within existing health service forms.
- Ensure regular weight monitoring is established. Consider and improve ward/clinic/hospital access to appropriate weighing equipment (stand-on scales, weigh chair, platform scales, hoist weigh attachments) to facilitate efficiency and ease with this important task.
- Work with nurse unit managers in your health service to understand the demand within individual nursing roles at different points in the patient timeline/journey. Some roles may have greater capacity and different points of time to complete malnutrition risk screening. Identify nurse 'nutrition champions' for each ward to drive screening and nutrition support initiatives.
- Establish a regular program to audit inpatient and outpatient malnutrition risk screening and weighing compliance and referral rates to a dietitian – refer to Chapter 2 of this toolkit, *Key performance indicators for malnutrition management*, for further details. Table these reports for discussion at the health service's multidisciplinary nutrition committee – refer to Chapter 1 of this toolkit: *Malnutrition governance*.
- Feed back malnutrition risk screening and weighing compliance rates to local wards and units to encourage performance improvement. Conduct in-services on wards and day chemotherapy and radiotherapy units about malnutrition risk screening linking back to benefits in terms of patient outcomes. Seek opportunities for regular staff education in this area to ensure the increased rates initially seen post training are maintained. Be sure to capture rotating and pool/bank staff who may miss regular opportunities for training. Liaise with nurse education units to determine the best strategies for your health service.
- Create opportunities to increase awareness of malnutrition risk screening at peak times when new documents are to be implemented, during staff orientation (interns, new graduate nurses and allied health) or rotations, or during periods of periodic review/accreditation.

Refer to the appendix: *Checklist for a successful malnutrition risk screening program*.

5. Referral pathways to assessment and intervention

In addition to referrals from malnutrition risk screening, individual referrals may be received for cancer patients from medical teams, nursing staff, allied health, self-referrals, dietitian assistants or team/ward meetings. How can these referrals be managed? What systems could support this process?

Once a positive result has been achieved from screening, the majority of health services refer all patients to a dietitian for further assessment, nutritional support and management.

Some health services have developed additional processes to support improved nutritional outcomes and to manage high service demands:

- Triage only high-risk patients to the dietitian. Variation does exist between health services in terms of defining 'high risk' but this is usually defined as MST score ≥ 2.
- Automatic commencement of a high-energy, high-protein diet and/or nutritional supplements is started for patients with a positive malnutrition risk screening score (as defined by local health services), or concurrently with the dietitian referral.
- Low-risk patients may receive general nutrition information and additional mealtime monitoring and/or weekly re-screening from a health assistant as per local health service procedures.

Further information on these nutrition service delivery models and strategies for managing workload demand can be located in Chapter 4 of this toolkit.

6. Nutrition assessment and malnutrition diagnosis

Nutrition assessment is defined as:

> *... a comprehensive approach to gathering pertinent data in order to define nutrition status and identify nutrition-related problems.*[8]
>
> … with assessment often including …
>
> *… patient history, medical diagnosis and treatment plan; nutrition and medication history, nutrition related physical examination including anthropometry, nutritional biochemistry, psychological, social and environmental aspects.*[8]

Important considerations when collecting nutrition assessment data

In addition to collecting data to diagnose malnutrition, it is also essential to gather information on the aetiology or contributing causes of low body mass index (BMI), unintentional weight loss and/or poor intake, which may include:

- physiological causes – altered nutrient need, inflammation, malabsorption, dysphagia, fatigue, taste changes, nausea, pain, appetite changes, dentition issues
- socioeconomic causes – lack of access to food, poor nutrition-related knowledge
- psychological causes – depression, dementia, eating disorder.[8]

Using a standardised nutrition assessment form/template may help achieve consistency in information collection. Assessment forms that include a nutrition diagnosis and interventions can also act as a nutrition care plan template for the purposes of documentation to meet relevant accreditation standards. This is especially so where there are policies and guidelines in place to support expectations around content, such as use of approved terminology and mandatory data items. A standardised form/template may also aid clinical coders to ensure a malnutrition diagnosis is identified and the correct ICD-10-AM malnutrition code assigned. This will also be discussed in further detail below.

Examples of nutrition assessment forms/ templates used by health services:			Example of a nutrition review form/template used by health services:
Nutrition Ax-Austin.pdf	Oncology Nutrition Ax-Western.pdf	Electronic Nutrition Ax-Peter Mac.pdf	Nutrition RV-Austin.pdf

Which assessment tool can be used for diagnosing malnutrition?

It is important to choose a validated nutrition assessment tool for diagnosing malnutrition to meet the needs of your setting, and patient groups.[8] This ensures a diagnosis of malnutrition can be made reliably and confidently, and an appropriate nutrition care plan can be initiated.

The SGA and Patient-Generated SGA (PG-SGA) have previously been identified as validated methods of diagnosing nutritional status in the DAA evidence-based practice guidelines for nutrition management of cancer cachexia[11], patients receiving radiation therapy and/or chemotherapy[9] and patients with head and neck cancer.[12] These tools are encouraged due to the higher sensitivity and specificity to predict nutritional status in the cancer patient population.[8]

Training in correctly applying nutrition assessment tools is required.[8] Some health services have developed annual staff competency-based programs to ensure adequate skills and knowledge in using the nutrition assessment tool appropriately are maintained. This training also ensures consistency between dietitians when assessing nutritional status and diagnosing malnutrition.

Examples of nutrition assessment tool forms:	Examples of SGA training and competency guidelines:	
SGA tool-Monash.pdf	SGATrainingCheckLis t-Monash.pdf	SGA competency guidelines-STV.pdf

How can protein-energy malnutrition (PEM) be diagnosed?

Nutrition diagnosis is a clinical judgement based on data collected during the assessment phase, with this information then directing treatment goals and intervention strategies.[8]

A diagnosis of protein energy malnutrition can be supported by completing a SGA or PG-SGA tool[28] and applying an SGA-B or SGA-C rating, and satisfying the ICD-10-AM (7th edition) criteria for malnutrition (codes E40–E46), in particular: [8]

E43 – unspecified severe PEM	In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (≥ 10 per cent), with evidence of suboptimal intake resulting in severe loss of subcutaneous fat and/or severe muscle wasting.
E44 – PEM of moderate and mild degree	In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (five to nine per cent), with evidence of suboptimal intake resulting in moderate loss of subcutaneous fat and/or moderate muscle wasting. In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (five to nine per cent) with evidence of suboptimal intake resulting in mild loss of subcutaneous fat and/or mild muscle wasting.

Some health services have developed procedures or guidelines to ensure consistency in this approach. This includes using a 'malnutrition diagnosis' sticker in the patient's medical record – see examples at the end of this section of the toolkit.

Examples of malnutrition diagnosis guidelines or reference material:	
Guidelines doc maln 2014-STV.pdf	ICD-10-AM Codes Documentation-Qld.p

In 2009 the American Society for Parenteral and Enteral Nutrition (ASPEN) and The European Society for Clinical Nutrition and Metabolism (ESPEN) convened the International Consensus Guideline Committee to develop an aetiology-based approach to diagnosing adult malnutrition in the clinical setting. These developed definitions describe adult malnutrition in the context of acute illness or injury, chronic disease or conditions and starvation-related malnutrition.[29,30] Malnutrition criteria developed by consensus between the Academy of Nutrition and Dietetics and ASPEN in 2009 are currently being validated in a multicentre study.

How can a malnutrition diagnosis be identified and assigned by clinical coders at your health service?

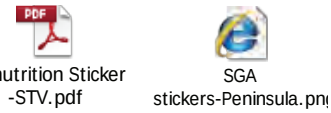
Clinical coders review the documentation of all clinical/medical records to assign patient admissions with appropriate ICD-10-AM codes after discharge. This ensures all patient diagnoses and complications are recorded and associated costs recognised. Assignment of malnutrition codes E40–E46 can in some cases increase the complexity and comorbidity level for some patient admissions by changing the diagnosis-related group (DRG) and increasing the casemix funding to a health service.

The following table outlines strategies to increase the number of cases of malnutrition recognised and coded in your health service.

Build strong relationships with clinical coding staff	• Liaise with clinical coding staff to discuss how doctors and dietitians at your health service make sure they meet the coding criteria. • Organise regular meetings and in-servicing between nutrition and dietetics and clinical coding departments to maintain working relationships. • Seek input from clinical coding staff in the development and/or review of nutrition assessment forms.
Develop documentation of malnutrition guidelines	• Develop clear guidelines within your health service for documenting malnutrition either within your existing documentation procedures/guidelines or as a separate document. • Ensure dietitian documentation meets diagnosis criteria for the coding of malnutrition – using SGA and ICD-10AM criteria. • Ensure the term 'malnutrition' is clearly documented, followed by the nutrition interventions or care plan required. • Use a malnutrition diagnosis sticker to help clinical coders identify patients easily and standardise dietetic practice – see examples below.
Be committed to quality improvement	• Audit the effectiveness of interventions to improve malnutrition coding rates – Is there correct documentation by staff? Are all those diagnosed as malnourished by a dietitian coded accurately? Refer to Chapter 2 of this toolkit: *Key performance indicators for malnutrition care.* • Develop a competency training package for dietitians for malnutrition assessment, diagnosis and documentation.
Gather support widely within your health service	• Engage medical staff to document malnutrition diagnose in addition to the dietitian. • Involve your multidisciplinary nutrition committee in the development and/or review of nutrition assessment forms – refer to Chapter 1 of this toolkit: *Malnutrition governance.*

The following are some examples of ‘malnutrition diagnosis’ stickers in use in some health services to assist clinical coders to identify and assign patients with an ICD-10-AM malnutrition code (E40–E46).

Examples of ‘malnutrition diagnosis’ stickers used by health services:



The Australian Commission on Safety and Quality in Health Care (ACSQHC) has recently commissioned work to implement a national set of high-priority complications that occur in hospital (including malnutrition).[31] Changes to malnutrition documentation and coding guidelines may be required in the future to better capture and monitor hospital-acquired malnutrition. For further information refer to Chapter 2 of this toolkit: *Key performance indicators for malnutrition care*.

7. Preventing decline and improving nutritional status through nutrition intervention and monitoring

Medical nutrition therapy (MNT) involves assessing nutritional status, establishing nutritional diagnosis and using professional judgement to individually tailor an appropriate nutritional plan.[9] MNT aims to address a nutrition problem or cause of the nutrition diagnosis by changing nutrition-related behaviour, risk factors and environmental impacts on health status.[8]

What are appropriate nutrition goals for malnutrition or patients at risk of malnutrition?

According to the DAA evidence-based guidelines, the goal of intervention is 'to prevent decline/improve nutritional status and associated outcomes in adults with malnutrition or at risk of malnutrition'.[8]

However, when discussing nutrition goals with a patient with cancer, these goals should be individualised, taking into account patient prognosis, psychosocial issues and patient wishes.[11]

> *Weight-losing patients with cancer cachexia who stabilise their weight have greater quality of life and survival duration than those who continue to lose weight.*[11]

> *Weight maintenance leads to beneficial nutritional status, physical function and quality-of-life outcomes during radiation therapy.*[9] *If goal requirements cannot be achieved with oral intake, alternative means of nutrition support should be considered.*[11]

Refer to the guidelines for appropriately using enteral and parenteral nutrition in adult patients in section 9: *Where can I obtain further information about the identification, prevention and management of cancer malnutrition?*

Common symptoms in patients undergoing anti-cancer treatment that impact on dietary intake include taste changes, poor appetite and nausea.[32,33] If concerns regarding these symptoms are not addressed then the goals of MNT are unlikely to be met.

> *In patients with head or neck cancer receiving radiotherapy or chemotherapy, the specific aim is to minimise a decline in nutritional status and weight and to also maintain quality of life and symptom management.*[9,12] *Collaboration with the wider multidisciplinary team such as dentists, nurses, pharmacists and speech pathologists, aids dentition, symptom and pain management for these patients.*

Complementary and alternative medicine (CAM) is frequently used by patients with cancer and can contribute to developing malnutrition. For more information refer to information from Cancer Council Australia and NHMRC listed in section 9: *Where can I obtain further information about the identification, prevention and management of cancer malnutrition?*

What are the appropriate interventions for preventing and treating malnutrition?

Improving energy and protein intake remains the first interventional step in MNT for weight-losing cancer patients.[11] Specific details for calculating energy and protein requirements for a weight-stabilising goal in patients with cancer cachexia and/or undergoing radiotherapy can be found in the evidence-based guidelines.

Nutritional interventions that may improve outcomes include:

- a 'food first' approach – modifications to food provision methods such as increased nutrient density (food fortification),[34] identifying food preferences, more frequent meals and fluids, improving the eating environment through socialisation[8,13,35]
- feeding support provided by healthcare assistants[8,36]
- protected or assisted mealtimes[8,13,36]
- a multidisciplinary nutrition support team[8,29,37,38]
- multinutrient oral nutritional supplements (high energy and/or protein)[8,13,34]
- dietary counselling (with multinutrient oral nutritional supplements if deemed necessary) from a dietitian[8,9,39]
- enteral tube feeding[8,40]
- multinutrient oral nutritional supplements or enteral tube feeding in addition to exercise[8]
- parenteral nutrition[8]
- individually prescribed nutritional support using mixed approaches (such as high-energy diets +/- oral nutrition supplements, enteral tube feeding, parental nutrition).[8]

In patients with head and neck cancer, preoperative nutrition intervention in malnourished patients may lead to improved outcomes such as quality of life and reduce adverse-related consequences of malnutrition.[12]

How frequently should the dietitian review?

Monitoring patients provides an opportunity to evaluate the effectiveness of nutrition intervention. Frequent dietitian contact improves outcomes in patients receiving radiation therapy to the gastrointestinal tract or head and neck area[9] and/or those with cancer cachexia.[11] The recommended time for an initial consultation is 45–60 minutes and 15–30 minutes for a review consultation, with recent studies in patients with cancer demonstrating effective clinical outcomes with weekly to fortnightly dietetic intervention.[11]

Pre-treatment assessment and weekly dietitian review for oesophageal cancer patients receiving chemo-radiation therapy improves nutritional status and treatment tolerance.[9]

Patients with head and neck cancer should see a dietitian weekly during radiotherapy.[12] After treatment this should be fortnightly for a least six weeks and then as required.[12] Nutrition follow-up for all other patients undergoing radiotherapy is recommended at approximately six weeks after beginning radiation therapy.[9]

What other strategies have health services used to manage malnutrition?

- Establishing weighing stations within day chemotherapy treatment centres to encourage a patient-focused approach to weight monitoring. Developing a weight record card for patients to record and track this information – using self-management approaches.
- Ensuring patient information about nutrition and the importance of weight monitoring are easily accessible to patients. Considering the health literacy and language translation needs of the patient population. For more information visit the Cancer Council Australia and Health Translations websites (see section 9: *Where can I obtain further information about the identification, prevention and management of cancer malnutrition?*)
- Engaging staff in a malnutrition preventative focus to raise the profile of malnutrition within the health service so that all staff are 'malnutrition aware'. Refer to Chapter 1 of this toolkit, *Malnutrition governance*, specifically section 6 on engaging staff to ensure malnutrition is a priority within your health service.
- Adopting a food-first approach to achieving MNT goals where nutrition is provided from food where possible by working to optimise the food service system (food quality, choice and fortification) and mealtime environment. For nutritionally compromised patients, mid-meal snacks and drinks can make a significant nutritional contribution to intake. Nutritional supplements, traditionally high-waste items, can be avoided where possible.
- Where nutritional supplements are indicated for inpatient use, a policy and credentialing procedure for dietitians to prescribe nutritional supplements on the inpatient medication chart have been developed. This helps to highlight nutrition as an integral part of patient treatment, promotes increased timeliness and adherence to the nutrition care plan and enables patient non-consumption of nutrition support products to be identified and documented.
- Employing creative marketing and educational approaches to support MNT and increase the profile of nutrition at the patient treatment level such as ward/clinic posters and nutrition support product labels (see below for examples).

Examples of creative marketing and educational approaches utilised by health services to support malnutrition management:

Local approaches:	Interstate approaches:	International approaches:
Nutr Support Product Label - Eastern.pdf How to complete the MST-Eastern.pdf	Placemat1-Qld.pdf TPCH Banner 2-Qld.pdf Placemat at chair-Qld.pdf	ASPEN Pt Maln Poster.mht

8. Communicating the identification and management of cancer malnutrition

Once screening, assessment and diagnosing of malnutrition has occurred and interventions are in place, it is important to ensure this information is communicated. This may occur in different ways depending upon the patient setting.

On the ward:	In the day treatment units:	In the outpatient clinic:
* Discuss with the treating team (medical, nursing, nurse specialist, allied health) including in: • team meetings / team huddles • ward rounds • one-to-one discussions.	* Discuss with the treating team (medical, nursing, nurse specialist, allied health) in: • multidisciplinary team meeting • one-to-one discussions.	* Discuss with the treating team (medical, nursing, nurse specialist, allied health) in one-to-one discussions.
* Clearly document in the patient's file. * Use electronic/manual patient journal boards to accept and complete referrals. * Communicate discharge information onto other health services to coordinate future care.	* Clearly document in the patient's file. * Use electronic/manual patient journal boards to accept and complete referrals. * Communicate discharge information onto other health services to coordinate future care.	* Clearly document in the patient's file. * Communicate discharge information onto other health services to coordinate future care.

Also refer to Chapter 1 of this toolkit, *Malnutrition governance*, and the section on engaging staff to ensure malnutrition is a priority within your health service.

9. Where can I obtain further information about the identification, prevention and management of cancer malnutrition?

Screening and assessment tools:

Detsky A, McLaughlin J, Baker J, et al. 1987, 'What is subjective global assessment of nutritional status?' *Journal of Parenteral and Enteral Nutrition*, no. 11, pp. 8–13
http://www.nutricionclinica.sld.cu/Editoriales/DetskyASArticleOnSGA.pdf

Ferguson M, Capra S, Bauer J, Banks M 1999, 'Development of a valid and reliable malnutrition screening tool for adult acute hospital patients', *Nutrition*, no. 15, pp. 458–464
http://www.ncbi.nlm.nih.gov/pubmed/10378201

Oncology and Nutrition clinical guidelines and references – local:

Australasian Society for Parenteral and Enteral Nutrition (AuSPEN) 1999, *Guidelines for intravenous trace elements and vitamins*
http://www.auspen.org.au/assets/Uploads/Documents/guidelines-2/AuSPEN-Micronutrients-Guidelines.pdf

Cancer Council Australia 2011, 'Complementary and alternative medicine', *Cancer Forum*, vol. 35, no. 1
http://cancerforum.org.au/Issues/2011/March.htm

Cancer Council Australia: *Wiki platform – web-based information and education on clinical practice guidelines* – constantly updated
http://wiki.cancer.org.au/australia/Guidelines

Dietitians Association of Australia (DAA) *Enteral feeding manual for adults in health care facilities* and *Parenteral nutrition manual for adults in health care facilities*
http://daa.asn.au/for-health-professionals/publications-and-resources/professional-and-nutrition-education-resources/

eviQ Cancer Treatments Online – Website containing the latest chemotherapy regimens and side effects
https://www.eviq.org.au

Gillanders L, Angstmann K, Ball P, et al. 2008, 'AuSPEN clinical practice guideline for home enteral nutrition patients in Australia and New Zealand', *Nutrition*, no. 24, pp. 998–1012
http://www.auspen.org.au/assets/Uploads/Documents/guidelines-2/AuSPEN-HPN-Guidelines.pdf

National Health and Medical Research Council (NHMRC) 2014 *Talking with your patients about Complementary Medicine – a Resource for Clinicians*
http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/cam001_complementary_medicine_resource_clinicians_140409.pdf

Morey B, Brown T 2011, 'A review of evidence-based practice in nutrition-related complementary therapies: improving the knowledge of dietitians', *Cancer Forum*, vol. 35, no. 2
http://cancerforum.org.au/Issues/2011/July.htm

Peter MacCallum Cancer Centre – Nutrition Department 2009, *Oncology nutrition: an essential resource for the nutritional management of cancer*
http://www.petermac.org/education/

Please note this document is currently available; however, a review process has been commenced and it is anticipated there will be an updated edition in mid-2015.

