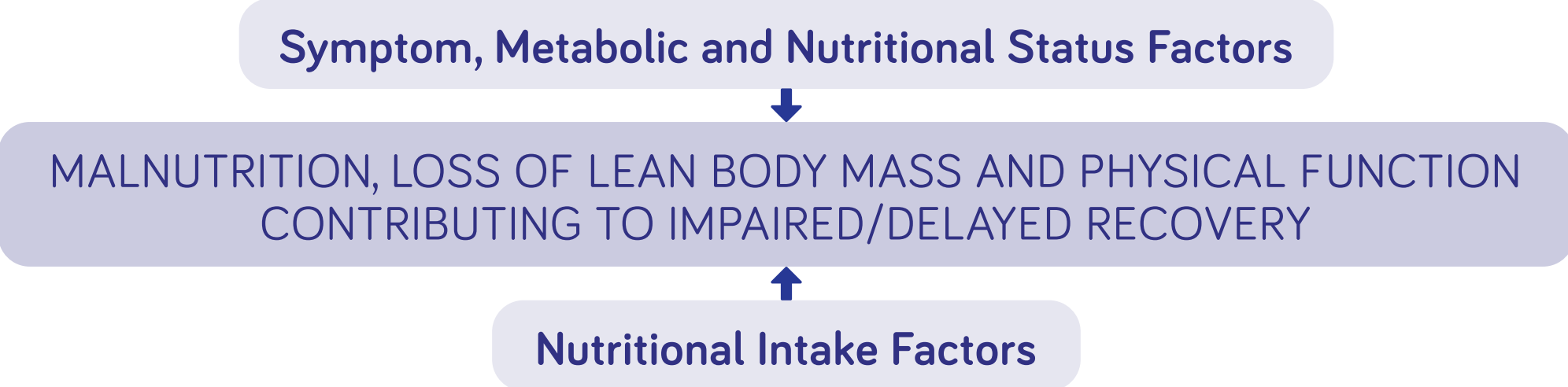





Table 1. Symptom, metabolic, nutritional status and nutritional intake factors contributing to malnutrition and impaired/delayed recovery across the continuum of care.

Pre-Acute Illness	Acute Illness	Recovery Phase
<p>Pre-existing noncommunicable disease (NCD):</p> <ul style="list-style-type: none"> Obesity CVD Diabetes COPD <p>Where chronic inflammation reduced cardiometabolic fitness¹ contribute to the stress inflammatory response in acute illness</p> <p>Pre-existing loss of body tissue/wasting:</p> <ul style="list-style-type: none"> Malnutrition Frailty Sarcopenia/Sarcopenic obesity Cachexia (wasting and inflammation) 	<p>Effects of acute illness:</p> <ul style="list-style-type: none"> Stress/inflammatory response Hypermetabolism (increased REE) Increased protein catabolism Bed rest/sedation Oropharyngeal dysphagia GI disturbances disrupting ability to feed Disuse atrophy 	<p>Recovery phase complicated by persistent symptoms:</p> <ul style="list-style-type: none"> Post-intensive care syndrome Functional impairment e.g., fatigue, muscle weakness Oropharyngeal dysphagia Altered appetite and chemosensory dysfunction



 Suboptimal dietary quality may already be a concern before onset of acute illness	 Nutrient deficits accumulate during hospital stay	 Ongoing nutritional needs frequently not addressed at discharge
<ul style="list-style-type: none"> Suboptimal food and nutrient intake linked to NCD Poor diet quality linked to frailty in old age Poor appetite/ability to eat affects physical function Low protein intake linked to reduced strength and physical performance 	<ul style="list-style-type: none"> More than half of patients do not finish their meals in the ward Only 56% of ICU patients meet their requirement for energy and 52% for protein Up to 60% of post ICU patients on oral nutrition alone do not meet their energy requirements and up to 70% do not meet their protein targets Suboptimal use of thickening agents and texture-modified foods for dysphagic patients Patients on texture modified diets have lower energy and protein intake than patients on a normal hospital diet and fail to meet requirements 	<ul style="list-style-type: none"> Forty-five percent of malnourished patients received inappropriate advice to limit caloric intake Forty-seven percent received general advice that did not address malnutrition Eighty-eight percent received ONS in hospital, but only 6.6% scripted post-discharge Only 11% of HCPs estimated that all patients with COVID-19 were 'discharged from hospital with a clear nutrition plan' Suboptimal use of thickening agents and texture-modified foods for dysphagic patients

¹The term 'cardiometabolic fitness' refers to the presence of insulin resistance, obesity and hypertriglyceridemia rather than physical performance. ²Includes enteral nutrition, parenteral nutrition and propofol. Data presented in the lower part of the table is not specific to COVID-19 patients unless specified. CVD, cardiovascular disease; COPD, chronic obstructive pulmonary disease; REE, resting energy expenditure; ONS, oral nutritional supplements; HCPs, healthcare professionals.