

Nutrition Care After Hospital Discharge in Singapore: Evidence-based Best Practice Recommendations

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The nutritional status of hospitalised patients is often at risk or compromised and predisposed to further deterioration after discharge. This leads to poor clinical outcomes, high healthcare costs and poor QoL.

Urgent action is needed to improve nutritional care of patients after discharge in Singapore. The following evidence-based best-practice recommendations serve as the first step to improve the nutrition care process at discharge and after discharge in Singapore.

Evidence-based Best-Practice Recommendations



1 All patients should undergo nutrition screening within 24 hours of admission.



3 All patients should undergo nutrition screening at discharge.

Nutrition screening should be performed on all patients prior to discharge to avoid the negative outcomes associated with unaddressed malnutrition (i.e., increased likelihood of re-admission and mortality after discharge).



5 Use a validated screening tool that includes a disease activity/burden component.

This includes the Malnutrition Universal Screening Tool (MUST), the Mini Nutritional Assessment (MNA) and the Nutrition Risk Screening 2002 (NRS-2002). The use of the same screening tool by all public health institutions is encouraged to facilitate better communication across healthcare institutions.



7 The individualised nutrition care plan provided should include the following information:



Target weight

A BMI of at least 18.5 kg/m² in Asians <70 years and 20 kg/m² in Asians >70 years.



Target energy and protein intake

Energy intake: at least 30 kcal/kg of actual body weight/day for older patients, those with an acute or chronic disease who are malnourished or at risk of malnutrition.

Protein intake: of at least 1.2 g/kg of actual body weight/day for inpatients; 1.2 – 1.5 g/kg of body weight/day for older adults with acute or chronic disease; up to 2.0 g/kg of body weight/day for those with severe illness, injury or severe malnutrition.



Strategies to achieve target weight

Food fortification; small frequent meals; additional snacks and/or finger food; Oral Nutrition Supplement (ONS): at least 400 kcal/day including 30 g or more protein/day for older adults.



2 Nutrition re-screening should be performed on a weekly basis during hospitalisation to identify individuals who may be experiencing nutritional decline.



4 If a patient is at risk of malnutrition, any HCP, regardless of profession, should be able to make a direct referral to a dietitian for further assessment and intervention.

Nutrition screening results should be included in the electronic health records and the electronic healthcare systems should be programmed to automatically initiate dietetic referral when a patient screens positive.



6 An individualised nutrition care plan should be formulated for patients who have been assessed to be malnourished or at risk of malnutrition during hospitalisation or at discharge.



Duration of nutrition intervention

Should be continued for at least 1 month before re-assessment for effectiveness.



Dietetics follow-up appointment

To regularly monitor the outcome of interventions, re-assess nutritional status and re-adjust interventions as needed.



Updates on nutrition care progress for primary care physician.



Dietitians, physicians, nurses, physiotherapists, speech therapists and medical social workers should collaborate in the planning and delivery of the after-discharge nutrition care plan.

A collaborative and coordinated effort from relevant HCPs is required to ensure successful planning and delivery of the after-discharge nutrition care plan (refer to Figure below).



Collaborations amongst public health institutions, community healthcare partners and community support groups are needed to support the continuum of care for patients.

Hospital-to-community transition should incorporate dialogue and liaison between all key stakeholders (dietitians, physicians, nurses, physiotherapists and medical social workers) between both setups. Having a coordinator for nutrition care can improve collaboration and communication across healthcare settings.



Patients and their caregivers should be provided with adequate education related to after-discharge nutrition care.

Educating patients and caregivers on the importance of nutrition and exercise facilitates their active participation in improving their nutritional health and understanding and adhering to the after-discharge nutrition care plan.

Collaboration between all HCPs across both settings is necessary to ensure

Planning, Delivery and Implementation of Nutrition Care Plan



In Hospital At Discharge

Hospital-to-community TRANSITION

Outpatient or Community After discharge



Arrange nutrition screening and dietitian referral as required; educate patients and caregivers on the nutrition care plan; ensure discharge notes include nutrition care plan for follow-up

PHYSICIANS

Ensure nutrition care plan is carried out at home or community healthcare institution through follow-ups; conduct nutrition re-screening

Conduct nutrition screening; document and arrange dietitian referral as required; reinforce to patients and caregivers about nutrition care plan

NURSES

Remind patients and caregivers on adhering to nutrition care plan at follow-up visits

Conduct nutrition assessment; formulate nutrition care plan for patient and include this plan in the discharge notes; educate patients and caregivers on the nutrition care plan

DIETITIANS

Follow-up with patients to ensure nutrition goals are met; review and update nutrition care plan based on patients' needs; re-educate patients and caregivers on any changes to nutrition care plan

Provide after-discharge exercise plan as needed; educate patients and caregivers on the exercise plan, as well as importance of nutrition

PHYSIO-THERAPISTS

Assess patients' adherence and outcomes (e.g., muscle strength and function) from the after-discharge exercise plan; review and update exercise plan as required

Support for implementation: education; healthcare system improvement on nutrition screening and dietitian referral process; proper documentation of nutrition care plan; regular audits on nutrition screening and referral process.

Support for compliance and follow-up: consolidation of multiple specialist appointments; telehealth follow-up consultation; patient self-assessment using smartphone applications for nutrition and muscle health screening.

Abbreviation: BMI, body mass index; HCP, healthcare professional; ONS, oral nutrition supplements; QoL, quality of life.