Oncology-specific and Nutrition clinical guidelines and references – international:

ASPEN 2011, *Clinical guidelines: nutrition screening, assessment and intervention in adults*
http://pen.sagepub.com/content/35/1/16.long

British Association for Parental Enteral Nutrition (BAPEN): *Malnutrition and nutritional care in the UK*
http://www.bapen.org.uk/

Malnutrition Resource Centre – interactive website maintained by Academy of Nutrition and Dietetics
http://malnutrition.andjrnl.org/

National Institute for Health and Care Excellence (NICE): *Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition*
http://publications.nice.org.uk/nutrition-support-in-adults-cg32

NICE: *Cancer service guidance*
http://guidance.nice.org.uk/CSG/Published

NICE: *Pathways – nutrition support in adults*
http://pathways.nice.org.uk/pathways/nutrition-support-in-adults

NICE: *Nutrition support in adult – quality standard*
http://www.nice.org.uk/guidance/QS24

The Cochrane Library: Database of systematic reviews
http://www.thecochranelibrary.com/

The European Society for Clinical Nutrition and Metabolism: Guidelines and position papers
http://www.espen.org/education/espen-guidelines

Oncology-specific resources in languages other than English:

Cancer Council Australia: Resources in other languages
http://www.cancervic.org.au/languages

Health Translations Online Directory – enables health practitioners and those working with culturally and linguistically diverse communities to easily find translated health information
http://www.healthtranslations.vic.gov.au

Appendix 1: Checklist for a successful malnutrition risk screening program

	Action required	In progress	Completed	Not applicable
Malnutrition risk screening is embedded into designated staff role. If nursing – relationships are established to understand demand within individual nursing roles at different points in the patient timeline/journey. Nurse 'nutrition champions' have been identified and engaged.				
Malnutrition screening tool is incorporated into existing paperwork or processes of which completion is already established. Malnutrition screening tool is incorporated into existing cancer-specific screening tool.				
Regular weight monitoring is established. Staff and patients have access to appropriate weight- and height-measuring equipment.				
Results of screening and sequential weights are documented in a systematic way, allowing access for all members of the team.				
Audits are regularly completed of malnutrition risk screening and weighing compliance and referral rates to dietitians.				
Reports from the malnutrition audits are tabled at your health service's multidisciplinary nutrition committee.				
Staff in-services occur regularly on malnutrition risk screening linked back to benefits in terms of patient outcomes and local results of audits measuring malnutrition risk screening and weighing compliance. Relationship established with nurse education units to determine best strategies for your health service.				
Opportunities to increase awareness of malnutrition risk screening are actively sought and aligned with key education and hospital programs.				
Support has been gained from executive, senior medical and nursing and clinical/quality unit staff.				

Appendix 2: Examples of existing health service documents

Examples of malnutrition screening embedded in existing health service forms:

- Functional Maintenance Screening Tool – Western Health
  FM Screen Tool – Western
- Generic Adult Patient Admission and Discharge Screen – Bendigo Health
  Patient AdmDC Screen – Bendigo

Examples of malnutrition re-screening prompts within existing health service forms:

- Functional Maintenance Care Plan – Western Health
  FM Care Plan – Western

Examples of nutrition assessment forms/templates used by health services:

- Nutrition Assessment – Austin Health
  Nutrition Ax – Austin
- Nutrition Assessment Form – Day Oncology – Western Health
  Oncology Nutrition Ax – Western
- Electronic Nutrition Assessment Form – Peter MacCallum Cancer Centre
  Electronic Nutrition Ax – Peter Mac

Example of a nutrition review form/template used by health services:

- Nutrition Review Form – Austin Health
  Nutrition RV – Austin

Examples of nutrition assessment tool forms:

- Subjective Global Assessment of Nutritional Status – Monash Health
  SGA tool – Monash

Examples of SGA training and competency guidelines:

- Checklist of tasks to assist with SGA competency training – Monash Health
  SGA Training Checklist – Monash
- Nutrition Department Subjective Global Assessment training and competency guidelines – St Vincent's Hospital, Melbourne
  SGA Competency guidelines – STV

Examples of malnutrition diagnosis guidelines or reference material:

- Guidelines for the assessment, diagnosis and documentation of protein-energy malnutrition – St Vincent's Hospital, Melbourne
  Guidelines doc maln 2014 – STV
- ICD-10-AM Codes for Malnutrition – Queensland Health
  ICD-10-AM Codes Documentation – Qld

Examples of 'malnutrition diagnosis' stickers used by health services:

- Malnutrition diagnosis sticker – St Vincent's Hospital, Melbourne
  Malnutrition sticker – STV
- Malnutrition diagnosis sticker – Peninsula Health
  SGA stickers – Peninsula

Examples of creative marketing and educational approaches utilised by health services to support malnutrition management

Local approaches:

- Nutrition Support Product Label – Eastern Health
  Nutr Support Product Label – Eastern
- How to complete the MST Flowchart – Eastern Health
  How to complete the MST – Eastern

Interstate approaches:

- Placemat example 1 – Queensland Health
  Placemat1 – Qld
- Placemat example 2 – Queensland Health
  Placemat at chair – Qld
- Protected Meal Time Banner – Queensland Health
  TPCH Banner2 – Qld

International approaches:

- ASPEN Patient Malnutrition Poster
  ASPEN Pt Maln Poster

WHAD82.1

Western Health

FUNCTIONAL MAINTENANCE SCREENING TOOL AD 82.1

❒ **Western Hospital** ❒ **Hazeldean**
❒ **Sunshine Hospital**
❒ **Williamstown Hospital**

- To be completed within 24 hours of admission for patients with expected length of stay > 48 hours and then weekly thereafter
- At least 1 action must be taken for each domain

PATIENT IDENTIFICATION LABEL

Date Of Admission: _____ / _____ / _____ **Reason For Admission:** _____

Patient's Goal/s (in their own words): _____

	Usual Status At Home	Status On Admission	Action/s Taken	Date	Initials
Cognition **Delirium** **Dementia** **Depression**	❒ Previous episode of delirium or post-operative confusion ❒ Diagnosed cognitive impairment: ❒ Dementia ❒ Depression ❒ Other: _____ _____ ❒ Concerns regarding behaviour, memory or emotional health	❒ Confused / disorientated ❒ Poor short term memory ❒ Wandering / exit seeking ❒ Agitated / aggressive / restless ❒ Hallucinating / delusional / paranoid ❒ Fluctuating level of consciousness ❒ Withdrawn / apathetic / lethargic ❒ Disturbed mood / sleep / appetite ❒ Lack of interest in usual activities	Nil issues identified / nil action required Discuss with Medical Team Collect information about usual routine Commence Behaviour Management Plan / Chart Commence Patient Special Needs Assessment and Management Chart Refer to Psychologist / C-L Psychiatric Nurse Other:		
Nutrition & Swallowing **Height: _____ cm** **Weight: _____ kg**	❒ Chewing / swallowing difficulties ❒ Specified diet: _____ _____ ❒ Specified fluids: _____ _____ ❒ Fluid restriction: _____ L/day ❒ Diagnosed diabetes with unstable blood sugar levels ❒ Feeding Assistance / Set-up Only ❒ Concerns regarding poor appetite / nutritional status	❒ Gurgling breathing / wet voice / choking / coughing with eating and / or drinking ❒ Recent pneumonia (in past 1/12) ❒ Feeding Assistance / Set-up Only **Malnutrition Risk Score:** **1. Have you lost weight recently without trying? (in last 6/12) No ⓪ Unsure ②** **If Yes, amount : 1–5kg ① 10kg ②** **11-15kg ③ 15kg ④** **Unsure ②** **2. Have you been eating poorly because of a decreased appetite? No ⓪ Yes ①** **Total malnutrition risk score (1+2) =** ☐	***All patients: Weekly weigh / re-screen for malnutrition*** If malnutrition risk score: • = 2 or 3: commence High Energy High Protein Diet (HEHP) • = 4 or 5: commence HEHP Diet and refer to Dietitian Discuss with Medical Team Commence nil by mouth / specified diet / specified fluids _____ Commence Daily Fluid Balance / Food Chart Refer to Speech Pathologist / Diabetes Educator Refer to Volunteer Mealtime Assistance Program (VMAP) Other:		
Medication	❒ Difficulty swallowing medication ❒ Difficulty opening medication packets ❒ Difficulty remembering to take medications ❒ Medication Management:_____ _____ ❒ Concerns regarding medication use	❒ Change in ability to take medications ❒ Requiring additional assistance to take medications ❒ Taking 4 or more medications ❒ On warfarin / insulin / other "high risk" medications	Nil issues identified / nil action required Discuss with Medical Team Refer to Pharmaceutical Care Plan Refer to Pharmacist Other:		

	Usual Status At Home	Status On Admission	Action/s Taken	Date	Initials
Continence 	❒ Urinary / faecal incontinence ❒ Constipation / diarrhoea ❒ Continence management: _____ _____ ❒ Concerns / pain / embarrassment regarding bladder or bowels	❒ Urinary / faecal incontinence ❒ Constipation / diarrhoea ❒ Indwelling catheter (IDC) ❒ Abnormal urinalysis result	Nil issues identified / nil action required Discuss with Medical Team Commence Inpatient Continence Assessment and Management Form / Bowel Function Chart Commence Daily Fluid Balance / Food Chart Other:		
Skin Integrity 	❒ History of skin tears / fragile skin ❒ History of leg ulcers ❒ Previous pressure ulcer ❒ Concerns regarding skin integrity ❒ Risks to skin integrity - incontinence or diarrhea / immobility / malnutrition	❒ Current skin tears ❒ Current pressure injury ❒ Current wound ❒ Any reddened areas (observe <u>all areas</u> including back of head, spine, sacrum, lower legs, heels and toes)	***All Patients: Assess risk: Braden Pressure Ulcer Risk Ax Tool / Skin Checks: Daily full skin integrity checks*** Commence Wound Management Chart Refer to Wound Care Nurse / Podiatrist Other:		
Mobility / Falls 	❒ Bedbound / assisted / supervised / independent mobility ❒ History of fall/s in last 12 months ❒ Mobility aid/s: _____ ❒ Concerns regarding unsafe mobility / dizziness / frailty / home access ❒ Ability to comprehends mobility tasks	❒ Change in mobility / weight bearing / balance / cognition ❒ Unable to assist with on / off bed tasks ❒ Unable to assist with transfers ❒ Unsteady / unsafe mobility ❒ Admitted as the result of a fall ❒ Fall since admission	***All Patients: Assess falls risk: Falls Risk Ax, Prevention & Management Plan*** Unable to assist on/off bed – Use slide sheets & bed mechanics Unable to assist with transfers – Use mechanical aid Refer to PT / OT *(all subacute patients)* Other:		
Self-Care (activities of daily living) 	❒ Fully dependent / assisted / supervised self-care ❒ Community services: _____ _____ ❒ Concerns regarding self-care	❒ Reduced ability to perform self-care ❒ Unsafe ability to perform self-care	Nil issues identified / nil action required Perform Barthel / FIM *(subacute patients only*) Refer to OT *(all subacute patients)* Other:		
Pain 	❒ History of chronic pain – specify details:	❒ Current pain – specify details:	Nil issues identified / nil action required Discuss with Medical Team Other:		
Social & Communication 	❒ Social isolation ❒ Legal issues ❒ Concerns regarding social situation ❒ Supportive communication: _____ _____	❒ Carer stress ❒ Family conflict ❒ Potential inability to return to previous living arrangements ❒ Communication issues	Nil issues identified / nil action required Refer to Social Worker *(all subacute patients)* Refer to Speech Pathologist Other:		

Staff Name & Signature	A.M._____	P.M._____	Night:_____

FBH 305 100

BENDIGO HEALTH

GENERIC ADULT PATIENT ADMISSION & DISCHARGE SCREEN

SURNAME:..... UR NO: .....
GIVEN NAMES:.....
D.O.B:..... SEX:.....
ADMISSION DATE:.....
CONSULTANT:..... WARD/CLINIC:.....
USE LABEL IF AVAILABLE

ADMISSION & DISCHARGE SCREEN

MR92

ADMISSION DETAILS

Provisional Diagnosis:

Date of admission: Time:

Past History (medical, surgical, mental health):

Consider: CNS (nerves, brain), CVS, Resp, GIT, urinary, skin.

ID Band ☐

PREDICTED DISCHARGE

Predicted date of discharge: | Predicted destination:

Transport ☐ Self ☐ Family/carer ☐ Taxi ☐ Ambulance ☐ Other ☐

PRE – ADMISSION SERVICES

☐ not applicable

eg HARP, HNSS, MOW, Home Help, PCA, Case Manager (include details & notify Case Manager Liaison)

Provider details include service provided	Admission notification date & sign	Discharge notification date & sign

1. ADMISSION HISTORY

Is this a re-admission to hospital: ☐ 28 days ☐ 3 months

How many times has patient been in any hospital in past 12 months?

Consider complex discharge planning

2. ORIENTATION TO UNIT:

Welcome information given and explained ☐ Patient rights & responsibilities booklet ☐
Telephone location ☐ Introduction to other patients ☐ Bathroom location ☐
TV ☐ Discharge time (10am) explained. ☐ Use of Nurse call ☐

3. SOCIAL/ LIFESTYLE	NO	YES	Referrals/action (✔)
Aboriginal/Torres Strait Islander			Aboriginal Liaison Services ☐
Is patient identified as Culturally and Linguistically Diverse?			Interpreter needed? ☐
Does patient have a case manager? Name & phone			Notify of admission, Case Management Liaison Co-ordinator ☐
Does patient have a support person/ carer?			Notify of admission, ☐ Social Worker (if concerns) ☐
Does patient live alone? If no, who with (other than carer)? Name:			Social Worker (if concerns) ☐ PAC ☐
Is patient a carer?			TCP ☐
If yes have arrangements been made?			
Does patient drink alcohol daily?			Doctor if possible issues ☐
Does patient smoke?			Complete Smoking assessment nicotine dependence scale (MR92Q)
Does patient use recreational drugs?			Doctor if possible issues ☐

Current accommodations type: House ☐ Unit ☐ Caravan ☐
Aged care facility ☐ Low Care ☐ High care ☐ SRS ☐

Will current home arrangements be an issue on discharge? Social Worker ☐

4. ADVANCE CARE PLANNING	NO	YES	Referrals/action (✔)
Does the patient have an Advance Care Plan?			A copy of these orders must be placed in the clinical file.
Enduring Power of Attorney (medical treatment)?			
Enduring Power of Guardianship?			
Refusal of Treatment Certificate?			Entered on IPM? ☐

OCT 2013

BENDIGO HEALTH

GENERIC ADULT PATIENT ADMISSION & DISCHARGE SCREEN

SURNAME:..... UR NO: .....

GIVEN NAMES:.....

D.O.B:..... SEX:.....

ADMISSION DATE:.....

CONSULTANT:..... WARD/CLINIC:.....

USE LABEL IF AVAILABLE

5. INFECTION CONTROL	NO	YES	Referrals/action (✔)
MRSA/VRE/Clostridium difficile/Other MRO			Swabs as per policy ☐
Gastroenteritis			Infection control ☐
Acute Respiratory Infection/Influenza			Infection control ☐
Other Infection/infectious disease			Infection control ☐
Is isolation required?			Infection control ☐

6. MEDICATIONS	NO	YES	Referrals/action (✔)
Does patient have any allergies?			Alert Sheet ☐ ID band ☐
If Yes, what type?			Medication Chart ☐
Is patient taking more than 5 medications?			If Yes, Pharmacy Review ☐
Does patient use a dosette or webster pack?			Name of local Pharmacy:
Does patient understand current medications?			

7. BLOOD & BLOOD PRODUCTS	NO	YES	Referrals/action (✔)
Is the patient likely to receive blood products this admission?			Details of any Transfusion Reaction
Has the patient ever had a blood product transfusion?			
If yes to the above, has the patient ever had a transfusion reaction? Please comment			If Yes, noted on Alert Sheet ☐ If Yes, noted IPM ☐

8. COMMUNICATION	NO	YES	Referrals/action (✔)
Does patient have hearing impairment?			Document aids on valuables list ☐
Does patient have vision impairment?			Document aids on valuables list ☐
Any new / pre existing (circle) issues with communication? Explain:			Speech Pathology ☐

9. COGNITION	NO	YES	Referrals/action (✔)
Does patient have a history of dementia?			Social Worker ☐
Is the patient at risk of wandering?			Occupational Therapist ☐
Is the patient confused?			If the patient is aged 65 years or older, or ✔ in the yes column complete Multidisciplinary delirium & cognition screen and stickers.
Is the patient disorientated?			

AMTS Score: ☐

10. PAIN / DISCOMFORT	NO	YES	Referrals/action (✔)
Does patient experience pain or discomfort?			Pain Service Referral ☐
Pain is Chronic (>3 months) ☐ Acute ☐			
Describe location, severity & life interference on care plan			

11. SKIN INTEGRITY	NO	YES	Referrals/action (✔)
On admission does patient have any skin tears, pressure ulcers, wounds or blisters (circle)			Podiatry ☐
			Dietitian ☐
Complete incident report and wound chart. ☐	Score? ☐		Wound Consultant ☐
Braden Screen completed? ☐			Occupational Therapist ☐
If Braden score is ≤ 12 a Comprehensive skin assessment must be undertaken within 8 hours (tick box when completed) ☐			Physiotherapist ☐
			Photograph of Wound? ☐

12. NUTRITION	NO	YES	Referrals/action (✔)
Does the patient have any food allergies?			Notify Kitchen ☐
Allergy Type: Please document			Alert sheet ☐
Diet type: Please document daily in care plan			Doctor ☐
Does patient have difficulty swallowing?			Speech Pathology ☐

MALNUTRITION SCREENING TOOL			SCORE	
Has patient lost weight recently with out trying?	No	0		Add scores ☐
	Unsure	2		If 2 or more, refer to dietitian and commence upon HEHP Diet
	Yes, 1-5 kg	1		
	Yes, over 5kg	2		Dietitian ☐
Has patient been eating poorly because of decreased appetite?	No	0		HEHP Diet ☐
	Yes	1		

BENDIGO HEALTH

GENERIC ADULT PATIENT ADMISSION & DISCHARGE SCREEN

SURNAME:..... UR NO: .....
GIVEN NAMES:.....
D.O.B:..... SEX:.....
ADMISSION DATE:.....
CONSULTANT:..... WARD/CLINIC:.....
USE LABEL IF AVAILABLE

13. DEPRESSION	NO	YES	Referrals/action (✔)
Yes to weight loss/decrease in section 12.			Doctor Notified ☐
Recent changes in sleep patterns, significant stress, unresolved pain?			
Recent mood or energy level changes?			

14. ACTIVITIES OF DAILY LIVING — **Referrals/action (✔)**

Key: I = Independent S = Supervision A = Able to assist D = Dependent

Level of Function	Pre-Morbid	Current	Level of Function	Pre-Morbid	Current	Referral
Showering / Bathing			Toileting			OT ☐
Dressing			Eating			Physio ☐
Grooming			Mobility			

15. ELIMINATION	NO	YES	Referrals/action (✔)
Does the patient have frequency, burning or pain on voiding?			FWT/MSU ☐
Have incontinence of urine or faeces? (circle)			Continence Clinic ☐
Use continence aids? What type?			
Suffer from constipation or diarrhoea? (circle and describe strategies)			Dietitian ☐
Have a Urostomy/Colostomy (circle)			Stomal Therapist ☐
Does the patient have an indwelling catheter or an intermittent catheter?			Date of next replacement?

16. MOBILITY/FALLS	NO	YES	Referrals/action (✔)
Is the patient bariatric?			No Lift/Bariatric Plan ☐
Has the patient had unexpected falls within the last 6 months?			If concerns exist regarding safety with mobility or function, refer to
Does the patient have an unsteady/unsafe gait?			Physio ☐ OT ☐
Is the patient agitated/confused/disorientated? (see section 9)			Complete Falls Prevention Screen, Assessment & Strategies (MR118) if patient ≥ 65 years or Falls risk is identified on ALERT SHEET or Yes to 2 or more of the mobility & falls questions
Does visual impairment impact on everyday function such that the patient is considered unsafe?			
Is the patient in need of frequent toileting?			

Does the patient require the following items?	If needed do they have them?		Do items need to be brought in?		Complete MR118 ☐
	Yes	No	Yes	No	
Glasses					Family and friends asked to bring required items in. Date discussed / /
Non slip footwear					Falls prevention booklet provided (if at risk of falls) ☐
Mobility Aids					

BENDIGO HEALTH

GENERIC ADULT PATIENT ADMISSION & DISCHARGE SCREEN

SURNAME:..... UR NO: .....

GIVEN NAMES:.....

D.O.B:..... SEX:.....

ADMISSION DATE:.....

CONSULTANT:..... WARD/CLINIC:.....

USE LABEL IF AVAILABLE

COMPLEX DISCHARGE SCREEN		Discharge date & destination unclear ☐	
Frequent Presenter	☐	Unable to return home ☐	If ✔ to any, activate Complex Discharge Process.
Homeless	☐	Residential care required ☐	
Bariatric	☐	Disability Services required ☐	
GEM on Acute	☐	1 or more Community services ☐	

DISCHARGE CHECKLIST	✔ when completed	If no what action was taken or N/A.	
Valuables Checklist complete		(Check ED Checklist for Valuables)	
Collection of Discharge Medications		BH pharmacy ☐	Own pharmacy ☐
Own Medications returned			
Medical Certificate			
Pre-admission or new services notified		Name:	
IV/subcutaneous cannula removed			
Dressing attended			
Post d/c action plan (e.g. COPD, asthma)			Oxygen ordered ☐
Medical Discharge summary complete and copy to patient			
Family/Carer notified of discharge			
Check Oxygen & suction, change if required			
Patients returning to Residential Aged Care Facilities also include the following			
Completed Medication Chart			
Medications arranged with Pharmacy			24 Hr notice if possible
Residential In Reach notified of discharge			
Transfer letter completed (medical)			
Facility notified of discharge time			
Patients transferred to another Health Service also include the following			
Inter-hospital transfer form completed			
At discharge checked by Name:	Signature:		Date

VALUABLES **No valuables with patient** ☐

Describe Items (Do not tick here, Description must be provided)	N/A	Please Tick Location			Returned (Date & Sign)	
		Home	Patient	Safe		
Hearing Aids						
Dentures						
Glasses						
Jewellery						
Watch						
Electrical Items						
Mobile Phone						
Mobility Aids						
Money, C.Cards						
Medications		Home	DD Cupboard	Drug Room		
Other items						

Completion of Screen by Nurse & Patient / Significant Other

I am aware that any jewellery or valuables kept on me or in the ward area, are my responsiblity and I understand that Bendigo Health are not accountable for any loss or damage. I understand that my care plan will be developed from the information I have provided above.

