

# Virtual Post-Emergency Department Nutrition Care: Addressing Malnutrition Risk with Timely Interventions

Providing high patient satisfaction with the revenue generated exceeding the cost of service provision

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**Background:** The National Safety and Quality Health Service Standards specify the inclusion of nutritional assessment in comprehensive care plans, including for patients admitted to an Emergency Department (ED) even if not overnight. To address this, Gold Coast Health developed a new model of care to provide timely virtual nutritional assessments and interventions for patients identified as at risk of malnutrition after attending an ED. Adult patients with a malnutrition risk tool (MST) score of  $\geq 2$  (where 0 is not at risk, to 5, highest malnutrition risk) were triaged to the service, where further eligibility was assessed. The utility of such models in providing care to patients at risk of malnutrition is unknown. Thus, we aimed to evaluate the effectiveness in relation to service reach, patient satisfaction and basic economic analysis.

**Methods:** Demographic and clinical data were collated from electronic medical records for service-eligible patients who attended a Gold Coast Health ED or Day Surgery Unit (DSU) between Dec 2022 and Sept 2024. A Patient Reported Evaluation Measure (PREM) survey was circulated to patients via text message after appointment, and comments analysed thematically. Basic economic analysis compared occasions of service (revenue generated) with cost of providing dietetic FTE for the service.

**Results:** Of 67,229 patients who received MST screening in an ED or DSU, 25% (n=17,031) were identified as at risk of malnutrition (MST  $\geq 2$ ).

**Reach:** Of 2670 patients eligible for the service, 57% were seen by a dietitian and 24% declined an appointment. Of those who received dietetic assessment, almost 40% had some degree of malnutrition, and an additional 36% were at risk of malnutrition (Figure 1).

**Patient survey results:** 80% of patients indicated a preference for virtual over face-to-face appointments. Satisfaction with the service was high, with patient responses summarised into four key themes (Table 2).

**Economic analysis:** The revenue generated from the service was sufficient to cover service costs (Figure 2).

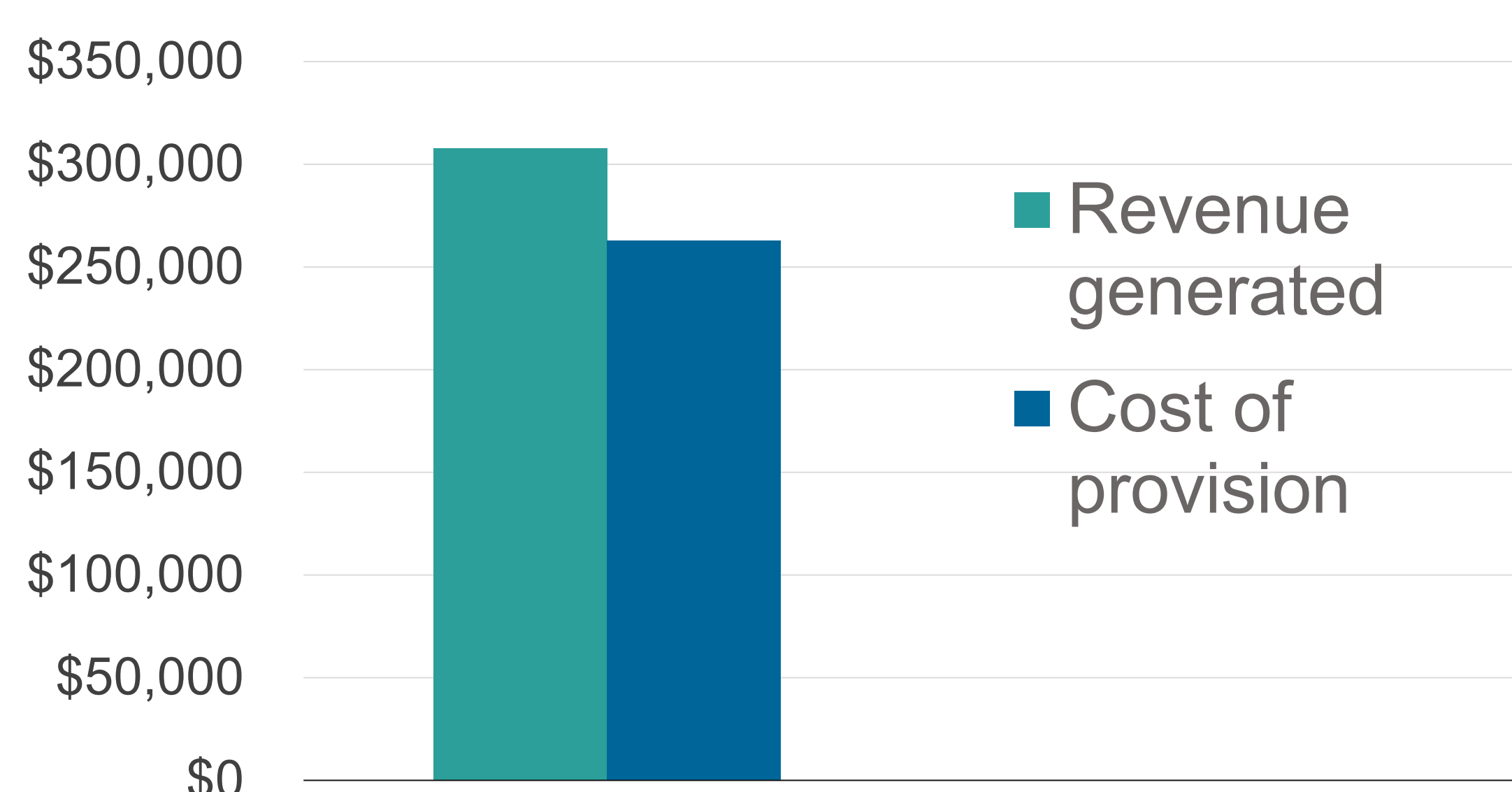


Figure 2: Net economic benefit of the Post-Emergency Dietitian Outpatient Service to the health service