Nurse & Patient or significart other must sign. If unable to sign, state a reason why.....

Patient Name:..... Signed:..... Date:.....

Nurse Name:..... Signed:..... Date:.....

Western Health

FUNCTIONAL MAINTENANCE CARE PLAN AD 82.0

☐ Western Hospital ☐ Hazeldean
☐ Sunshine Hospital
☐ Williamstown Hospital

PATIENT IDENTIFICATION LABEL

WHAD82.0

Interpreter: N/Y_____		Date:_____/_____/_____ LOS Day:_____	Comments / Progress / Plan updated:
General	*Observations*	Frequency:	
	Additional Monitoring	❑ BSL ❑ Weight ❑ Neuro Vasc_____ ❑ Other _____	❑ Drain tubes/ICC _____
	Oxygen	❑_____LPM ❑ Face Mask ❑ Nasal Prongs ❑ Humidified	
Pain	*Acute or Chronic*	❑ Type/Location/Mx: _____ ❑ Sedation score _____	
Cognition	*Orientation & Behaviour*	❑ Alert ❑ Drowsy ❑ Oriented ❑ Confused ❑ Other: _____	
	Supportive Comminication	❑ Hearing Aid – Left / Right ❑ Dentures – Top / Bottom ❑ Glasses / Legally Blind	
Nutrition Ensure weekly weigh and rescreen for malnutrition risk weekly	*Assistance Required*	❑ Nil ❑ Set-up ❑ Feeding ❑ Oral Hygiene	MST score: _____ Next MST screen due: _____ Next weight due: _____
	Fluid	❑ Fluid Bal. Chart ❑ ____ L/Day FR ❑ Normal Fluid ❑ IV / NGT / PEG ❑ Modified Fluids ❑ NBM	
	Food	❑ Food Chart ❑ HEHP diet ❑ Full Ward Diet ❑ Supplements ❑ Diabetic Diet ❑ IV / NGT / PEG ❑ Modified Diet ❑ NBM	
Medication (must be supervised)	*Assistance Required*	❑ Nil ❑ Set-up ❑ Crushed medication	
	IV Cannula	Location: Resite Due:	
	Patch	Location: Change Due:	
Continence	*Bladder*	❑ IDC ❑ Continent ❑ Prompting ❑ Incontinent	❑ Stoma _____ ❑ Skin regime if double incontinence
	Bowel	❑ Bowel Chart ❑ Continent ❑ Prompting ❑ Incontinent	
Skin Integrity Braden score ≤ 12 high risk 13-14 medium risk 15-18 low risk	*Pressure injury prevention*	Braden Score:_____ Due on ...../...../..... ❑ Pressure Care as per Braden Ax ❑ Daily full skin check for **ALL** patients	❑ Air Mattress ❑ Turning regime ❑ Elevate heels ❑ ROHO cushion
	Wound Mx	❑ Wound(s) present ❑ Wound chart updated	
Mobility & Self-Care	*Transfers/ Off bed/On bed*	❑ Hoist: _____ ❑ Supervise ❑ Assist ❑ Independent ❑ (1) Slide sheet ❑ (2) Slide sheets	
	Ambulation	WB Status: _____ Gait Aid: _____ ❑ Independent ❑ Supervise ❑ Assist ❑ Unable to assist	
	Toileting **OTF = over toilet frame*	IDC / Pad / Pan / Bottle / Commode / Toilet ❑ OTF* ❑ Supervise ❑ Assist ❑ Independent	
	Hygiene	Sponge / Shower Chair / Standing Shower ❑ Set-up ❑ Supervise ❑ Assist ❑ Independent	
	Dressing	❑ Set-up ❑ Supervise ❑ Assist ❑ Independent	
Discharge Destination:			**EDD:**
Nurse Initials (Each Shift)	**A.M.**	**P.M.**	**Night**

41084 03/12

FUNCTIONAL MAINTENANCE CARE PLAN

AD 82.0

Western Health

FUNCTIONAL MAINTENANCE CARE PLAN AD 82.0

☐ **Western Hospital** ☐ **Hazeldean**
☐ **Sunshine Hospital**
☐ **Williamstown Hospital**

PATIENT IDENTIFICATION LABEL

Interpreter: N/Y_____		**Date:**_____/_____/_____ **LOS Day:**_____	**Comments / Progress / Plan updated:**
General	*Observations*	Frequency:	
	Additional Monitoring	❑ BSL ❑ Weight ❑ Neuro Vasc_____ ❑ Other _____	❑ Drain tubes/ICC _____
	Oxygen	❑_____LPM ❑ Face Mask ❑ Nasal Prongs ❑ Humidified	
Pain	*Acute or Chronic*	❑ Type/Location/Mx: _____ ❑ Sedation score _____	
Cognition	*Orientation & Behaviour*	❑ Alert ❑ Drowsy ❑ Oriented ❑ Confused ❑ Other: _____	
	Supportive Comminication	❑ Hearing Aid – Left / Right ❑ Dentures – Top / Bottom ❑ Glasses / Legally Blind	
Nutrition Ensure weekly weigh and rescreen for malnutrition risk weekly	*Assistance Required*	❑ Nil ❑ Set-up ❑ Feeding ❑ Oral Hygiene	MST score: _____ Next MST screen due: _____ Next weight due: _____
	Fluid	❑ Fluid Bal. Chart ❑ ____ L/Day FR ❑ Normal Fluid ❑ IV / NGT / PEG ❑ Modified Fluids ❑ NBM	
	Food	❑ Food Chart ❑ HEHP diet ❑ Full Ward Diet ❑ Supplements ❑ Diabetic Diet ❑ IV / NGT / PEG ❑ Modified Diet ❑ NBM	
Medication **(must be supervised)**	*Assistance Required*	❑ Nil ❑ Set-up ❑ Crushed medication	
	IV Cannula	Location: Resite Due:	
	Patch	Location: Change Due:	
Continence	*Bladder*	❑ IDC ❑ Continent ❑ Prompting ❑ Incontinent	❑ Stoma _____ ❑ Skin regime if double incontinence
	Bowel	❑ Bowel Chart ❑ Continent ❑ Prompting ❑ Incontinent	
Skin Integrity Braden score ≤ 12 high risk 13-14 medium risk 15-18 low risk	*Pressure injury prevention*	Braden Score:_____ Due on ...../...../..... ❑ Pressure Care as per Braden Ax ❑ Daily full skin check for **ALL** patients	❑ Air Mattress ❑ Turning regime ❑ Elevate heels ❑ ROHO cushion
	Wound Mx	❑ Wound(s) present ❑ Wound chart updated	
Mobility & Self-Care	*Transfers/ Off bed/On bed*	❑ Hoist: _____ ❑ Supervise ❑ Assist ❑ Independent ❑ (1) Slide sheet ❑ (2) Slide sheets	
	Ambulation	WB Status: _____ Gait Aid: _____ ❑ Independent ❑ Supervise ❑ Assist ❑ Unable to assist	
	Toileting **OTF = over toilet frame*	IDC / Pad / Pan / Bottle / Commode / Toilet ❑ OTF* ❑ Supervise ❑ Assist ❑ Independent	
	Hygiene	Sponge / Shower Chair / Standing Shower ❑ Set-up ❑ Supervise ❑ Assist ❑ Independent	
	Dressing	❑ Set-up ❑ Supervise ❑ Assist ❑ Independent	
Discharge Destination:			**EDD:**

Nurse Initials (Each Shift)	**A.M.**	**P.M.**	**Night**

Austin Health

Nutrition Assessment

U.R Number ……

Surname ……

Given Name(s) ……

Date of Birth ……

AFFIX PATIENT LABEL HERE

FAH026601

Date …… **Time**……

Reason for Referral: ☐ Screened ☐ Referred: Reason……

Location: ☐ Inpatient ☐ Home ☐ Phone ☐ Outpatient Clinic……

Medical History……

……

Medication……

……

Social History ……

……

Physical Activity / Functional Capacity:……

……

Anthropometry

Weight (kg)…… Date: …… (Measured / Estimated / Reported) BMI (kg/m²)……

Height (m)……Date: …… (Measured / Estimated / Reported) HWR(kg)……

PG - SGA score……

Weight History……

……

Biochemistry

Date									
Parameters									
Result									

Clinical

……

……

……

……

……

……

Estimated Requirements. Using……kg.

Energy…… …… MJ/day (kJ/kg or kcal/kg ……

Protein……g/day (…… g/kgBW/day) Fluid (L/day)……

Nutrition Assessment

M31.00

Austin Health

U.R Number ……

Surname ……

Given Name(s) ……

Date of Birth ……

AFFIX PATIENT LABEL HERE

Nutrition Assessment

FAH026601

Dietary Assessment

- □ Meat/alt
- □ Dairy/alt
- □ Fruit
- □ Vegetables
- □ Bread/Cereal
- □ Fat
- □ Drinks
- □ Alcohol
- □ Sweets
- □ Takeaway
- □ Vitamin/Mineral Supp's
- □ Diet Allergies / Intolerances

.....

.....

.....

Dietary Assessment Summary……

……

Client viewpoint……

Nutritional Diagnosis

……

.....

.....

.....

Goals

……

.....

.....

Intervention / Plan

……

.....

.....

.....

Monitoring/Evaluation

……

……

.....

Signature..... Name……

Designation..... Date: ..... Pager no:..... .....

PATIENT IDENTIFICATION LABEL

NUTRITION ASSESSMENT FORM – DAY ONCOLOGY

WHAH390

☐ **Consent for assessment and intervention**

Assessment: **Medical Diagnosis:** _____

Chemotherapy: _____ **Cycle:** _____

Reason for Referral: _____ **Previous input** _____

Relevant Past History: _____

_____

Clinical: _____

_____

Relevant Medications: _____

Social: _____ **Activity/Function:** _____

Anthropometry: Weight: _____ kg Ht: _____ cm BMI: _____ kg/m^2

Interpretation: _____ HWR: _____

Weight History: _____

☐ BMI< 18.5 + evidence of suboptimal intake resulting in subcutaneous fat loss and/ or muscle wasting
☐ Weight loss of at least 5% with evidence of suboptimal oral intake, resulting in subcutaneous fat loss and/or muscle wasting

Biochemistry: _____

_____

Factors Affecting Intake:

Anorexia:	☐	Mucositis:	☐	Taste changes:	☐	Poor dentition:	☐
Nausea :	☐	Vomiting:	☐	Early satiety:	☐	Fatigue:	☐
Constipation:	☐	Diarrhoea:	☐	Dry mouth:	☐	Other:	☐

Estimated requirements: Wt used _____kg

Est Energy Requirements	Est Protein Requirements
_____ BMR x _____ SF x _____ AF = _____ MJ/d	_____ g/kg = _____ g/d
Fluid Requirements	
_____ ml/kg = _____ L/d	

Current Energy Intake: <50% ☐ 50-75% ☐ 100% ☐
Current Protein Intake: <50% ☐ 50-75% ☐ 100% ☐

Dietitian: _____ Pager: _____ Initial Assessment Date: / /

g:\int_subacutecare\nutrition\operational\dietitian\clinical\cancer\malnutrition vcs project phase ii 2013-2014\statewide initiatives\st v's project - nutr gov & kpi\stage 2\survey responses\western health\2013 day oncology nutrition assessment form.docx

Nutrition Assessment Form – Day Oncology – Western Health (cont.)

NAME: _____ U.R.: _____

Nutrition Diagnosis:

_____

related to:_____

***as evidenced by*:**_____

_____

Diet History:

Breakfast Time:	**Lunch** Time:	**Dinner** Time:
Morning Tea Time:	**Afternoon Tea** Time:	**Supper** Time:

Check List:

Milk	Fruit	Bread	Soft drink/Diet
Cheese	Fresh	BF Cereal	Sports drinks
Yoghurt	Canned	Rice/Pasta	Cordial/Diet
Ice-cream	Dried	Biscuits: dry, sweet	Tea/Coffee
	Juice	Pastry/Cake	Alcohol
Eggs		Sugar/Art Sweet	Water
Fish	Vegetables	Chocolate/lollies	Fats / Oils
Poultry	Salad	Chips/nuts	Spreads
Meat	Legumes	Dips	Sauce/Gravy/Dressing
Allergies/Intolerances:			
Cooking Methods:		Take Away:	

Supplements/HEHP foods liked	**Supplements/ HEHP foods disliked**

Intervention: Goals:_____

Plan:_____

_____

_____

Recommended Diet: _____

Nutrition Education / Counselling (*include educational material provided***) :**

1. **2.** **3.**

Monitoring

☐ Nutrition support- oral / enteral / parenteral	☐ Weight Monitoring
☐ Relevant Biochemistry	☐ Coordination of Nutrition Care
☐ Gastrointestinal symptoms	

Review Frequency / Follow up:

Electronic Nutrition Assessment Form – Peter MacCallum Cancer Centre

Peter MacCallum Cancer Centre

Nutrition Department

Nutrition Assessment

URN: [[PMI.URN]]

[[PMI.SURNAME]]
[[PMI.GivenNames]]

DOB: [[PMI.dob]]

[[Document.IncidentDate @" dd/MM/yyyy "]] This _ year old was assessed/reviewed in/by ☐ today. He/She is currently in week/cycle ☐ of __ for__.
Treatment dates: –.

Reason for referral:

PHx:

SHx:

Anthropometry

Height: cm | Weight: kg | BMI: kg/m^2 (RR:__-__kg/m^2) | Weight history: __% loss of bw (5% loss bw = kg). UBW = kg.

Nutrition-Related Difficulties

☐ Mucositis (grade)	☐ Dysgeusia	☐ Constipation	☐ Nausea
☐ Odynophagia	☐ Dysphagia	☐ Diarrhoea	☐ Vomiting
☐ Xerostomia	☐ ↓ Appetite	☐ Fatigue	☐ Dentition problems
☐ Oesophagitis	☐ Early satiety	☐ Other:	

PG-SGA

Score= Category ☐

Estimated Requirements

EER = 125 – 145kJ/kgBW/d = MJ/d

EPR = 1.2 – 1.5g/kgBW/d = g/d

EFR = 35 – 45mL/kgBW/d = mL/d

Diet History

Breakfast	*Snack*	*Lunch*	*Snack*	*Dinner*	*Supper*

Oral Intake

Overall Dietary Assessment

	Energy	Protein	Fluid	Comments:
Adequate	☐	☐	☐	
Inadequate	☐	☐	☐	

Electronic Nutrition Assessment Form – Peter MacCallum Cancer Centre (cont.)

Nutrition Diagnosis

Problem	Related to
Aetiology	as evidence by
Signs & Symptoms	

Nutritional Management (pt agreeable to):

1. Explained/educated on the importance of nutrition, discussed treatment side effect's, modified diet, nutritional supplements and the likelihood of enteral feeding.
2. Encouraged HEHP diet – regular meals & snacks; food fortification strategies discussed.
3. Supplements:
4. Written education material provided on
5. Aim for weight maintenance.

Follow-Up Plan: Review in [ ] in/via [ ].

[[Me.eSignatureMarker]]

[[Me.ShortSignature]]
[[Me.JobTitle]]

Austin Health

U.R Number ……

Surname ……

Given Name(s) ……

Date of Birth ……

AFFIX PATIENT LABEL HERE

Nutrition Review

FAH026602

Date..... **Time**.....

Location: ☐ Inpatient ☐ Home ☐ Phone ☐ Outpatient Clinic……

Reason for Review

.....

Physical activity/functional capacity: .....

.....

Anthropometry

Weight (kg)…… Date: ..... (Measured / Estimated / Reported) BMI (kg/m²)……

Height (m)…….... Date: ..... (Measured / Estimated / Reported) HWR(kg)……

PG - SGA score:.....

Weight History: ……

.....

Biochemistry

Date											
Parameter											
Result											

Clinical

.....

.....

.....

.....

.....

Dietary Assessment

□ Meat/alt
□ Dairy/alt
□ Fruit
□ Vegetables
□ Bread/Cereal
□ Fat
□ Drinks
□ Alcohol
□ Sweets
□ Takeaway
□ Vitamin/Mineral Supp's
□ Diet Allergies / Intolerances

.....

.....

.....

Nutrition Review

M31.01

Austin Health

U.R Number ……

Surname ……..

Given Name(s) ……

Date of Birth ……..…

AFFIX PATIENT LABEL HERE

FAH026602

Nutrition Review

Dietary intake assessment and summary

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Client Viewpoint

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Progress

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Nutritional Diagnosis

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Intervention / Plan

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Monitoring/Evaluation

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Name…… Signature……

Designation…… Date…… Pager number……

Southern Health

☐ Dandenong Hospital
☐ Kingston Centre
☐ Jessie McPherson
☐ Casey Hospital
☐ Monash Medical Centre - Clayton
☐ Monash Medical Centre - Moorabbin
☐ Community Health Services
☐ Cranbourne Integrated Care Centre

Unit Record Number: _____

Surname _____

Given Name _____

D.O.B. _____ Age _____ Sex _____

Affix Patient Identification Label

SHF042302

Dietetics

Subjective Global Assessment of Nutritional Status

Part 1: Medical History	A	B	C
1.Weight Change			
Overall change in past 6 months (_____ kg)			
Percent change: __ gain or <5% loss			
__ 5-10% loss			
__ >10% loss			
Change in past 2 weeks (_____kg)			
__ increase			
__ no change			
__ decrease			
2.Dietary Intake			
Overall change __no change			
__change			
Duration __ weeks			
Type of Change: __ suboptimal diet __ full liquid			
__ hypocalorie liquid__ starvation			
3.Gastrointestinal symptoms (persisting >2 weeks)			
(__ none__nausea__ vomiting__ diarrhea__ anorexia)			
4. Functional Impairment (nutritionally related)			
Overall Impairment __ none			
__ moderate			
__ severe			
Change (past 2 weeks) __ improved			
__ no change			
__regressed			

Part 2. Physical Examination				
5.Evidence of :	**Normal**	**Mild**	**Moderate**	**Severe**
Loss of subcutaneous fat				
Muscle wasting				
Edema				
Ascites				

Part 3. SGA Rating (check one)		
❑ **A - Well nourished**	❑ **B - Mildly / Moderately Malnourished**	❑ **C - Severely malnourished**

Dietitian _____ Pager_____Date/Time_____

Derived from Detsky, A. S; Smalley, P. S & Chang J. (JAMA 1994)

MRI70(I)
12/08

NUTRITIONAL STATUS - SUBJECTIVE GLOBAL ASSESSMENT **MRI70(I)**

MonashHealth

Nutrition & Dietetics

Check list of tasks to assist with SGA competency training

Clinicians who wish to gain competency in performing SGA are advised to complete the following tasks. Please maintain for your records. Name.....

Module	Tasks to be completed	Dates /Details	Comments
Module 1	**Didactic session** Attended		
	Group Activity-1 Viewed and participated with interactive video, worked on case studies Minimum 2-3 Nos. of patients=: ☐		
	Group Activity-2 Observed demonstration by experts Minimum 2-3 Nos. of patients = ☐		
	Written material reading Read/reviewed relevant materials		
Module 2	**(I) Independent Bedside SGA** Participated in multiple patient assessments to test agreement with sub-group Minimum 3-4 Nos. of patients= ☐		
	(II) Perform tests of agreement with Department Expert (DE) Participated in unknown patient assessments to test agreement with DE achieving agreement in >100% of the cases Minimum 1-2 Nos. of patients= ☐		
Post- training	**Independent patient assessments in practice** Nos. of patients= ☐		
	Yearly review with department group Minimum 2 patients Nos. of patients= ☐		

MonashHealth

Nutrition & Dietetics

Self-reflection list for SGA training

Competency Statement: Clinicians will demonstrate competency in assessing with a high degree of agreement, all the elements of SGA (aiming for 100%) and in the overall assessment (must be 100%) with other trained department staff

Use the following list for your self-reflection, evaluation and discussion with other clinicians if necessary during the training period and post-training.

No	Elements of the assessment	Points for discussion	Outcome of discussion
1.	Assessing weight history*		
2.	Assessing diet history*		
3.	Assessing gastro-intestinal symptoms		
4.	Assessing functional capacity		
5.	Performing examination of fat stores		
6.	Performing examination of muscle stores		
7.	Assessing presence of oedema/ascites		
8.	Including other relevant data in assessment e.g. co morbidities, biochemistry, signs of micronutrient deficiency		
9.	Classifying nutrition diagnosis relating to nutrition status in agreement with group		
10	Formatting a written statement documenting the diagnosis		

*Not applicable to Dietitians

Clinician /Sd_____ Date_____

Local Guideline Review Tracking Sheet

Local Guideline name:	**Nutrition Department Subjective Global Assessment training and competency guidelines**
Date sent out for review:	**July 2014**

STEP 1	***Person(s) responsible for review/update:***
Name:	Position:
• Eve Skliros	• Dietitian
•	•
Others consulted, including committees:	
Person name or committee name:	Position:
• Anna Whitley	• Senior Dietitian
• Clara Newsome	• Senior Dietitian
• Natalie Simmance	• Chief Dietitian
• Sophia Lee	• Senior Dietitian
Date 1st Review Complete:	

STEP 2	***Legislative & accreditation recommendation compliance checked by:***
Legislation checked by whom:	Date: OR ✓N/A
•	•
Accreditation recommendation checked by whom: (*state source e.g. ACHS, ACSAA, NATA etc*)	Date: OR ✓N/A
•	•

STEP 3	***Implementation strategy for local guideline by:***
Person name or position title or committee name:	Date:
• Eve Skliros	•

State implementation strategy *e.g. Broadcast, education program etc*
• Distribution of updated local guideline via email to all dietitians
• Discussion of updated local guideline at staff meeting and documentation working party meeting
• Allocate time for training to occur within department Professional Development sessions

STEP 4	***Planned audit evaluation strategy:***
State audit evaluation strategy (*mandatory domain where legislation impacts on policy*) :	
• Monitor staff completion of competency reviews via department mandatory training spread sheet	
•	

STEP 5	***Head of department responsible for policy review/update:***
Name:	Natalie Simmance
Date confirmed by head of department:	

STEP 6	***Summarise changes made:***
New Guidelines incorporate 12 monthly SGA review process and links to staff orientation program.	