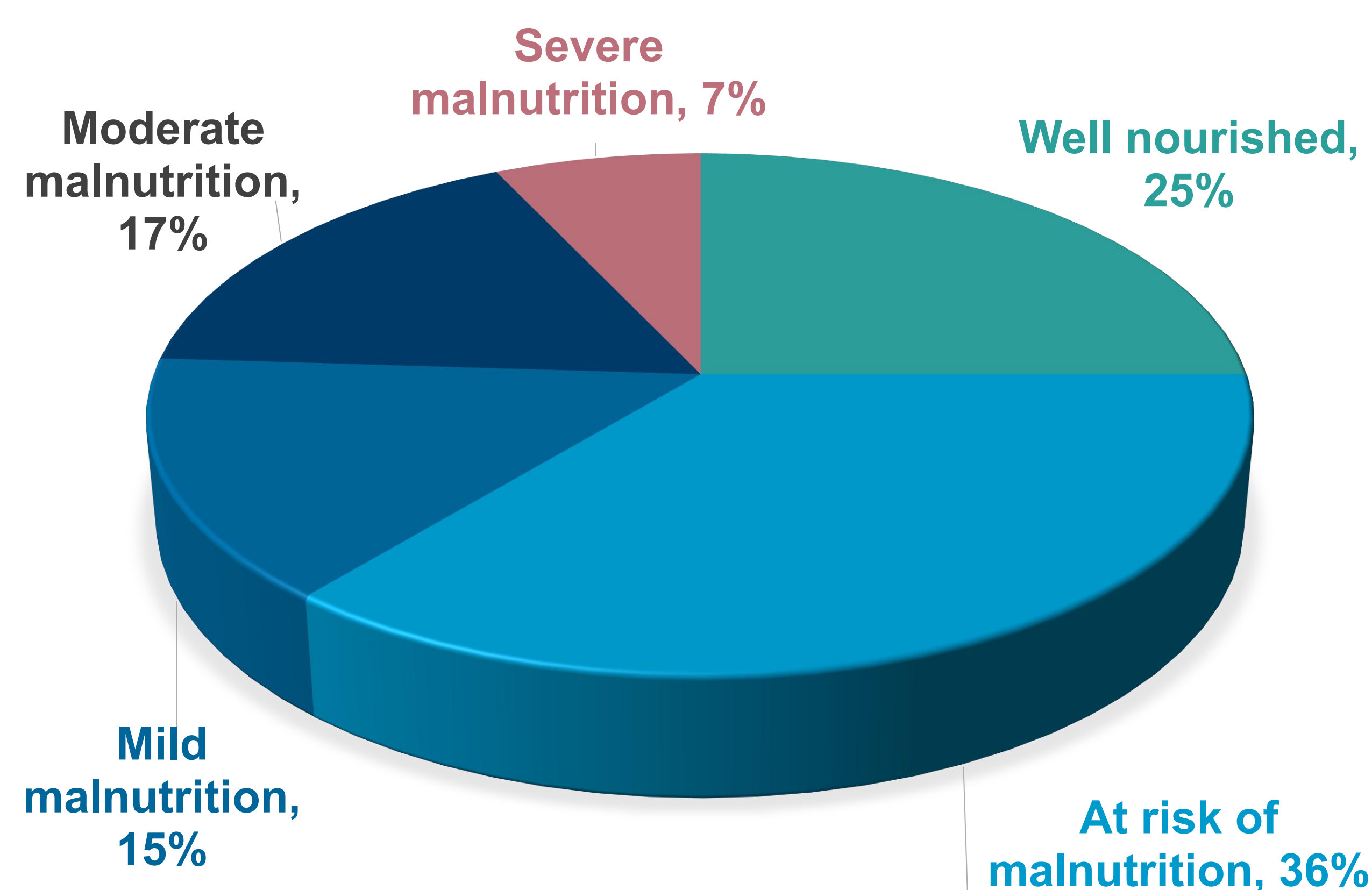


Figure 1: Nutritional status of patients receiving dietetic assessment through the service (n=1150)

Table 2: Patient Reported Evaluation Measure (PREM) survey showing high levels of satisfaction across 4 themes

Patient satisfaction themes	
	Effective communication
	Professionalism and empathy
	Knowledge and expertise
	Positive outcomes and support

**Conclusion:** The Post-Emergency Dietitian Outpatient Service offers timely nutrition interventions for patients at risk of malnutrition after being discharged from an ED or DSU. The clinic has economic benefits for the health service and returns high levels patient satisfaction. This supports the continuation of this model of care.