QUALITY DEPARTMENT USE ONLY:	
STEP 7	***Committee name where policy discussed :***
Date presented at (state committee name):	
Date approved :	

STEP 8	***Clinical Quality Committee or Corporate & Support Quality and Risk Committee or OHS Executive Steering Committee:***
State committee name and date:	
Date ratified by Clinical Quality Committee or Corporate & Support Quality & Risk Committee or OHS Executive Steering Committee:	
Date: ☐ Ratified – Comments:	
Date: ☐ Not Ratified – Comments:	

Local Guideline Statement

This local guideline has been produced to outline training and annual competency requirements for St Vincent's Dietitians using the Subjective Global Assessment (SGA) tool to assess nutritional status for patients at risk of malnutrition.

Objectives

- To ensure St Vincent's Dietitians possess adequate skills and knowledge to use a validated nutrition assessment tool - the Subjective Global Assessment
- To ensure consistency between St Vincent's Nutrition Department Dietitians when assessing nutritional status and diagnosing malnutrition

Scope

This local guideline applies to all St Vincent's Melbourne Dietitians.

Definitions

Medical Record

This is the written account (paper or electronic) of a patient's medical history and treatment information. It includes investigations, photographs, videos and correspondence.

Malnutrition

Unintentional weight loss with inadequate dietary intake and muscle and/or fat deficits. Refer to Guidelines for Documentation of Malnutrition for full definition.

Procedure

New staff

Training for new dietetic staff will take into account previous experience and training in the use of the SGA. New staff members will be asked by the Chief Dietitian to complete an SGA questionnaire, to indicate prior experience and training, within one week of commencing employment.

The SGA coordinator will review the results of the questionnaire with the new staff member and determine an appropriate induction training program as guided by the 'New Staff Member SGA training Checklist'. The new staff member will be allocated an SGA buddy from within their Clinical Team to assist with induction training. On completion of the induction training the 'New Staff Member SGA training Checklist' will be signed off by the SGA coordinator. The induction training may include any of the following depending on the new staff member's prior experience and training:

- View SGA DVD and complete case studies presented
- Self-study of related literature provided
- Bedside demonstration of physical assessment of 2-3 patients led by experienced clinician

- Completing up to ten SGAs on patients with experienced clinician/s. This may entail the new staff member observing the experienced clinician and vice versa, and/or completing joint assessments. The new staff member should independently complete a minimum of three SGAs observed by experienced clinician/s.

Documentation of SGA and malnutrition diagnosis

Once the above requirements have been fulfilled the new staff member can carry out and document SGA rating and malnutrition diagnosis as per relevant department guidelines and policies. Refer to Guidelines for Documentation of Malnutrition and Nutrition Department Guidelines for Medical Record Documentation.

Annual competency review

All Dietitians are required to undergo an annual SGA competency review with department experts. There are four department experts within the department; this includes the SGA coordinator and three representatives from the different Clinical Teams. The remaining Dietitians in the department are paired into SGA buddy couples. The SGA buddy relationship is designed to provide assistance with completing the annual training and support through out the year with conducting SGAs. At each annual review Dietitians will complete the 'Annual review SGA Competency Checklist' with their SGA buddy and allocated department expert.

The mandatory steps for completion are:

- Department experts will liaise with allocated buddy pairs to arrange suitable times to complete competency reviews.
- Perform bedside SGA with SGA buddy and expert dietitian on at least 2 patients. Compare and discuss ratings in each category.
- Aim for 100% agreement in global rating.

Additional steps on the checklist can be completed at the discretion of the dietitian or if recommended by the department expert. Record the date SGA annual competency is completed on the department mandatory training spread sheet.

Department experts are required to maintain a level of expertise in SGA by completing annual validation of skills sessions. This involves all experts performing SGA in a group on at least three patients, comparing and discussing the ratings in each category and aiming for 100% agreement in global rating. Department experts are required to complete the 'Annual review SGA Expert Checklist' to be signed off by Department manager. Department experts will complete these sessions prior to allocating competency training sessions with their allocated buddy pairs.

See 'SGA training allocations' for most current version of SGA buddies and allocated department experts. Please ensure checklists are signed by appropriate persons and returned to SGA co-ordinator for record keeping.

Ongoing professional development and education

Discussion of SGA ratings in real patient cases should occur regularly during department professional development time and case study reviews in clinical team meetings.
Two one-hour professional development sessions will be dedicated to this each year. Dietitians will be asked to volunteer to present case studies for group discussion.

Regular informal discussion between Dietitians of difficult or unusual cases is also encouraged.

REFERENCES

1. Detsky AS, McLaughlin JR, Baker JP, Johnston N, Whitaker S, Mendelson RA, Jeejeebhoy KN. What is Subjective Global Assessment of Nutritional Status? *JPEN* 1987;**11**:8-13.
2. Duerksen DR. Teaching medical students the Subjective Global Assessment. *Nutrition* 2002;**18**:313-315.
3. McCann L. Subjective Global Assessment as it pertains to the nutritional status of dialysis patients. *Dialysis and Transplantation* 1996;**25**:190-202
4. Raja R, Engstrom J and Silvers M. How can Dietitians become competent in performing Subjective Global Assessment? One hospital's training programme. *Proceedings of the Nutrition Society* 2010;**69**:E185.
5. Steenson J, Vivanti A, Isenring E. New clinicians require ongoing training to ensure high inter-rater reliability of the Subjective Global Assessment. *Nutrition* 2013; **29**:361-362.

Authorship Details

Name:	**Position:**
Primary Policy Author(s):	
Anna Whitley	Senior Dietitian
Eve Skliros	Dietitian
Others Consulted, including Committee's:	
Clara Newsome	Senior Dietitian
Libby Doyle	Senior Dietitian
Alison Bowie	Chief Dietitian
Sophia Lee	Senior Dietitian
Head of Department Responsible for policy:	
Natalie Simmance	Chief Dietitian

Guidelines for the assessment, diagnosis and documentation of protein-energy malnutrition

These guidelines aim to standardise ***assessment, diagnosis and documentation*** of protein-energy malnutrition (PEM) by Dietitians across St Vincent's Melbourne sites to support evidence based practice and clinical coding of Malnutrition.

Assessment

The Subjective Global Assessment (SGA) and Patient-Generated SGA (PG-SGA) are validated methods of diagnosing nutritional status. Use the SGA to assess nutritional status when:

- MST score ≥ 2, or clinical judgement indicates risk of malnutrition

Collect information about the aetiology or contributing causes of low body mass index (BMI), unintentional weight loss and/or poor dietary intake to support your assessment;

- Physiological causes – altered nutrient need, malabsorption, dysphagia, fatigue, taste changes, nausea, pain, appetite changes, dentition issues;
- Socio-economic causes – lack of access to food, poor nutrition related knowledge;
- Psychological causes – depression, dementia, eating disorder

SGA may need to be repeated for long stay patients (>3 weeks) or if change in nutritional status is suspected.

Diagnosis of PEM

PEM is diagnosed using the SGA (SGA-B or SGA-C) and based on ICD-10-AM Malnutrition classifications (E40-E46), in particular:

- **E43 Unspecified severe protein energy malnutrition**

In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (≥ 10%), with evidence of suboptimal intake resulting in severe loss of subcutaneous fat and/or severe muscle wasting.

- **E44 Protein-energy malnutrition of moderate and mild degree**

In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (5–9%), with evidence of suboptimal intake resulting in moderate loss of subcutaneous fat and /or moderate muscle wasting.

In adults, BMI < 18.5 kg/m2 or unintentional loss of weight (5–9%) with evidence of suboptimal intake resulting in mild loss of subcutaneous fat and/or mild muscle wasting.

Documentation of PEM

The following are required documentation elements to support clinical coding of Malnutrition:

Anthropometry	BMI (and interpretation) **and/or** % of unintentional weight loss in previous 0 – 6 months, calculated using amount of weight loss divided by reference body weight[1] (see definition) multiplied by 100. *e.g. for patient with a reference weight of 65kg who has lost 5kg, calculate 5/65 x 100 = 7.7% weight loss* **and** degree of muscle wasting and/or subcutaneous fat loss utilising physical examination at 3 - 5 sites. Refer to Appendix 1 – Reference guide for physical examination *e.g. BMI 17kg/m^2 (underweight) with 8% weight loss over last 2 months, moderate muscle wasting at temple, clavicle and shoulder observed.*
Dietary Intake	Provide evidence of sub-optimal intake (with % requirements met if calculated) *e.g. Patient reports suboptimal intake prior to admission ~ 30% usual meals. Currently tolerating free fluids providing ~3.5 MJ and ~30g protein.*
Nutrition Diagnosis (PES statement)	Include diagnosis of Malnutrition and primary IDNT diagnostic term from intake domain where possible. Include a Malnutrition diagnosis sticker in the progress notes and indicate the rating. *e.g. Inadequate oral intake and Malnutrition related to persistent nausea as evidenced by 8% weight loss over 4 weeks, consuming 30% of meals and moderate signs of muscle wasting and subcutaneous fat loss. SGA-B: Moderate Malnutrition*
Intervention Plan	Document interventions and monitoring plan for PEM.

[1]Reference body weight:

Reported or recorded weight prior to episode of weight loss within the last 6 months. When previous weights and/or timeframe of weight loss cannot be identified use clinical judgement of patient's current condition and recent oral intake to support diagnosis of malnutrition.

Examples of questions that may help establish reference body weight:

For an acute condition	Chronic underweight or gradual weight loss over long period of time
'What did you weigh before you became unwell?'	'What has been your highest weight?'
'What did you weigh when/before you were diagnosed with *x* condition?'	'What is a good weight for you?'
'Have you lost or gained any weight recently?'	'How long ago were you at your usual weight?'
	'Has your weight changed in the last few weeks/months?'

Appendix 1 - Reference guide for physical examination

Assess	Examination sites	Special Tips	No deficit	Mild to moderate deficit	Severe deficit
Subcutaneous fat	**Below the eye**	*Look at the fat pad under the eye; for dark circles and hollowness, if not clear, move to triceps and biceps*	Slightly bulging area	Area may be flat or with loose skin, or dark circles maybe present, fully or partially.	Hollowed look, depression, dark circles, loose skin
	Triceps	*Arm bent; do not include muscle in pinch; roll skin between fingers false positive in elderly*	Large space between fingers, ample fat tissue	Some space between fingers, fingers do not touch, less tone	Very little space between fingers, or fingers touch
	Biceps		Large space between fingers (smaller than triceps)	Some space between fingers, fingers may not touch	Very little space between fingers, or fingers touch
	Fat overlying lower ribs	*Look for prominent bones; have patient push hands against a solid object to observe the back*	Bones not prominent No significant depression	Mild depression or bone may show slightly; not all areas	Bones prominent ; significant depressions
Muscle wasting	**Scapula**		Bones not prominent No significant depression	Mild depression or bone may show slightly; not all areas	Bones prominent; significant depressions scapula & shoulder and spine
	Temple	*Observe straight on , have patient turn head side to side*	Well defined muscle/flat, not scooped	Slight depression	Hollowing, depression
	Clavicle	*Look for prominent bone with patient sitting up straight*	Not visible in males; maybe visible but not prominent in females	Some protrusion: may not be all the way along	Protruding/prominent bone- very significant in males
	Shoulder	*Arms at side, look straight on for prominent bones*	Rounded, smooth curves at junction of neck and shoulder	No square look; acromion process may protrude slightly	Square look of shoulder-to-arm joint; bones prominent
	Interosseous muscle	*Back of hand , move thumb and forefinger back and forth*	Muscle protrudes; could be flat in females	Flat or indented	Depressed significantly, scooped; may be flat in males
	Knee	*Have patient sit with leg propped up on low stool*	Bones not prominent	Mild-moderate prominence of knee bones	Obviously thin, prominent knee bones
	Quadriceps	*Not as sensitive an indicator as upper body*	Well rounded; no depressions	Mild depression on inner thigh	Depression on inner thigh , line from groin to knee,
	Calf		Well developed bulb	Bulb less developed or loose tone, bone maybe visible	Thin; no muscle definition, bone visible
Others	**Edema/Ascites (try to rule out causes other than malnutrition)**	*Check ankle of mobile patient, sacrum of activity- restricted patient;*	No sign of fluid accumulation	Mild to moderate swelling and pitting	Significant swelling and pitting

Page 2 of Subjective Global Assessment of Nutritional Status (Learning version) ©Monash Medical Centre, Dept of Dietetics, Jan 2010
Adapted from 1.Detsky, A. S et al. (JAMA 1994); 2. With permission from Ferguson et al. (1996)

ICD-10-AM Seventh edition. Codes for Malnutrition (E40–E46)[i]

Note: The degree of malnutrition is usually measured in terms of weight, expressed in standard deviations from the mean of the relevant reference population.

In children, when one or more previous measurements are available, lack of weight gain or evidence of weight loss is usually indicative of malnutrition. When only one measurement is available, the diagnosis is based on probabilities and is not definitive without other clinical or laboratory tests. In the exceptional circumstances that no measurement of weight is available, reliance should be placed on clinical evidence.

In adults, malnutrition includes weight loss of at least 5% with evidence of suboptimal intake resulting in subcutaneous fat loss and/or muscle wasting.

If an observed weight is below the mean value of the reference population, there is a high probability of severe malnutrition if there is an observed value situated 3 or more standard deviations below the mean value of the reference population; a high probability of moderate malnutrition for an observed value located between 2 and less than 3 standard deviations below this mean; and a high probability of mild malnutrition for an observed value located between 1 and less than 2 standard deviations below this mean.

Excludes: intestinal malabsorption (K90)
nutritional anaemias (D50–D53)
sequelae of protein-energy malnutrition (E64.0)
starvation (T73.0)

E40 Kwashiorkor

Severe malnutrition with nutritional oedema with dyspigmentation of skin and hair.

Excludes: marasmic kwashiorkor (E42)

E41 Nutritional marasmus

Severe malnutrition with marasmus. ***Excludes:*** marasmic kwashiorkor (E42)

E42 Marasmic kwashiorkor

Severe protein-energy malnutrition [as in E43]: intermediate form with signs of both kwashiorkor and marasmus.

E43 Unspecified severe protein-energy malnutrition

In children, severe loss of weight [wasting] or lack of weight gain leading to an observed weight that is at least 3 standard deviations below the mean value for the reference population (or a similar loss expressed through other statistical approaches). When only one measurement is available, there is a high probability of severe wasting when the observed weight is 3 or more standard deviations below the mean of the reference population.

In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (≥ 10%) with evidence of suboptimal intake resulting in severe loss of subcutaneous fat and/or severe muscle wasting.

Starvation oedema.

E44 Protein-energy malnutrition of moderate and mild degree

E44.0 Moderate protein-energy malnutrition

In children, weight loss or lack of weight gain leading to an observed weight that is 2 or more but less than 3 standard deviations below the mean value for the reference population (or a similar loss expressed through other statistical approaches). When only one measurement is available, there is a high probability of moderate protein-energy malnutrition when the observed weight is 2 or more but less than 3 standard deviations below the mean of the reference population.

In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (5–9%) with evidence of suboptimal intake resulting in moderate loss of subcutaneous fat and/or moderate muscle wasting.

E44.1 Mild protein-energy malnutrition

In children, weight loss or lack of weight gain leading to an observed weight that is 1 or more but less than 2 standard deviations below the mean value for the reference population (or a similar loss expressed through other statistical approaches). When only one measurement is available, there is a high probability of mild protein-energy malnutrition when the observed weight is 1 or more but less than 2 standard deviations below the mean of the reference population.

In adults, BMI < 18.5 kg/m^2 or unintentional loss of weight (5–9%) with evidence of suboptimal intake resulting in mild loss of subcutaneous fat and/or mild muscle wasting.

E45 Retarded development following protein-energy malnutrition

Nutritional:
- short stature
- stunting

Physical retardation due to malnutrition

E46 Unspecified protein-energy malnutrition

Malnutrition NOS
Protein-energy imbalance NOS

ICD-10-AM Coding Commandments (vol 15, no. 1) Malnutrition.[ii]

The NCCH and CSAC have agreed that malnutrition may be coded when it is documented by a dietitian in the clinical record. This decision is supported in the Introduction to the Australian Coding Standards (ACS) as follows:
"The term 'clinician' is used throughout the document and refers to the treating medical officer but may refer to other clinicians such as midwives, nurses and allied health professionals. In order to assign a code associated with a particular clinician's documentation, the documented information must be appropriate to the clinician's discipline." Dietitians meet the definition of a clinician in the ACS and diagnosis and treatment of malnutrition is appropriate to their profession.

Malnutrition must meet the criteria in **ACS 0001** *Principal diagnosis* or **ACS 0002** *Additional diagnoses* to be coded.

[i] Extracted from NCCH eBook, July 2010, Endocrine, Nutritional and Metabolic

[ii] Extracted from NCCH eBook, July 2010, 10-AM Commandments.

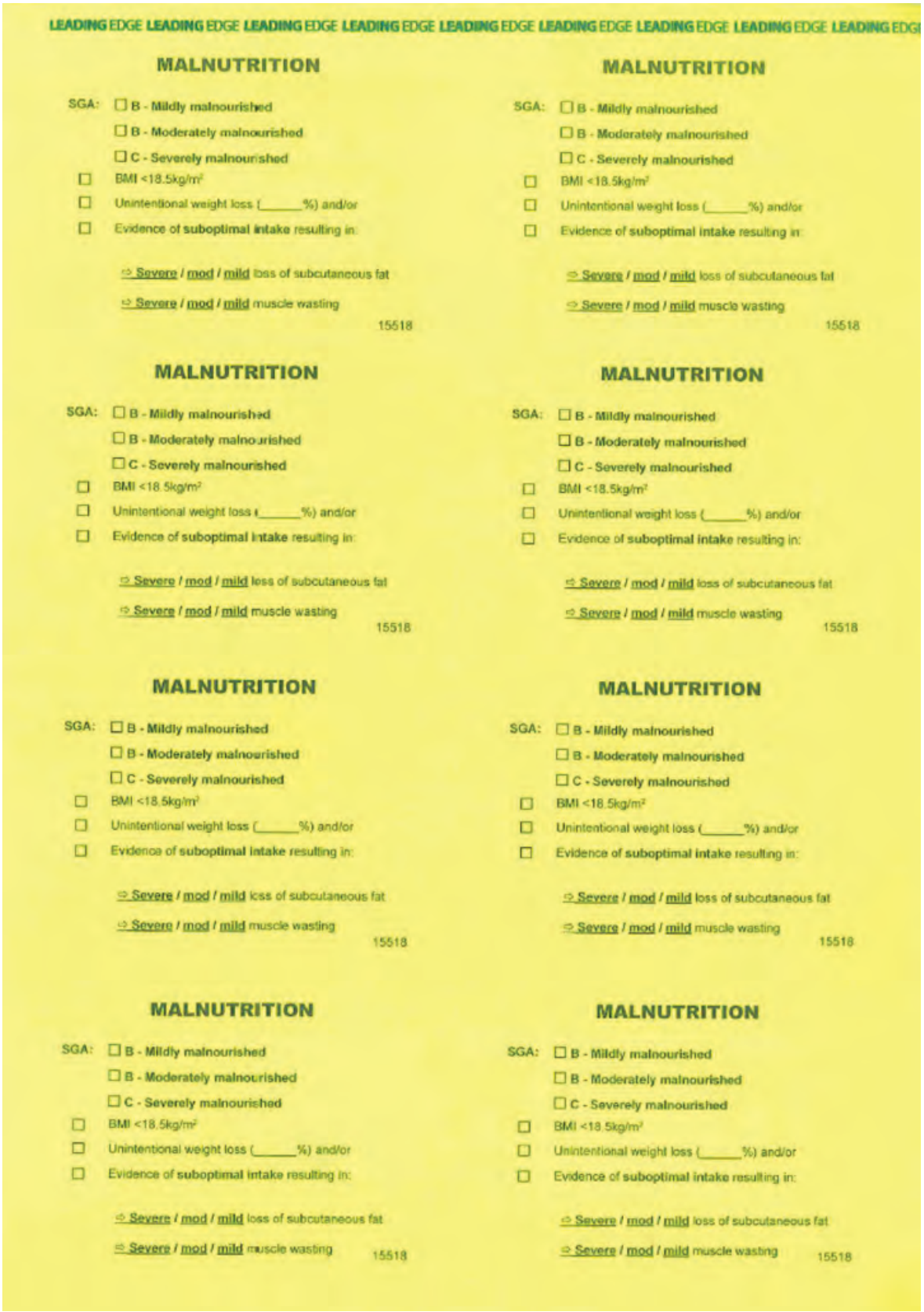
Malnutrition diagnosis sticker – St Vincent's Hospital, Melbourne

Nutrition Summary: MALNUTRITION - Subjective Global Assessment (SGA)

☐ SGA B – Mildly/Moderately malnourished ☐ SGA C – Severely malnourished

Name……Signature……, Dietitian Date……

Malnutrition diagnosis sticker – Peninsula Health



Nutrition Support Product Label – Eastern Health

How to complete the Malnutrition Screening Tool

Answer question 1 or 2 (not both)

Located in the Initial Patient Assessment (EH 290700)
or Model of Care Initial Assessment form (EH 295640 or EH 295600)
or the pink Malnutrition Screening Tool sticker

'Recently' refers to the **last 6 months**

Only include **unintentional** weight loss

	Question	Answer	Score	Comm
1	Have you lost weight recently without trying?	No Unsure	0 2	
2	**If yes**, how much weight have you lost?	1-5kg 6-10kg 11-15kg >15kg Unsure	1 2 3 4 2	
3	Have you been eating poorly because of a decreased appetite?	No Yes	0 1	
4		**TOTAL**		
	If total score ≥2 **refer** to Dietitian		Completed □	Initials____

Family may be able to assist with weight history or check past medical history

Ask if they suspect clothes, belt, rings or dentures fit more loosely; this may indicate weight loss

May also be eating poorly due to dementia, chewing or swallowing problems

Add score from question 1 or 2, plus score from question 3

If TOTAL is ≥2, refer to Dietitian as the patient is at risk of malnutrition

Ref: M Ferguson, S Capra, J Bauer, M Banks, Development of a valid and reliable Malnutrition Screening Tool for adult acute patients, Nutrition 1999; 15:458-64.

easternhealth
GREAT HEALTH AND WELLBEING

FOOD LOADING ZONE
KEEP CLEAR

Please ensure area is free of clutter, so your meal tray can be placed within reach at meal times.

An initiative of CHI Centre for Healthcare Improvement

Queensland Government

Design competition winner: Belinda Sergeant, Ward 1, Gladstone Hospital. Produced for the Meals Module, Productive Series, Queensland Health. http://qheps.health.qld.gov.au/productiveseries/ Developed February 2012.

Placemat example 2 – Queensland Health

Protected Meal Time Banner – Queensland Health

ASK ABOUT YOUR NUTRITION

Are you or your loved one experiencing any of these?

If you or your loved one have any of these problems, ask about your nutrition! Nutrition is important to your recovery and has been shown to promote positive outcomes. Ask if you can be evaluated by a registered dietitian or nutrition support clinician.

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Chapter 4: Nutrition service delivery models

Following Chapter 3, Identification*, prevention and management of malnutrition care*, we move to the practical application of this evidence – what strategies can we use to successfully implement the evidence-based guidelines and ensure high-quality care is received by all patients across the various settings to achieve the most favourable nutritional outcomes?

This chapter is likely to be of most use to dietetic managers and senior dietitians/clinicians for service development and benchmarking of nutrition service delivery models between health services and across jurisdictions.

1. Models for malnutrition risk screening and pathways to assessment

The table following provides models for malnutrition risk screening categorised according to patient setting. These models of care consider staff disciplines that may be responsible for completing screening, how this information could be communicated, and what the outcome of positive screening might entail. The final column details how the workload generated from these referrals might be prioritised. These details will vary between health services and the information presented here reflects both current practice and future possibilities.

Ward based – inpatient setting

Screening time *(**When** does screening occur?)*	**MST completed by:** *(**Who** completes the screening?)*	**Screening documentation** *(**How** is the screening tool completed?)*	**Screening outcome result** *(**What** occurs after a positive result from malnutrition risk screening?)* NB: Health service examples are at the end of this section	**Re-screening** *(**How** does re-screening occur?)*	**Referral prioritising process** *(**How** is the referral actioned?)*
On admission (within 24–48 hours)	Nurse	* As a stand-alone document filed in the medical history * Incorporated into patient assessment tools * Results written in the progress notes by the person completing the screen	* Referral to a dietitian for assessment * Triage only high-risk patients to a dietitian; low-risk patients are referred to allied health/nutrition and dietetics assistant * Automatic commencement of supplements and/or high-energy, high-protein (HEHP) diet	Weekly re-screen	All patients with MST > 2 seen. According to prioritisation tools – for inpatients, examples below: Clinical Priority Tool-Western.pdf Prioritisation tool-Melbourne.pdf Dietetics Priority List-Monash.pdf Dietetics Triage criteria - Cabrini.pdf
	Allied health / nutrition and dietetics assistant	* Incorporated into patient assessment tools * Results written in the progress notes by the person completing the screen	* Referral to a dietitian for assessment (MST= 3–5) * Triage only high-risk patients to a dietitian * Automatic commencement of supplements and/or HEHP diet (MST = 2)	Weekly re-screen	According to prioritisation tools – for inpatients, example below: Nutrition Priority Framework-Peter Mac
	Dietitian	* Incorporated into patient assessment tools * Results written in the progress notes by the person completing the screen	* Progression onto assessment by a dietitian * Triage only high-risk patients to assessment by a dietitian * Automatic commencement of supplements and/or HEHP diet	Weekly re-screen	According to prioritisation tools – for inpatients, examples below: Dietetics Inpt Prioritisation-Peninsul

MST = *Malnutrition screening tool*

In addition to referrals received from screening on the ward, referrals may also come directly from medical staff, nursing staff, allied health, patient self-referral or nutrition/dietitian assistant and team/ward meetings and actioned according to local caseload prioritisation tools.

Ambulatory treatment centre – chemotherapy

Screening time (*When* does screening occur?)	MST completed by: (*Who* completes the screening?)	Screening documentation (*How* is the screening tool completed?)	Screening outcome result (*What* occurs after a positive result from malnutrition risk screening?)	Re-screening (*How* does re-screening occur?)	Referral prioritising process (*How* is the referral actioned?)
Day 1 of treatment	Nurse	* As a stand-alone document filed in the medical history * Incorporated into patient assessment tools * Results written in the progress notes by the person completing the screen	* Referral to a dietitian for assessment * Triage only high-risk patients to a dietitian; low-risk patients referred to allied health / nutrition and dietetics assistant	Re-screening at each visit	All patients with MST > 2 seen According to prioritisation tool – for ambulatory/day oncology patients, example below: Nutrition Priority Framework-Peter Mac
	Patient	* As a stand-alone document filed in the medical history	Referral depends on the score		
	Oncologist	* Results written in the progress notes by the person completing the screen	* Referral to a dietitian for assessment		MST priority tool flow chart Oncology MST flowchart-Bendigo.pd

In addition to referrals received from screening, referrals may also come directly from medical staff, nursing staff, allied health, patient self-referral and nutrition/dietitian assistant and team/ward meetings.

Screening time (*When* does screening occur?)	MST completed by: (*Who* completes the screening?)	Screening documentation (*How* is the screening tool completed?)	Screening outcome result (*What* occurs after a positive result from malnutrition risk screening?)	Re-screening (*How* does re-screening occur?)	Referral prioritising process (*How* is the referral actioned?)
Day 1 of treatment	Nurse	* As a stand-alone document filed in the medical history * Incorporated into patient assessment tools * Results written in the progress notes by the person completing the screen	* Referral to a dietitian for assessment * Triage only high-risk patients to a dietitian		According to prioritisation tool – for ambulatory/day radiotherapy patients, example below: Nutrition Priority Framework-Peter Mac
	Patient	* Incorporated into patient assessment tools	* Referral to a dietitian for assessment		
	Administration staff	* Results written in the progress notes by the person completing the screen	* Referral to a dietitian for assessment		MST priority tool flow chart

In addition to referrals received from screening, referrals may also come directly from medical staff, nursing staff, allied health, patient self-referral and team/ward meetings.

Outpatient/preadmission clinics

Screening time *(**When** does screening occur?)*	MST completed by: *(**Who** completes the screening?)*	Screening documentation *(**How** is the screening tool completed?)*	Screening outcome result *(**What** occurs after a positive result from malnutrition risk screening?)*	Re-screening *(**How** does re-screening occur?)*	Referral prioritising process *(**How** is the referral actioned?)*
First clinic appointment	Nurse	* As a stand-alone document filed in the medical history * Incorporated into patient assessment tools	* Referral to a dietitian for assessment * Triage only high-risk patients to a dietitian		All patients with MST > 2 seen According to prioritisation tool – for ambulatory/out-patients, example below: Diet Prioritisation Tool-Eastern.pdf Nutrition Priority Framework-Peter Mac
	Patient	* As a stand-alone document filed in the medical history	* Referral depends on the score	Re-screening at each clinic visit	
	Dietitian	* Incorporated into patient assessment tools	* Referral to a dietitian for assessment		Patients booked into next available nutrition oncology clinic
	Oncologist	* As a stand-alone document filed in the medical history * Results written in the progress notes by the person completing the screen	* Referral to a dietitian for assessment		

In addition to referrals received from screenings, referrals may also come directly from medical staff, nursing staff, allied health, patient self-referral and team/ward meetings.

There are limited systematic re-screening processes despite this being recognised as an important feature within health service malnutrition policy.

- In some health services weight may be monitored weekly, and referrals made with unintentional loss of weight.
- Other health services are aiming to link re-screening to care plans or patient flow manager electronic systems using length of stay features.
- Where dietitian/nutrition assistants are employed, re-screening is being conducted weekly at some health services in the inpatient setting.

The above tables also highlight that there are limited priority tools for day ambulatory chemotherapy and radiotherapy patient settings – the majority of priority tools encompass the inpatient population and to some degree the outpatient clinic setting. Triage/prioritisation tools help to resolve the issue of how to allocate limited resources and assist in patient management. A recent Australian study found there is lack of both consensus and consistency within current dietetic triage practices with a limited evidence base in this area.[1]

Where examples have been provided from health services with existing screening, referral and intervention models in place, further details are provided below.

Examples of malnutrition risk screening models where all patients are referred to a dietitian for assessment:	Examples of procedures for automatic commencement of supplements and/or HEHP diet:	Examples of systems where there is triaging and only high-risk patients are referred to a dietitian post screening:
OncReferral Pathway-GV Health.p	MIS model of care-Peter Mac.pdf	MIS model of care-Peter Mac.pdf Std flowchart Maln Id Tx-Eastern.pdf

2. Using an assistant role in nutrition service delivery to cancer patients

Varied models currently exist for the assistant workforce involved in supporting nutrition care delivery, both within and across health services. Assistants may perform a food services and/or a clinical role and may report via a food services, nursing, allied health or nutrition and dietetics manager. More recently, a health assistant nurse (HAN) position has been implemented in some health services, and their role has been developed to include assisting patients at mealtimes, which has been shown to be effective in reducing interruptions to patients at mealtimes and ensuring better access to meal trays.[2]

The following task matrix outlines various position titles and duties for assistant roles as they relate to nutrition care. Assistants could be involved in further roles beyond the scope presented below. Health services will need to determine the model that best meets their individual needs. Refer also to section 3: *Using a team approach to identify, prevent and manage cancer malnutrition*.

	Food services assistant	Diet aide / menu monitor	Nutrition assistant / allied health assistant	Health assistant nurse
Screening			Malnutrition risk screening	
			Referral to dietitian	
Intervention			Low-risk intervention – provides general nutrition information to patients	
			Weighs patients	
		Assists with menu completion, identify food preferences		
	Meals, mid-meals and supplement delivery			
	Mealtime set up – prepares bedside environment			
			Transports patients to communal dining areas at mealtimes	
		Mealtime set up and assistance with feeding		
Monitoring		Monitors supplement consumption		
		Commences food and fluid intake charts		
			Analyses food and fluid intake charts	
			Documents information in patient medical history	
			Conducts quality improvement audits	

In the following sections of the toolkit, further detail is provided about nutrition assistant / allied health assistant roles involved in delivering *clinical* work – that is, implementing nutrition risk screening and intervention and monitoring under the supervision of a dietitian. Typically, a nutrition assistant / allied health assistant works directly under the supervision of a health professional and has formal qualifications (Certificate III or Certificate IV in Allied Health Assistance specialising in nutrition and dietetics as a minimum). Significant on-the-job training may be required where access to local formal training courses is limited.

What is the benefit to using an assistant role?

The introduction of assistant roles can increase clinical capacity and afford the opportunity for health professionals to work to their top scope of practice and in advanced practice roles.[3]

> *'Underpinning the utilisation of the allied health assistant workforce is the principle that while allied health professionals are responsible for patient diagnosis and overall care and treatment plans – delivery of the treatment plan may involve a variety of appropriately skilled members of the team'.*[3]

A recent project funded by the Victorian Department of Health found that allied health professionals often have a poor understanding of the roles, skills and contribution that allied health assistants can make to patient outcomes and service design thus creating barriers to innovative and efficient service development.[3] For assistants to be used effectively within health services it is important for all staff to be aware of the scope of practice for these roles and the tasks suitable for delegation. Having clear processes and defined service delivery models in place is essential. Refer to section 1 of this chapter of the toolkit: *Models for malnutrition risk screening and pathways to assessment*.

The following table provides a list of possible nutrition clinical tasks for assistant roles within the cancer services setting. The '✔' represents current and potential clinical practice opportunities across health services and the treatment setting in which they are completed. Predominately where assistant roles currently exist, they work within an inpatient setting.

Possible clinical tasks for assistant roles (with feedback to a dietitian)	Screening		Intervention								Monitoring		
	Screen for malnutrition risk using a validated tool. Refer at-risk patients.	Check special diet requirements and food preferences.	Commence and complete food and fluid intake charts.	Assist with menu selection – offer meal and snack alternatives.	Weigh patients on a regular basis.	Analyse food and fluid intake charts for nutritional content.	Transport patients to communal dining areas at mealtimes.	Practise mealtime observation including set up and assistance with feeding.	Review and assist with nutritional supplements.	Provide general nutrition information to patients.	Participate in food service and clinical audits to track nutrition care KPIs.	Enter basic meal plan preferences and changes into the food service system.	Document interventions in the patient's medical or treatment record.
Inpatient ward	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Treatment centre – chemotherapy	✔	✔		✔	✔			✔	✔	✔	✔	✔	✔
Treatment centre – radiotherapy	✔	✔			✔						✔		
Outpatient clinics	✔				✔								

Example of a template for an allied health assistant nutrition review:

AHA doc template - Eastern.pdf

3. Assistant and dietitian staffing profile to support nutrition services to cancer patients

Working in cancer services requires specialist knowledge and skills for all staff involved in patient care. This section of the toolkit outlines possible roles and responsibilities for health assistants and dietitians to support high-quality and safe nutrition service delivery to cancer patients. It is recognised that within industrial awards and across practice settings and jurisdictions there are clear requirements in relation to role expectations for dietitians working at different grades and classifications, and this toolkit should be read in conjunction with relevant awards in determining individual responsibilities.

Although outside the scope of this toolkit, for more detailed information about scope of practice, clinical competencies and behavioural capabilities as they relate to the provision of high-quality healthcare please refer to further references at the end of this chapter. Health Workforce Australia has developed the *National common health capability resource for the Australian health workforce*[4] and the Victorian Department of Health will roll out the *Governance framework for professional practice in allied health*[5] consisting of credentialing and scope of practice, clinical competence and behavioural capabilities in 2014. The Western Australia Country Health Service (WACHS) has developed a range of competency frameworks[6] designed to identify the skills, behaviours and attitudes required of allied health professionals and allied health assistants working in the rural and remote setting, which will be of particular relevance to some stakeholders.

Assistant and dietitian staffing profile to support nutrition service delivery

		Assistant	Grade 1 dietitian	Grade 2 dietitian	Grade 3 dietitian Senior clinician	Grade 4 dietitian Senior clinician
Individual patient care	Screening	Malnutrition risk screening				
	Assessment		Nutrition assessment (working with high-acuity, complex patients and treatments – grade 1 dietitian may work under the supervision of senior staff)			
	Diagnosis		Nutrition diagnosis			
	Intervention, monitoring and evaluation	Provide general nutrition information	Provide medical nutrition therapy – individualised therapeutic diet and supplement prescription, enteral and parenteral nutrition therapy, counselling and discharge planning (grade 1 dietitian may work under the supervision of senior staff)			
		Surveillance – mealtime observation and assistance, intake review, regular weighing				
		Document interventions in patient's clinical information record				
			Communicating with healthcare team – attendance at team meetings / case conferences			
			Development, delivery and evaluation of nutrition group education programs			
Service evaluation	Service monitoring	Complete food services and clinical documentation audits under the direction of senior staff			Evaluate information / data for KPI monitoring of nutrition care *Refer to Chapter 2 of toolkit – KPI monitoring*	
			Participate in quality improvement and research activities within cancer services under the direction of senior staff		Oversee and implement quality improvement and research activities within cancer services	
			Deliver and evaluate staff education within cancer services		Oversee, deliver and evaluate staff education within cancer services	
				Nutrition department clinical team leadership		
					Consultative and expertise role (internal or external to health service)	
	Service evaluation				Oversee and participate in staff clinical supervision programs	
					Oversee and develop staff training and competency programs	
					Implement and coordinate nutrition governance activities *Refer to Chapter 1: Malnutrition governance*	
					Management activities – oversee service development, site management, budget monitoring, human resources	

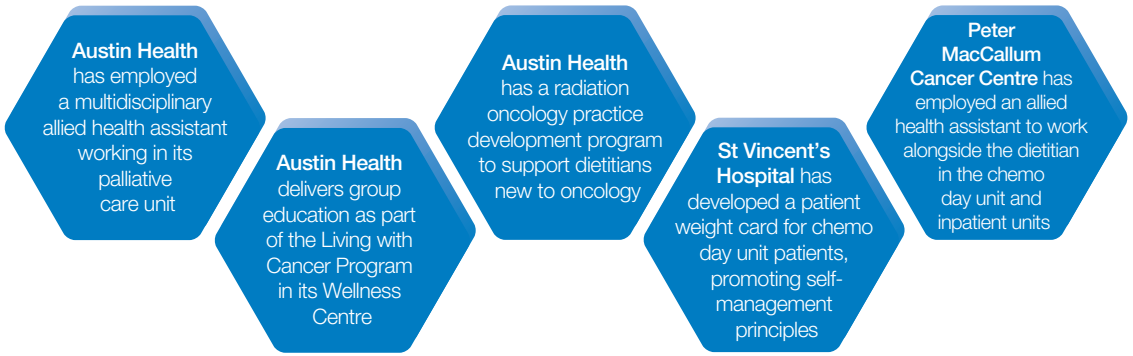
As the above matrix demonstrates, a grade 3 or 4 dietitian role (senior dietitian or senior clinician position) has additional scope and responsibility beyond providing clinical care to individual patients, particularly in the areas of service monitoring and evaluation. See the table below for further examples of responsibilities appropriate for a grade 3 or 4 dietitian role. This is not an exhaustive list; however, it does provide examples that may be relevant for your health service – see section 4 of this chapter for further guidance.

Key capabilities for grade 3 or 4 dietitian	Tasks and responsibilities may include the following:
Clinical leadership	• Expert role – providing high-level clinical expertise through knowledge of research, new developments and evidence-based practice in cancer services area • Consultative role – providing above clinical expertise to other dietitians both internal and external to individual department and health service • Building relationships external to the nutrition department to secure medical and nursing leadership • Involving internal and external committees such as the multidisciplinary nutrition committee • In-servicing hospital wide – grand round presentations, key department and professional group stakeholders • Team/program leader – clinical role: oversee dietitians working in cancer to support clinical practice, quality and research • Team/program leader – administrative role: workload allocation, prioritisation, leave cover, team meetings • Providing staff clinical supervision – supporting grade 1/2 clinical dietitians • Food services management – involvement as it relates to nutritional care • Completion of or undertaking higher research degree or relevant postgraduate qualification
Service monitoring	• Involvement in clinical audit activities • Coordinating collection and monitoring of department or health service performance indicators
Service evaluation	• Leading development of new initiatives for consideration, including submissions for external funding • Undertaking research and producing peer-review publications in relevant specialty • Developing staff training programs – may include oncology-specific competency or practice development programs for dietitians such as radiotherapy orientation and practice program; advanced scope of practice for PEG management, non-medical prescribing of nutrition supplements on medication charts, PG-SGA competency training • Consolidating local and/or relevant data and evidence about the problem of patient malnutrition • Coordinating service development and succession planning activities • Developing business cases to support future resourcing; submissions for internal and external funding

Refer to Chapter 1, *Malnutrition governance*, and Chapter 2, *Key performance indicators in malnutrition care*, of this toolkit for further details of strategies to support strong nutrition governance practices.

Innovation in delivering nutrition services within the cancer services setting

Many health services are exploring different ways of working to meet the needs and demands of this population group. See the below examples of health service innovations in delivering nutrition-based services.



4. Workforce development to support nutrition service demands

Various approaches to workforce planning have considered a range of methods to calculate workload resource requirements or capacity. Despite limitations, the procedure-based measurement approach appeared to be the most widely accepted; however, casemix and mixed-method approaches have also been proposed as potential future directions in this area.[7] Although there is potential to apply allied health ratios in specific areas of rehabilitation, it has not been possible from the evidence published to date to use workforce ratios to plan for allied health requirements outside of that setting.[8]

Some of the factors for consideration when evaluating current nutrition and dietetic staffing profiles and/or seeking to increase staff resources as services or demands expand may include the following:

- *Patient acuity and complexity* – What are the demographics of patients referred to your health service and does this impact on complexity (high interpreter use, low health literacy, rural and remoteness)? Is your department within, or a referral service to, a tertiary teaching hospital? What is the malnutrition prevalence? What specialised services, procedures and anti-cancer treatments does your health service perform? What are the nutrition impacts of these?
- *Local measures of service demand* – What is the size/scope of your health service? How many dedicated medical oncology, haematology and palliative care beds are within your health service? Are patients with cancer in other treating units within your health service, for example, head and neck surgery, colorectal surgery, the respiratory unit, urology or neurosurgery? What are the service settings and where is the demand? How many referrals does your service receive? What have been the trends over time? What are the estimations of unmet demand? Do you have benchmarking data from peer health services comparing staff resourcing?
- *Model of care delivery* – What is the time needed to support the direct/face-to-face clinical care of patients? Consider indirect patient care activity such as food services management, discharge planning and administrative tasks. How much involvement will dietitians have in clinical and business meetings? Will dietitians be required to be representatives on other service-wide or regional committees? Does your health service provide team-based nutrition support (access to total parenteral nutrition (TPN) care teams or a home enteral nutrition (HEN) service)? What is your model for ongoing monitoring and surveillance for patients? Does your service have access to outpatient nutrition clinics, community dietitians or nutrition telehealth services?
- *Access to support staff* – Are there dietitians in management positions, research or teaching and training roles? Are there dietitians employed in food services roles? Do you employ food services and clinical assistants to support dietitians delivering clinical care?
- *Staff classifications* – What is the appropriate staff classification based on scope of role, clinical acuity and experience and qualifications needed, staff supervision requirements and level of responsibility? Estimate clinical workload as a percentage of full-time equivalent (FTE) (generally 85 per cent reducing to 60 per cent), with higher classifications or more experienced staff expected to have more managerial/supervisory responsibilities and less clinical contact.
- *Existing funding arrangements* – How are nutrition and dietetic (and other allied health) services funded within your health service? Is there scope to develop a business case for additional staff resources based on potential loss of revenue secondary to under-identification of malnutrition? How are existing specialist medical and allied health outpatient clinics funded? How can we measure and factor in time for teaching and training roles? Service development? Quality and research? Do positions incorporate leave cover (such as an accrued day off (ADO), annual/sick leave)? Refer to the Dietitians Association of Australia (DAA) resource allocation manual[9] for examples of business cases.

5. Where can I obtain further information about nutrition service delivery models and workforce planning?

Allied Health Professions, Scottish Executive 2006, *Workload measurement and management* http://www.sehd.scot.nhs.uk/ahp/_documents/AHPworkloadMeasureandmanage.pdf

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Appendix 1: Examples of existing health service documents

Referral prioritising processes:

- Western Health Nutrition Department Prioritisation Tool – Western Health
  Clinical Priority Tool – Western
- Nutrition Prioritisation Tool – Melbourne Health
  Prioritisation tool – Melbourne
- Framework for Prioritising Adult Inpatient Dietetic Referrals – Monash Health (previously Southern Health)
  Dietetics Priority List – Monash
- Allied Health Services Inpatient referral, triage and intervention – Cabrini Health
  Dietetics Triage criteria – Cabrini
- Nutrition Department Priority Framework – Peter MacCallum Cancer Centre
  Nutrition Priority Framework – Peter Mac
- Nutrition and Dietetics: Prioritisation of inpatient referrals – Peninsula Health
  Dietetics Input Prioritisation – Peninsula
- Oncology/Radiotherapy MST dietetic care pathway for all cancer streams – Bendigo Health
  Oncology MST flowchart – Bendigo
- Caseload Prioritisation Tool – Eastern Health
  Diet Prioritisation Tool – Eastern

Examples of existing screening, referral and intervention models:

- Dietetic Oncology Referral Pathway for New Patients – Goulburn Valley Health
  OncReferral Pathway – GV Health
- Peter Mac Malnutrition Inpatient Strategy: Model of care – Peter MacCallum Cancer Centre
  MIS model of care – Peter Mac
- Standard assessment of risk of malnutrition and treatment of malnutrition – Eastern Health
  Std flowchart Maln Id Tx – Eastern

Examples of a template for an allied health assistant nutrition review:

- Documentation template for AHA nutrition review – Eastern Health
  AHA doc template – Eastern

WESTERN HEALTH NUTRITION DEPARTMENT PRIORITISATION TOOL 2013

Western Health

Goal - to provide a total service reponse for nutrition & individual workload management by prioritising new referrals and reviewing patients at an approriate timeframe (for acute & subacute campuses)

Priority	P1 = Priority 1 (URGENT)	P2 = Priority 2 (HIGH PRIORITY)	P3 = Priority 3 (MEDIUM PRIOIRTY)	P4 = Priority 4 (LOW PRIORITY)
Clinical conditions	Requires enteral nutrition or parenteral nutrition Risk of refeeding syndrome Patient at clinical risk: Meal plan requires modification for safety prior to next meal - include food allergies textured modified diets/ thickened fluids, renal diet with fluid restriction (immediate diet code change required however full Ax of patient = P2 Day Onc pt's requiring review to avoid admission (i.e. grade 3-4 side effects of chemo requiring fluid supp. diet or NGT)	Discharge dependent on dietetic input such as diabetes associated with risk of hypoglycaemia, intestinal stricture, severe malabsorption or newly diagnosed coeliac disease/food allergy LOW>10% usual weight or MST ≥4 Major upper GI or head and neck surgery, stoma output>1.5L daily Failure to thrive (paediatrics) Post operative wound healing support (major surgery only) NBM or clear fluids > 5 days K > 6 or APO (renal patients only) Pressure injury Grade 3-4	Patients with chronic or recurrent nutritional issues e.g renal disease, head and neck cancer, CLD, IBD, cancer cachexia, eating disorder DKA Intradialytic weight gain>2L or PO4 >1.6 or commencing dialysis Newly diagnosed condition therapeutic diet required eg CLD, IBD, new ileostomy Nutrition side effects of chemotherapy or radiotherapy Low Alb. (no other information provided) or poor oral intake Foot/ leg / other minor wounds Pressure injury Grade 2 Malnutrition MST 3	Overweight, obesity, healthy eating, dyslipidaemia, constipation, long standing diabetes, gout, vegetarinism Well nourished patient that dislikes hospital food/ fussy eating Patients who will receive other nutrition education (eg patient to attend Cardiac Rehab) Pressure injury grade 1/ at risk- Braden Tool Score ≤ 14 Dialysis for discharge MST score 1-2 (MST 2 should be placed on HEHP diet code)
Risk Assessment	**Very High Risk** Dietetic input required to ensure immediate safety of patient	**High Risk** Dietetic input required to optimise outcome or ensure patient can be safely discharged today	**Medium Risk** Dietetic input likely impact on length of stay, prevent clinical deterioration, or facilitate timely discharge	**Low Risk** Dietetic intervention unlikely to impact on LOS or referral unrelated to reason for admission
Response inpatients	Within half a working day from when referral received	Within 1 working day	Within 2-3 working days	Intervention as able (referral to alternative service may occur)
Day Onc.	On the day of chemo.	Within 1 cycle of chemo	Within 2 cycles of chemo	
Review frequency	Daily to 2nd daily until stable (Monday - fridays only)	~ every 1-3 days until stable	Once to twice per week until stable (then review prior to discharge)	Only if clinically indicated

*** New referrals should be actioned within 24 hours, including documentation in medical notes regarding the priority and timeframe for full assessment**

*** Unclear referrals will be given a lower priority. It should be fed back to the NUM that more information is required regarding the indication for referral**

Prioritisation tool - supporting documentation / examples

Day Oncology patients

* patients requiring urgent assessment/on the day of referral include patients at risk of admission such as those requiring EN or liquid/supplement diet
* timeframe for assesment of day oncology patients is outlined in a separate row of the prioritisation tool and relates to the cycle of chemo. rather than the number of working dyas as is the case with inpatients

Discharge dependent on dietetic input

* discharge dependent on dietetic input may include **new** P2 referrals, if education is required for the patient to be safely discharged (see P2)
* P3 referrals made on the day of discharge may not be seen prior to discharge. The referral may be forwarded on to other services if indicated

Diabetes

* patients with **newly diagnosed** diabetes should be considered P3 unless the patient is for discharge, in which case they would be considered P2
* patients with pre-existing diabetes should be considered as P3, unless they have been commenced on a medication that increases the risk of hypoglycaemia (eg commencing insulin or sulphonurea) in which case they become P2
* DKA should be considered P3 referral unless the patient is for discharge that day where referral would be P2. Patients with DKA triggered by omission of insulin or acute illness may not be seen during the admission if the patient has had previous dietary education

Prioritisation of new referrals vs reviews

* in most cases if there is clash between assessing a new referral and reviewing a pre-existing patient the new referral should take priority over the review
* the exception to this is if the review patient is for discharge and education is required or the review is P1 or P2 patient
* however if the review of a patient has already been delayed due to workload issues, please seek clarification from a senior dietitian regarding the most approriate way to prioritise new referrals vs reviews of current patients

Screening of patients to determine what priority they are

* prioritisation of patients can not usually be done solely based on the referal information provided in iPM
* the reason for admission, indication for dietitian referral, potential timeframe for discharge and visual asessment of patient's weight/BMI should be considered where possible, to prioritise the patient (may take 5- 10 minutes)

Attendance at unit meetings /case conferences and family meetings

* dietitians should attend these meetings where possible however if the department is short staffed attendance may not be required, please discuss with senior dietitian. Consider requesting to discuss your patients first at meetings or case conferences if possible
* if you are unable to attend the meeting/case conference please provide handover to colleagues where possible

MELBOURNE HEALTH

DEPARTMENT	Nutrition			
PURPOSE	To assist dietetic staff to manage their workload in terms of response to referral and frequency of reviews.			
ISSUED 7 OCTOBER 2013	**REVIEW** 7 OCTOBER 2016			
Unclear or insufficiently detailed referrals will need to be clarified with the referral source and this can slow down prioritisation and response times. Review times are set as a guideline and should be based on clinicians' judgement.				
Nutrition Priority	**Priority 1** ***Immediate*** *Intervention within 4-8 hours.*	**Priority 2** ***Urgent*** *Intervention within 1 working day.*	**Priority 3** ***Not urgent*** *Intervention within 2-3 working days.*	**Priority 4** ***Desirable*** *Intervention within 3-4 working days.*
Descriptor	Patients requiring intensive nutrition support due to medical condition to optimise patient outcome and safety.	Patients requiring nutrition support due to medical condition to optimise patient outcome, or clinical condition has deteriorated.	Patients whose previous dietetic intervention still needs to be monitored.	Patients who are stable and only require infrequent monitoring.
	Dietetic intervention and timely nutrition support is likely to impact on length of stay, discharge safety and readmission risk.			
Initial Referrals	▪ Patients newly commencing on parenteral nutrition (PN) or enteral nutrition (EN). ▪ Dietary needs where the default meal for a diet code does not automatically confer clinical safety, i.e. allergy, multiple dietary requirements (e.g. texture modified + renal) ▪ Inherited Metabolic Disorders patients. ▪ Referral and discharge within same day and safe discharge depends on dietetic intervention e.g. percutaneous endoscopic gastronomy (PEG) patient in emergency dept/same day.	▪ Patients with high risk of malnutrition (Malnutrition Screening Tool ≥ 3). ▪ All patients admitted to Eating Disorders Unit (John Cade) ▪ Unstable medical condition where therapeutic diet assists medical management (.ie. hyperkalaemia).	▪ Patients newly commencing oral nutrition support ▪ Patients newly diagnosed with Type1 Diabetes Mellitus or starting insulin with Type 2 Diabetes Mellitus ▪ Diabetes with altered glycaemic control/altered intake (e.g. post-surgical, anorexia, unstable diabetes, unstable co-morbidity) ▪ Poor oral intake on background of existing under nutrition or Malnutrition Screening Tool = 2 ▪ New dialysis commencement.	▪ Assistance with in hospital food choices for therapeutic diets (eg. well nourished patient with coeliac disease).

Reviews	▪ Unstable medical condition & likely to require enteral nutrition or PN ▪ Unstable patients on EN/PN (including those patients at risk of refeeding syndrome).	▪ Discharge expected within 24 hours ▪ Newly commenced EN/PN or unstable EN/PN ▪ Patients with high risk of refeeding syndrome (oral intake).	▪ Stable enteral nutrition ▪ Recent changed medical condition but eating well ▪ Newly commenced oral nutrition support.	▪ Review of patients stable on oral nutrition support ▪ Stable nutritional status and eating well NB. these reviews could be completed by the Nutrition allied health assistant.
Timeframes	Daily	Daily or 2nd daily	3rd or 4th daily	Weekly

Acknowledgment: From Alfred Health: draft developed Jan 2009 & Western Hospital draft developed 2010.

Southern Health

Framework for Prioritising Adult Inpatient Dietetic Referrals

Risk Category/ Descriptor	Priority 1 Major Nutritional Risk	Priority 2 High Nutritional Risk	Priority 3 Moderate Nutritional Risk	Priority 4 Low Nutritional Risk
Definition	Nutritional intervention essential and urgent to minimise acute clinical deterioration and/or facilitate improved outcomes and/ or timely discharge.	Nutritional intervention to minimise acute clinical deterioration and/or facilitate improved outcomes and/ or timely discharge.	Nutritional Intervention prior to discharge will facilitate improved outcomes	Nutritional intervention not essential for discharge and can be provided in the community
Response Time	Response time within 24 hours of receipt of referral	Response time 24 -72 hours of receipt of referral	Response time > 3-5 days of receipt of referral	Response time 5 days of receipt of referral
Action	Full or limited nutritional intervention. Aim to review minimum x 2-3 /week if appropriate	Full or limited nutritional intervention and intervention Aim to review minimum x 1-2 per week	Full or limited nutritional intervention and as appropriate; Review as required	Nutritional intervention as able and /or advise referrer to refer to more appropriate community dietetic service on discharge
Conditions	**Enteral Nutrition** • ICU: follow feeding algorithm • Wards : New or transfer from ICU • HEN	**Diabetes** • New diagnosis type 1/gestational • Commencing insulin • With poorly healing wound/pressure ulcer ≥ Stage 2	**Diabetes** • New Diagnosis type 2	**Diabetes** • Pre-existing
	Parenteral Nutrition • New • Transfer from ICU	**Liver Failure** • Encephalopathy • Ascites	**Liver Disease with nutrition impact signs and/or symptoms**	**Weight Management**
	Refeeding Syndrome Risk	**Eating Disorder**		**Micronutrient Deficiencies, diet related**
	Malnutrition risk: 'MUST' score> 2	**Malnutrition Risk: 'MUST' score=2** **In absence of 'MUST' score:** • BMI<18.5 • Unintentional weight loss ≥ 6 kg in ≤3 months • ≤ 50% intake over 3 days	**Malnutrition Risk** • 'MUST' score 1 and no improvement in oral intake in 3 days **In absence of 'MUST' score:** • Unintentional weight loss 3-6 kg in ≤3 months and poor oral intake > 3 days **Hypoalbuminaemia and absence of inflammatory process**	**Cardiovascular Disease /Stroke** • Lipid Lowering • Warfarin
	Clear fluids only >5 days **Nil by mouth > 5 days**	**Inborn Errors of Metabolism** -liaison with CNMU	**Texture Modification and potential for malnutrition/dehydration** • Texture B Minced/Moist Diet • Texture C Smooth Pureed Diet • Level 400 Thickened Fluids • Level 900 Thickened Fluids	
	Multiple food allergies	**Cystic fibrosis**		
	Acute Assessment Units	**Parkinson's Disease** Severe constipation/risk of impaction	**Parkinson's Disease** High risk of drug-nutrient interaction	

Risk Category/ Descriptor	Priority 1 Major Nutritional Risk	Priority 2 High Nutritional Risk	Priority 3 Moderate Nutritional Risk	Priority 4 Low Nutritional Risk
Conditions	**Renal Disease** • Serum Potassium >6.0 mmol/L • Peritoneal Dialysis patients with Peritonitis • Pancreatic-Renal Transplant	**Renal Disease New** • Chronic Kidney Disease (CKD) Stage 5 • Nephrotic Syndrome **Renal Disease with nutrition impact signs and/or symptoms** • Acute Kidney Disease • CKD Stages 3-5 • Renal Transplant • Nephrotic Syndrome **Haemodialysis attending non-Southern Health satellite centre**	**Renal Disease New** • CKD Stages 3-4 • Renal Transplant **Renal Disease and no dietetic review r/v >6/12** • CKD Stages 3-4 • Peritoneal Dialysis	**Renal Disease** • CKD stage 3-4 and dietetic review <6/12 • Haemodialysis attending Southern Health satellite centre • Home haemodialysis • Renal Transplant and no review > 6/12
	Gastrointestinal Conditions • Bariatric Surgery • Fundoplication • Fractured mandible • Oesophageal stents/obstruction	**Gastrointestinal Surgery** • Whipple's Procedure • Total or Partial Gastrectomy • Oesophagectomy • Surgery with complications **Gastrointestinal abnormal fluid losses** • Malabsorption • High stoma output • Short Bowel Syndrome **Gastrointestinal Disease-new diagnosis/severe or acute exacerbation** • Inflammatory Bowel Disease • Pancreatitis • Gastroparesis	**Gastrointestinal Disease** • Pancreatitis, chronic /Pancreatic insufficiency with symptoms • Coeliac Disease new • Achalasia • Diverticular Disease (New or exacerbation) • Ostomate education	**Gastrointestinal Disease- pre-existing with no nutrition impact signs and/or symptoms**
	Chyle Leak/Chylothorax	**Oncology patients with nutrition impact signs and /or symptoms**		
	Maternity Tear • Fourth Degree • Third degree	**Wound Management**: Wounds /Pressure Ulcers • Stages 3 -4 • Non –healing • Multiple	**Wound Management** :Wounds /Pressure Ulcers • Stage 2 and nutrition impact signs and/or symptoms	
	Emergency Department-pending discharge **Day Treatment Centre-**pending discharge	**Emergency Department –** for ward transfer		

APPENDIX 1

ALLIED HEALTH SERVICES INPATIENT REFERAL, TRIAGE AND INTERVENTION

DIETETICS ACUTE INPATIENT REFERRAL, TRIAGE AND INTERVENTION GUIDELINES

REFERRAL SCREENING BY DIETITIAN

- All referrals prioritised within 24 hours unless urgent

CATEGORY 1 (URGENT)

Immediate Nutritional Risk
Phone call *plus* PAS Referral

Including but not limited to:

- Initial enteral nutrition and parentertal nutrition yet to commence
- Enteral and parenteral nutrition reviews (referred)
- Food allergy
- Newly diagnosed coeliac disease
- Severe eating disorders (medical management)
- Paediatrics – e.g. failure to thrive, cystic fibrosis, feeding difficulties, allergy risk when introducing solids, inborn errors in metabolism, food aversions
- Newly diagnosed insulin requiring diabetes at risk of hypoglycaemia
- Abnormal GIT losses (fistula, diarrohea, stoma output >1L)
- Cancer involving mouth, oesophagus, stomach, upper GIT
- Renal disease with elevated K^+ > 6 mmol/L
- Nil orally > 5 days
- BMI <18.5, MUST® score > 2 or MST® = 3-5
- High risk refeeding syndrome
- Pre-discharge dietary education for the above conditions

CATEGORY 2 (SEMI-URGENT)

Nutritional intervention is essential prior to discharge. Delayed intervention will affect patient safety and/or impact length of stay

Diet-related Diseases including but not limited to:

- Dysphagia requiring thickened fluids or minced or vitamised texture modified diet (post speech pathology Ax)
- New but commenced enteral and parenteral nutrition
- Renal disease with Cr > 400 umol/L or requiring dialysis
- Newly diagnosed non insulin requiring diabetes
- Patients admitted for unstable diabetes
- Post GIT surgery or newly diagnosed GIT disorders
- Abnormal GIT losses (fistula, diarrohea, stoma output >1L)
- Acute IBD, pancreatitis, cholecysitis
- Chronic pancreatitis with symptoms
- Liver failure
- Respiratory disease - acute on chronic advanced respiratory disease, pneumonia
- Neurological disease (eg Parkinson's disease, post CVA
- Cardiac failure
- Food intolerance
- Other cancer patients for symptom management
- Grade 2 or more pressure ulcers/wound management

Dietary Education (when not nil orally)

- Texture modification, sodium or fluid restriction, or related to above conditions, new ileostomy or colostomy, post GIT surgery not previously educated

Nutrition Support

- Malnutrition/risk of any cause (recent significant weight loss in 3 months; poor oral intake over 1 week; MUST® =1, MST® =2
- Free fluids >7 days or CF > 5 days

CATEGORY 3 (ROUTINE)

Intervention not essential for discharge. Minimal risk/no impact on length of stay

Including but not limited to:

- Overweight/obesity
- Hypertension
- Lipid lowering
- Diabetes pre existing
- Low serum albumin
- Chronic micronutrient deficiency including anaemia
- Chronic diarrohea or constipation
- Self imposed diets
- Positive angiography result/post CABGS
- General dietary advice

- Referral for quality of life/ desired purposes (includes chronic care and education programs)
- Conditions unrelated to reason for admission and not impacting on discharge safety.

RESPONSE

- **Within 24 hours** of referral.

RESPONSE

- **Within 48 hours** of referral

RESPONSE

- **Unlikely to be seen as an inpatient**
- Refer to appropriate Cabrini community service

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Allied Health Acute Inpatient Referral, Triage & Intervention Policy and Procedure

Nutrition Department Priority Framework

Category of priority		Category 1	Category 2	Category 3	Category 4	Category 5	Not indicated for intervention
Description		Immediate risk & intervention required to mitigate risk	Risk exists, situation unstable & intervention time critical for optimal outcome	Risk exists & intervention time critical for optimal outcome	Situation is relatively stable but intervention remains time critical	Situation relatively stable & intervention less time critical	Inappropriate referral and/or no clinical indication for nutrition intervention within resource constraints
INPATIENTS							
Response time (working hrs/days)	**Accept referral**	≤ 4hrs	≤ 1 day	≤ 2 days	≤ 2 days	≤ 2 days	No intervention provided
	Full assessment & management	≤ 4hrs	≤ 1 day	≤ 2 days	≤ 4 days	≤ 7 days	
Patient types/interventions required (including by not limited to)		• New enteral feed/nutrition • New parenteral nutrition • Refeeding syndrome risk	• Unstable enteral feed/nutrition • Unstable parenteral nutrition • New admission of stable enteral feed/nutrition • Poor oral intake requiring enteral nutrition	• MST = 3-5 • Stable parenteral nutrition • Stable enteral feed/nutrition • New post-surgery/RT (via automatic criteria) • New hyper CVAD B cycle chemotherapy	• MST = 2 • New haem induction chemotherapy (other than H-CVAD +FLAG) • New chemotherapy (via automatic criteria) • All other automatic criteria (as per model of care)	• MST = 0-1 • New/review oral nutrition support • New haem FLAG chemotherapy	• General weight loss • General dietary advice or healthy eating • Non-cancer related dietary concern (eg. Diabetes) • Patient declined nutrition assessment/intervention • Patient 'did not attend (DNA)' appointments as per department guidelines • Well-nourished and no anticipated nutrition issues related to cancer/treatment • Patients undergoing cancer treatment (not via automatic criteria) with no nutrition issues (recommend re-screening to referrer)
AMBULATORY PATIENTS							
Response time (working hrs/days)	**Accept referral**	≤ 4hrs	≤ 1 day	≤ 1 week	≤ 1 week	≤ 1 week	No intervention provided
	Full assessment & management	≤ 1 day	≤ 2 days	≤ 1 week	≤ 2 weeks	≤ 1 month	
Patient types/interventions required (including by not limited to)		• New enteral feed/nutrition • Refeeding syndrome risk	• Unstable enteral feed/nutrition (HEN) • Poor oral intake requiring enteral nutrition	• MST = 4-5 • ≥ 10% loss of body wt past 3/12	• MST = 3 • ≥ 5% loss of body wt past 3/12 • Stable enteral feed/nutrition in acute phase (during/post RT up to 8wks) • Change in enteral nutrition regimen/ transition • New UGI, H&N, lung RT (via automatic criteria/referral)	• MST = 0-2 • Change in long-term enteral/HEN regimen/transition • New chemotherapy (via automatic criteria) • New/review oral nutrition support	• As per inpatients

- Reason for referral and minimum requirements for a valid referral must be received prior to the Nutrition Department accepting the referral
- Response time to accept all new referrals should been within 2 days for inpatients & within 1 week for ambulatory patients
- The minimum frequency of review for patients should be managed as per above and clinical judgement used (guided by minimum once/week)
- At times of high demand and/or reduced staffing, Category 1 patients will be given priority (using prioritisation categories systematically above) and it may not be possible to respond to referrals and review patients from other categories during these times
- All ambulatory patients booked into clinics/seen are triaged and given an appropriate booking based on clinical need – those booked will be given a Category 1 rating on any given day

Created by Nutrition Department, Jan 2013

OPERATIONAL PRACTICE GUIDELINE

NUTRITION AND DIETETICS:

PRIORITISATION OF INPATIENT REFERRALS

Peninsula Health

1. INTRODUCTION

The Nutrition and Dietetic Department receives in-patient referrals to be actioned by the dietitian servicing the specific unit / ward. In order to provide a high quality, efficient and equitable dietetic service an evidenced based process of prioritising referrals is required.

2. PURPOSE

The policy aims to provide a guideline for evidence-based prioritisation of in-patient referrals. Referrals for the dietitian are categorized according to the patient's nutritional need and actioned accordingly.

Referrals are accepted for in-patient interventions from medical, nursing and allied health staff. Workload is triaged and priortised daily.

3. DEFINITIONS

Business Day: Working day, excludes weekends and public holidays

Inappropriate referral: A referral that does not fit into the criteria of the priority categories for inpatients but may be appropriate for services as an outpatient. Patients with specific food preferences but with no clinical reason for a therapeutic diet. Referrals for another discipline (e.g. speech referrals etc)

BMI: Body Mass index (weight/height in meters squared)

Category of Referral:

Priority 1	Immediate priority. These patients are to be seen within 1 business day of the referral being received.
Priority 2	Second priority. These patients are to be seen within 2 business days of the referral being received.
Priority 3	Third priority. These patients are to be seen either within 3 business days of the referral being received or if ready for discharge an appropriate referral to an outpatient clinic is to be made in liaison with the patient / carer.
Priority 4	Lowest priority and likely to have chronic conditions better managed in a community setting.

4. RELATED POLICIES/ OPERATIONAL PRACTICE GUIDELINES

- **7.1.19-Medical Record documentation**
- **OPG- Completing the initial nutrition report**
- **OPG- Clinical Supervision**

5. RESPONSIBILITIES

5.1. Peninsula Health – Ensure all employees have access to the OPG.

5.2. Department Head/Manager - Ensure all employees are aware of the OPG and its location and delegate the review and update of the OPG to a Nutrition and Dietetics Department team member.

5.3. Senior Dietitians – Ensure the OPG is included in staff orientation programs, coordinate regular review and update of the OPG.

5.4. Employee - Ensure familiarity with the OPG, compliance with its requirements and active participation in update and revision.

OPERATIONAL PRACTICE GUIDELINE

NUTRITION AND DIETETICS:

PRIORITISATION OF INPATIENT REFERRALS

Peninsula Health

6. OPERATIONAL PRACTICE GUIDELINE

All inpatient referrals received are prioritised according to clinical need to ensure an effective service and patient equity. Referrals and current inpatients should be triaged daily to assist workload management. Clinical judgment will be the final deciding factor in workload prioritisation. It is important that dietitians work as a team to manage workloads.

Referrals are received from various sources

Types of Referrals

Written – received from Nursing, Medical or Allied Health Staff on the prescribed Allied Health referral form in Acute

Verbal – communicated indirectly via the referral phone line or directly to a Nutrition Department staff member during a ward meeting, ward round or while on the ward.

Pathway - the Stroke, Anorexia Nervosa and Paediatric newly diagnosed Diabetes pathways in Acute have blanket referral to dietitians

Screening: dietitian screening based on admission diagnosis

Inappropriate referrals should be documented on the spreadsheet kept on the departmental M Drive

INPATIENTS (Adults and Paeds)	
Priority 1 Seen within 24 hours of referral screening (or on 1st business day for after hours or weekend referral)	Artificial Nutrition Support (Enteral or Parenteral Nutrition) Malnutrition (Severe->5% weight loss in 1month with evidence of sub-cut fat loss and muscle wasting) (1) Adult & paediatric patients with Anorexia Nervosa (as per pathways) Nil orally > 3 days Newly diagnosed Diabetes requiring insulin(being discharged that day) Paediatric type 1 diabetes (as per pathway) Stroke (as per pathway) Pressure Ulcer/Wounds Stage 3-4 All ICU patients to be screened and actioned as priority 1 Discharge Planning- all patients referred on day of discharge should be prioritised and if more appropriate refer on to various outpatient services. (document inappropriate discharge referrals) Food Service: Very high risk nutrition support – significant food allergies or therapeutic dietary changes that food service are unable to implement without dietetic guidance

OPERATIONAL PRACTICE GUIDELINE

NUTRITION AND DIETETICS:

PRIORITISATION OF INPATIENT REFERRALS

Peninsula Health

Priority 2 Seen within 2 working days hours of referral / screening	Newly diagnosed Diabetes requiring insulin (being discharged later in the week) Acute Inflammatory Bowel Disease Liver disease Malnutrition (mild to moderate) Pressure Ulcer/Wounds Stage 2 or below Renal disease / haemodialysis Newly diagnosed cancer (upper GI) Major GI surgery (eg colectomy, oesphagectomy) Dysphagia Decreased oral intake/appetite >7 days Food Service: Complex therapeutic diets (general meal / food preferences to be referred to Food Service staff) **Sub-acute variations**: Stroke Amputations
Priority 3 Seen within 3 working days of referral / screening	Unintentional wt loss Underweight (BMI < 18.5 in under 65 years, <22 in over 65 years) – but with no recent weight loss Newly diagnosed Diabetes not requiring insulin Existing Diabetes commencing insulin Uncomplicated diverticular disease/cholecystitis
Priority 4 Seen within 4 working days of referral / screening (or refer to relevant OP service on d/c)	Nutrition education for chronic conditions (eg obesity, chronic constipation, mental health disorders, cardiac disease existing low risk T2DM) Patients can be provided with information about appropriate outpatients services on the Mornington Peninsula. The clinician can generate a referral or in many cases the patient can self refer into the appropriate service. *** Documentation in clinical notes still required if referred to OP service without inpatient intervention.*

Food service issues: Assistance should be sort from the menu monitors or PSAs (in sub-acute) in the first instance. Exception is patients with significant food allergies or therapeutic

dietary changes that food service is unable to implement without dietetic guidance

6.1 INDICATIONS AND CONTRAINDICATIONS

Indications:

- Applies to all adult and paediatric inpatients at facilities within Peninsula Health

6.2 CLINICAL CONSIDERATIONS

Clinical judgment must always be used to make the final decision regarding patient / caseload prioritisation.

7. EVALUATION

- As part of regular Medical history audits: to identify date of referral, condition and date patient was seen.
- Regular review of prioritisation procedures in clinical supervision as per case discussion template.

8. REFERENCES

Evidence based practice guidelines for the nutritional management of malnutrition in adult patients across the continuum of care. *Nutrition and Dietetics* 2009; **66** (Suppl 3:S1)

Escott-Stump, S. *Nutrition and Diagnosis-Related Care*, Lippincott Williams & Wilkins 2002, Maryland, USA.

Garrow JS, James WPT and Ralph A. *Human Nutrition and Dietetics*, Harcourt Publishers Ltd 200, London, UK.

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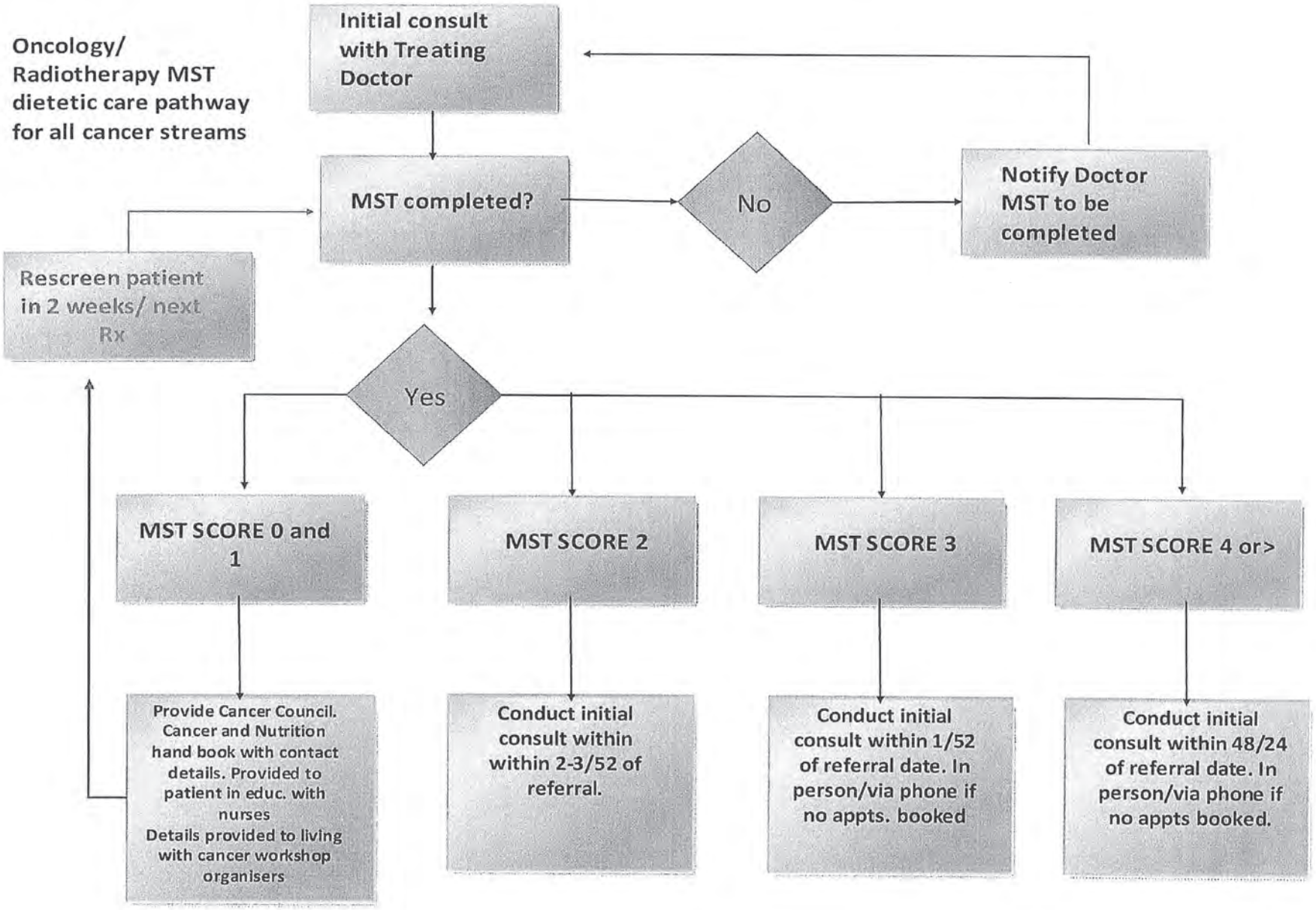
Acknowledgments: Table adapted from Liverpool Hospitals Dietetic Clinical Priorities

9. OPERATIONAL PRACTICE GUIDELINE HISTORY

- Protocol for In-patient referrals (revised 2001 / 2006/2007/2008)
- Revised and renamed as an OPG in March 2012

10. KEY PERFORMANCE INDICATORS/ OUTCOME

- 100% of Referrals triaged and actioned as per protocol


Oncology/ Radiotherapy MST dietetic care pathway for all cancer streams
Initial consult with Treating Doctor
MST completed?
No
Notify Doctor MST to be completed
Rescreen patient in 2 weeks/ next Rx
Yes
MST SCORE 0 and 1
MST SCORE 2
MST SCORE 3
MST SCORE 4 or>
Provide Cancer Council. Cancer and Nutrition hand book with contact details. Provided to patient in educ. with nurses
Details provided to living with cancer workshop organisers
Conduct initial consult within within 2-3/52 of referral.
Conduct initial consult within 1/52 of referral date. In person/via phone if no appts. booked
Conduct initial consult within 48/24 of referral date. In person/via phone if no appts booked.

Attachment 1 Dietetics Prioritisation Tool

Eastern Health DIETETICS

CASELOAD PRIORITISATION TOOL

Based on assessed risk, impact on physical outcomes, patient safety, goals of patient care and potential to increase length of stay

- Reprioritisation occurs daily and not only on receipt of referral
- Resource shifting to respond to caseload requirements
- Daily prioritisation embedded in the caseload management process of teams
- Staff daily timetables will be developed, maintained and reviewed by senior clinicians

Urgent

Immediate Risk

- New Enteral nutrition support referral until target achieved and clinically stable.
- New TPN support referral until target achieved and clinically stable
- Newly diagnosed food allergy with severe reaction/anaphylaxis
- High risk of refeeding syndrome (eg NBM more than 1 week) /severe electrolyte disturbances
- (BHH only) - Eating disorder assessment and meal plan review following weigh day (Mon/Thurs)
- Same day patient discharge blocking a bed
- Urgent HEN order
- Failure to thrive in identified vulnerable child
- Renal patient with hyperkalemia
- Repair and maintenance of food service related software in order to ensure that patients receive correct diet order
- Clinical handover completion to facilitate discharge/transfer between services
- EH incident response

Standard Work

All referrals will be managed according to evidence based guidelines and prioritised by the Dietetics framework

- New referrals (other than those identified as urgent) will receive an intervention within 48 hours (acute setting) or 72 hours (sub acute setting) unless evidence based guidelines indicate more rapid response
- Patients scheduled for discharge within the next 48 hours will be prioritised for intervention.
- Patients with unstable acute nutrition related clinical conditions will receive dietetic intervention (assessment or review) at a minimum of every 48 hours unless evidence based guidelines indicate more frequent intervention.
- Patients with stable nutrition related clinical conditions will receive dietetic intervention (assessment or review) at a minimum of every 72 hours (acute setting) and weekly (subacute setting) unless evidence based guidelines indicate more frequent intervention.
- Needs intervention to achieve goals
- Non clinical work that has been identified and agreed as part of a clinician's allocated workload is to be timetabled for completion as part of standard work.

Not for Action in this Setting

Including but not limited to:

- Overweight/obesity
- Hypertension
- Lipid lowering
- Pre-existing diabetes/unstable diabetes
- Irritable bowel syndrome
- Micronutrient deficiencies
- Food service liaison (non therapeutic diet related)
- Referral for quality of life/desired purposes (including chronic care, particularly conditions not related to the reason for admission (?) and education programs)
- Conditions unrelated to reason for admission and not impacting on discharge safety or length of stay

Eastern Health DIETETICS

Prioritisation of non clinical work

Category 1
Supervision (staff)
Case conference
Dietetics Leadership meetings for Grade 3 and Grade 4
Preparation to present Professional Development
Chefmax maintenance

Category 2

Meal audits
Student supervision
Professional development
Ward business /Allied health meeting
Department meeting
Attend internal Professional Development
Portfolio meetings* and associated paperwork
Stepping into Research sessions and project time
Approved research activities

Category 3
Independent project** work

*exception if you are the only dietetics representative on a multidisciplinary committee- d/w site senior/manager
** may be prioritised higher depending on the work

Eastern Health DIETETICS

FRAMEWORK FOR PRIORITISING ACUTE INPATIENT REFERRALS

REFERRAL SCREENING BY DIETETICS

Category 1

Immediate Risk

Response Time: ≤ 24 hours

Including but not limited to:

- Facilitate safe discharge where discharge is ≤24 hours (either planned or unexpected)
- Enteral/parenteral nutrition
- Newly diagnosed type 1 diabetes with risk of hypoglycaemia or newly commencing insulin
- Existing diabetics newly commencing insulin
- Newly diagnosed coeliac disease
- Liver failure with encephalopathy
- Renal disease with elevated K
- Abnormal GIT fluid loss
- Severe mucositis
- Eating disorders
- Paediatrics e.g. failure to thrive, cystic fibrosis, feeding difficulties, allergy risk when introducing solids
- Newly diagnosed food allergy with severe reaction/anaphylaxis
- Risk of refeeding syndrome i.e. negligible food intake for > 5 days

Category 2

Recent events and improved outcomes through intervention

Response Time: ≤ 2 days

Including but not limited to:

- Facilitating safe discharge (discharge planned > 24 hours)
- Malnutrition (recent significant weight loss in 3 months; poor oral intake over 1 week; hypoalbuminaemia; loss of appetite; extended period of NBM/CF.
- Risk of malnutrition, malnutrition screening tool score of ≥2 – *initial response includes clarification of malnutrition risk, commencement of Malnutrition Response Diet (Resource 2.0 80 ml tds)*
- Dysphagia requiring texture modified food/fluids
- Wound and pressure area management
- Renal disease where creatinine >400umol/L or requiring dialysis
- Recent stroke not requiring enteral feeding
- Newly diagnosed type 2 diabetes/unstable blood glucose levels/gestational diabetes
- Gastric or major bowel surgery including bariatric surgery
- Liver failure- non encephalopathy, ascites
- Oncology patients for symptom management
- Newly diagnosed food intolerance
- Acute cholecystitis
- Acute pancreatitis and chronic pancreatitis with symptoms
- Obesity/overweight impacting on admission intervention and/or length of stay
- Hyponatraemia

Category 3

Chronic Condition/ Acute condition with limited improvement likely/ Improve quality of life/ Low risk acute condition

Response Time: ≤ 5 days

Including but not limited to:

- Overweight/obesity
- Hypertension
- Lipid lowering
- Pre-existing diabetes
- Irritable bowel syndrome
- Micronutrient deficiencies
- Food service liaison (non therapeutic diet related)
- Referral for quality of life/desired purposes (including chronic care and education programs)
- Conditions unrelated to reason for admission and not impacting on discharge safety or length of stay

Dietetic response

Response time within 5 days of referral received.

- If patient not assessed during admission, refer to dietetic ambulatory services.
- Record referral to ambulatory services in medical record

Reason for referral MUST be documented in the clinical notes and as part of the referral. At times of high demand or reduced staffing, category 1 patients will be given priority for assessment. It may not be possible to respond to referrals from other categories at these times.

Eastern Health DIETETICS

FRAMEWORK FOR PRIORITISING OUTPATIENT REFERRALS

Based on assessed risk, impact on physical outcomes, patient safety and potential to increase length of stay

REFERRAL SCREENING BY DIETETICS

Category 1

Immediate Risk

Response Time: ≤ 24 hours

Including but not limited to:

- Home Enteral Nutrition- newly discharged or difficulty with gastrostomy tube or requiring formula or feeding equipment
- Unstable eating disorder

Response time < 7 days

- Gestational diabetes newly diagnosed
- Renal disease – unstable electrolytes
- complex paediatric conditions/social situations impacting nutritional status

Category 2

Recent events and improved outcomes through intervention

Response Time: ≤ 14 days

Including but not limited to:

- Malnourished BMI < 18kg/m2 or significant unintentional weight loss
- Poorly controlled Type 1 Diabetes & Type 2 diabetes treated with insulin or medication
- New diagnosis food allergy
- Commencing insulin pump
- Severe exacerbation of COAD, COPD clients impacting on ability to maintain nutritional status
- Renal disease – electrolyte management
- Wound management – poor wound healing
- Newly diagnosed coeliac disease
- New diagnosis of food intolerances
- Modified consistency diet
- Liver or renal problems
- Side effects of chemotherapy
- Paediatric failure to thrive
- Cancer cachexia
- Hyperemesis with associated LOW

Category 3

Chronic Condition/ Acute condition with limited improvement likely/ Improve quality of life/ Low risk acute condition

Response Time: ≤ 28 days

Including but not limited to:

- Recent diagnosis of diabetes or change in treatment modality
- Body mass impacting on ability to move (pre or post orthopaedic surgery).
- Pregnant obese women
- Irritable Bowel Syndrome
- Chronic pain patients
- Stable eating disorder patients
- Pre diabetes (IGT or IFG)
- PCOS
- Constipation
- Diverticular disease
- Anaemia/iron deficiency
- Child less than 12 years old
- Over 65 years old and frail or disabled or diagnosed with 2 or more chronic conditions
- Cancer
- Bariatric surgery planned
- Paediatric fussy eating/food refusal

Category 4

Existing conditions

Appropriateness of referral will be discussed with referee

Response Time: ≤ 42 days

Including but not limited to:

- Stable diabetes
- Obesity/overweight with no other comorbidities
- Hyperlipidemia
- Hypertension
- Vegan or vegetarian diets
- Dental issues
- Healthy eating or general nutrition
- Nutrition for sport
- Osteoporosis
- Previous bariatric surgery

Eastern Health DIETETICS

FRAMEWORK FOR PRIORITISING SUB-ACUTE INPATIENT REFERRALS

REFERRAL SCREENING BY DIETETICS

Category 1

Immediate Risk

Response Time: ≤ 24 hours

Including but not limited to:

- Facilitating safe discharge where discharge is ≤24 hours (either planned or unexpected)
- Enteral/parenteral nutrition
- Newly diagnosed type 1 diabetes with risk of hypoglycaemia
- Newly diagnosed coeliac disease
- Liver failure with encephalopathy
- Renal disease with elevated K
- Acute inflammatory bowel disease
- Abnormal GIT fluid loss
- Eating disorders
- Paediatrics e.g. failure to thrive, cystic fibrosis, feeding difficulties, allergy risk when introducing solids
- Newly diagnosed food allergy with severe reaction/anaphylaxis
- Risk of refeeding syndrome

Category 2

Recent events and improved outcomes through intervention

Response Time: ≤ 2 days

Including but not limited to:

- Facilitating safe discharge (discharge planned > 24 hours)
- Malnutrition (recent significant weight loss in 3 months; poor oral intake over 1 week; hypoalbuminaemia; loss of appetite; extended period of NBM/CF.
- Risk of malnutrition, malnutrition screening tool score of ≥2
- Dysphagia requiring texture modified food/fluids
- Wound and pressure area management
- Renal disease where creatinine >400umol/L or requiring dialysis
- Recent stroke not requiring enteral feeding
- Newly diagnosed type 2 diabetes/unstable blood glucose levels/gestational diabetes
- Gastric or major bowel surgery including bariatric surgery
- Liver failure- non encephalopathy, ascites
- Oncology patients for symptom management
- Newly diagnosed food intolerance
- Acute cholecystitis
- Acute pancreatitis and chronic pancreatitis with symptoms
- Obesity/overweight impacting on admission intervention and/or length of stay
- Hyponatraemia

Category 3

Chronic Condition/ Acute condition with limited improvement likely/ Improve quality of life/ Low risk acute condition

Response Time: ≤ 5 days

Including but not limited to:

- Overweight/obesity
- Hypertension
- Lipid lowering
- Pre-existing diabetes
- Irritable bowel syndrome
- Micronutrient deficiencies
- Food service liaison (non therapeutic diet related)
- Referral for quality of life/desired purposes (including chronic care and education programs)
- Conditions unrelated to reason for admission and not impacting on discharge safety or length of stay

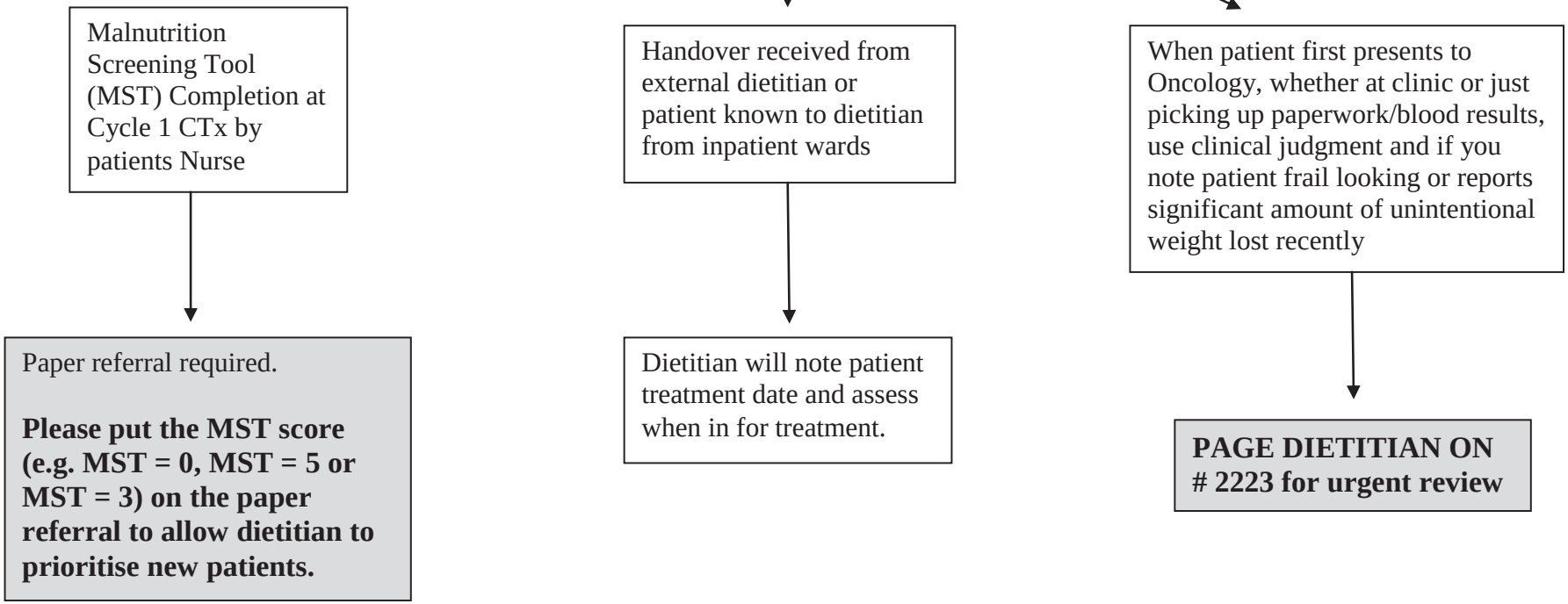
Dietetic response

Response time within 5 days of referral received.

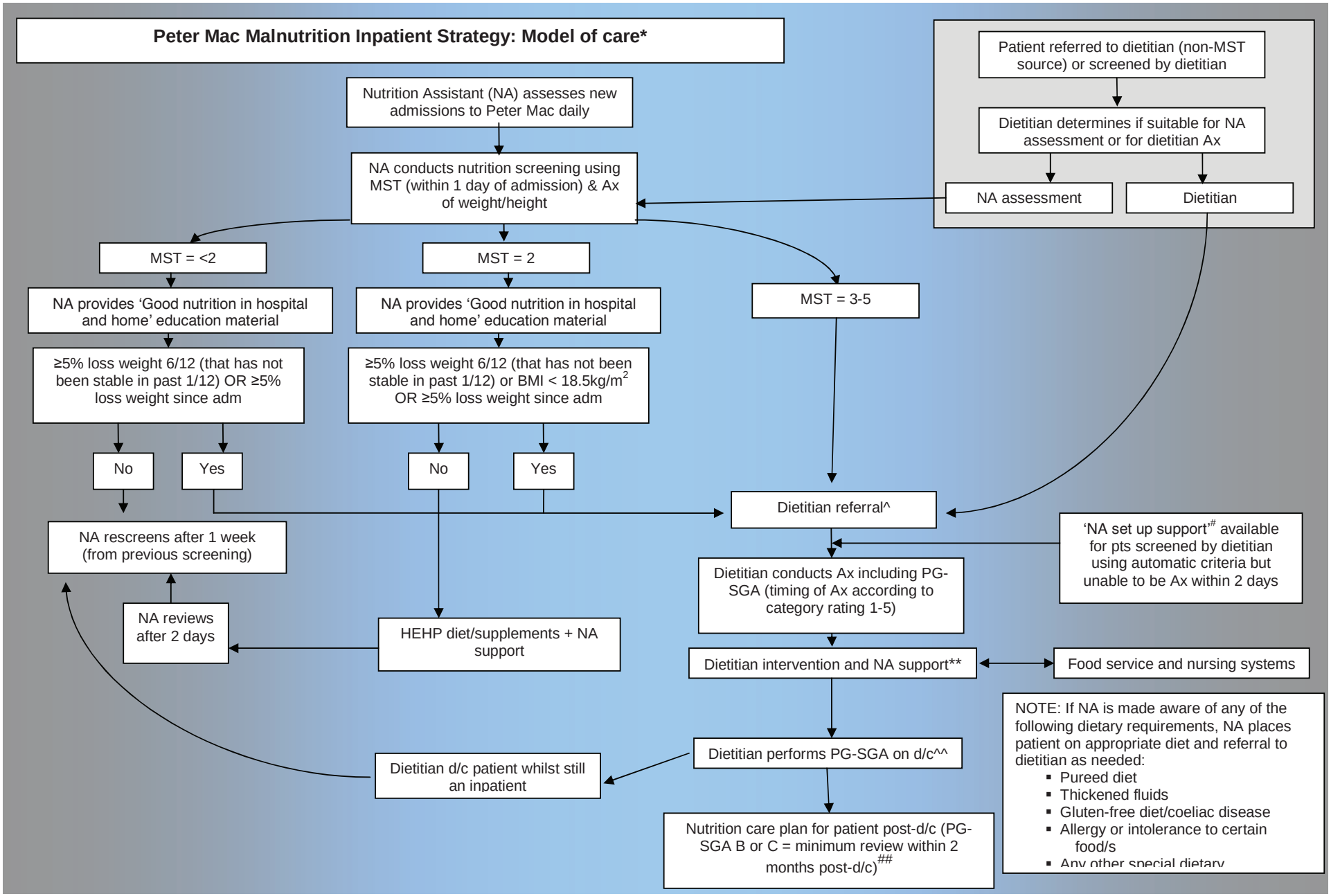
- If patient not assessed during admission, refer to dietetic ambulatory services.
- Record referral to ambulatory services in medical record

Reason for referral MUST be documented in the clinical notes and as part of the referral. At times of high demand or reduced staffing, category 1 patients will be given priority for assessment. It may not be possible to respond to referrals from other categories at these times.

Dietetic Oncology Referral Pathway for New Patients



Grey boxes indicate where an action is required by Oncology nursing staff


Peter Mac Malnutrition Inpatient Strategy: Model of care*
Patient referred to dietitian (non-MST source) or screened by dietitian
Dietitian determines if suitable for NA assessment or for dietitian Ax
NA assessment
Dietitian
Nutrition Assistant (NA) assesses new admissions to Peter Mac daily
NA conducts nutrition screening using MST (within 1 day of admission) & Ax of weight/height
MST = <2
MST = 2
MST = 3-5
NA provides 'Good nutrition in hospital and home' education material
NA provides 'Good nutrition in hospital and home' education material
≥5% loss weight 6/12 (that has not been stable in past 1/12) OR ≥5% loss weight since adm
≥5% loss weight 6/12 (that has not been stable in past 1/12) or BMI < 18.5kg/m2 OR ≥5% loss weight since adm
No
Yes
No
Yes
Dietitian referral^
NA rescreens after 1 week (from previous screening)
'NA set up support'# available for pts screened by dietitian using automatic criteria but unable to be Ax within 2 days
Dietitian conducts Ax including PG-SGA (timing of Ax according to category rating 1-5)
NA reviews after 2 days
HEHP diet/supplements + NA support
Dietitian intervention and NA support**
Food service and nursing systems
NOTE: If NA is made aware of any of the following dietary requirements, NA places patient on appropriate diet and referral to dietitian as needed:
Pureed diet
Thickened fluids
Gluten-free diet/coeliac disease
Allergy or intolerance to certain food/s
Any other special dietary
Dietitian performs PG-SGA on d/c^^
Dietitian d/c patient whilst still an inpatient
Nutrition care plan for patient post-d/c (PG-SGA B or C = minimum review within 2 months post-d/c)##

KEY:

* Clinical judgement should be used at all times when referring to this model of care

^ For MST=0-2 referred to the dietitian, due to the lower priority rating of these pts for Ax, NA's will set pt up on appropriate diet code and supplements at time of screening

'NA set up support' includes NA collecting details on pt's height and weight (current and history) and oral intake, and placing pt on appropriate diet code and supplements. This does not include MST screening

** For MST=0-3, where appropriate, provide intervention/education (including education material) on initial Ax and discharge back to NA for rescreen

^^ If a pt is discharged following assessment without dietitian knowledge and is a low risk pt/requires no further intervention, a 'Nutrition Discharge Pack 1' can be posted out to the pt. The unit dietitian must:

1. Request the nutrition secretary to post out this pack via email. Please provide detail on which pack to be sent ie. Discharge Pack 1, along with pt UR number and name in request. If any alterations are required to be made to this pack ie. Addition of education material, please provide detail to secretary at time of request.
2. In the discharge summary note on Verdi:
    a. Indicate that the patient was discharged prior to education/intervention being completed
    b. In the 'Nutrition Management' section, for one of the points put "A nutrition discharge pack has been posted to the patient containing the Nutrition Department contact details and information on how to find a local dietitian"
    c. In the 'Follow-up Plan' section select "review on request"

For MST=0-3 referred but not seen during admission, a 'Nutrition Discharge Pack 2' can be posted out to the pt if the dietitian feels that further nutrition intervention is not clinically indicated ie. A low risk/priority pt. The unit dietitian must:

1. Request the nutrition secretary to post out this pack via email. Please provide detail on which pack to be sent ie. Discharge Pack 2, along with pt UR number and name in request. If any additions are required to be made to this pack ie. Addition/deletion of education material, please provide detail to secretary at time of request.
2. Enter a discharge summary note on Verdi.
    a. Complete admission dates, opening lines and reason for referral then delete down to the 'Nutrition Management' section.
    b. Until template updated, under this section put 'Patient was unable to be assessed during this admission. A nutrition discharge pack has been posted to the patient containing the Nutrition Department contact details, information on how to find a local dieititan, and the Cancer Council Victoria Nutrition and Exercise booklet'.
    c. In the 'Follow-up Plan' section select "review on request"

'Nutrition Discharge Pack 1' contains:

1. Letter informing pt they were seen by the dietitian during their admission and provides Nutrition Dept contact details
2. Information on how to find a local community/private dietitian

'Nutrition Discharge Pack 2' contains:

1. Letter informing pt they were identified as being at risk but unable to be seen and provides Nutrition Dept contact details
2. Cancer Council Victoria 'Nutrition and Exercise' booklet
3. Information on how to find a local community/private dietitian

Standard assessment of risk of malnutrition and treatment of malnutrition in Eastern Health (with Dietetic AHA)

Identification of malnutrition risk via nutrition screening using the 'Malnutrition Screening Tool' (MST)

Initial MST conducted by nursing staff on day 1 of admission

MST score <2 nutrition risk **not** identified no intervention required at this stage

Routine repeat screening by Dietetic AHA conducted at day 8, 15 etc.

Score= 0
low risk
Repeat screening weekly

MST score = 2 unsure response- further investigation required

Dietetic AHA conducts MUST

Score= 1
Medium Risk
Document appetite/ intake. If intake is poor 3/7

1. **Referral to Dietitian**

2. Standard treatment of *3x 80ml energy dense nutrition support product* commenced.

MST > 2 at risk of malnutrition

Referral to Dietitian

Score ≥2
High Risk

See Treatment Process *

Treatment process

1.Nutrition diagnosis formulated based on finding of assessment

2. Treatment and management plan commenced via appropriate route eg. oral, enteral, parenteral

3. Ongoing monitoring and review of treatment plan as required

4. Discharge Planning

Acute to sub-acute

Handover provided to Dietitian at transferring site for ongoing management.

Transition care community/resi home

Dietary education provided to patient and/or carer + CRP referral if required

High/Low level care

Discharge summary provided with nutritional recommendations

Standard assessment of risk of malnutrition and treatment of malnutrition in Eastern Health (without Dietetic AHA)

Identification of malnutrition risk via nutrition screening using the 'Malnutrition Screening Tool' (MST)

Initial MST conducted by nursing staff on day 1 of admission

MST < 2 nutrition risk **not** identified

No intervention required

MST score ≥ 2 at risk of Malnutrition

Referral to Dietitian

Treatment process

1.Nutrition diagnosis formulated based on finding of assessment

2. Treatment and management plan commenced via appropriate route eg. oral, enteral, parenteral

3. Ongoing monitoring and review of treatment plan as required

4. Discharge Planning

Acute to sub-acute

Handover provided to Dietitian at transferring site for ongoing management.

Transition care community/resi

Dietary education provided to patient and/or carer

home

Referral to appropriate ambulatory service if required.

High/Low level care

Discharge summary provided with nutritional recommendations

Documentation template for AHA nutrition review.

Uncomplicated category 2 patients, already assessed by a dietitian.

List of alternative oral nutrition support products for AHA to use.

- Extras list items
- Change the flavour of whatever the patient is currently receiving
- Sustagen
- Sustagen pudding
- Fortisip (non diabetic patient. Check with dietitian if patient is diabetic)
- Fortijuce (non diabetic patient. Check with dietitian if patient is diabetic)

Otherwise please check with the ward dietitian.

Documentation
Dietitian sticker; AHA assistant
Date, time and name.

Anthro:
Record new weight or re weigh patient (only if **safe** to do so).
Interpret weight (eg increased, decreased or stable since last dietitian assessment)
Otherwise write 'no recent weight and patient unsafe to weigh'

Example:
Weight 70kg. Stable since last dietitian review.

Clinical:
Use this heading if any other information to include.
eg. bowels etc.

Dietary Ax:
Comment on oral nutrition support products and/or extras already trialled.
You could also comment on a patient's appetite, quantity of meals the patient is managing.

Example:
Review of oral nutrition support product ……
Patient has been receiving chocolate fortisip as per dietitian review 30/10/12. He is happy to continue oral nutrition support products, however dislikes the current flavour. He reports his appetite is poor and is currently managing only ¼ of his meals. (List consumption of meals if pt has eaten) eg, pt consumed ½ of main meal, meat and vegetables, all desert and approx 1/4 soup, cup of tea)

Plan:
Mention date of last dietetic review in the plan.

Example:

1. Change fortisip x 2/day to strawberry and banana flavours.

2. Continue other plans as per full dietetics review conducted on ……..

References

1. Porter J, Jamieson R 2013, 'Triaging in dietetics: Do we prioritise the right patients?' *Nutrition and Dietetics*, no. 70, pp. 21–26.
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3. Department of Health 2012, *Supervision and delegation framework for allied health assistants*, viewed August 2014, <http://www.health.ivc.gov.au/workforce>.
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8. Cartmill L, Comans T, Clark M, et al. 2012, 'Using staffing ratios for workforce planning: evidence on nine allied health professions', *Human Resources for Health*, no. 10, p. 2.
9. Roshier-Taks M 2011, *The DAA resource allocation manual*, Dietitians Association of Australia, viewed August 2014, <http://daa.asn.au/wp-content/uploads/2011/03/Resource-allocation-manual-20110421.pdf>.