Malnutrition Case Study - PICU Trauma

AM is a 9 year old female admitted to the PICU following a motor vehicle accident with injuries including multiple fractures, a liver laceration, and traumatic brain injury. Currently she is intubated and sedated. Enteral feeds via NG tube were initiated within 24 hours of admission.

Current Anthropometrics:
Current Weight: 25 kg (z-score -1.22), on day 7 of admission
Height: 137 cm (z-score 0.27)
BMI: 13.3kg/m^2 (z-score -2.14)
MUAC: Unable to position correctly to obtain
Usual Weight: 28.2 kg (z-score -0.5)

Past Medical History: None

History Obtained:
In talking with AM mom she reports that pts weight was stable prior to her accident and that she had good oral intake and was eating normally up until time of accident. She had good energy and was participating in all of her usual activities.
In reviewing her chart, you determine that her feedings are frequently interrupted because of necessary surgical procedures, as a result of this significant NPO time her average daily intake is 550 calories via NG, her ordered feeds are to provide 1200 calories.

Circle applicable criteria below or indicate "N/A" with an X

Criteria	Mild	Moderate	Severe	N/A
Wt-for-lt z-score	-1 to -1.9	-2 to -2.9	-3 to -3.9	x
BMI for age z-score	-1 to -1.9	-2 to -2.9	-3 to -3.9	
Length/Ht for Age z-score			-3 or less	x
MUAC z-score	-1 to -1.9	-2 to -2.9	-3 to -3.9	x
Weight gain velocity (<2 yrs)	<75% of norm	<50% of norm	<25% of norm	x
Weight loss (2-20 yrs)	5% UBW	7.5% UBW	10% UBW	
Decline in Lt/Ht z-score	Decline of 1 z-score	Decline of 2 z-scores	Decline of 3 z-scores	
Inadequate nutrition intake	51-75% estimated energy/pro needs	26-50% estimated energy/pro needs	< 25% estimated energy/pro needs	

Does JJ meet criteria for malnutrition?   Yes   No

      Etiology: **Acute**   Chronic

      Illness: **Illness-related**   Non-illness related

      Severity: Mild   **Moderate**   Severe

Write a Malnutrition PES statement for AM:
Acute, Illness-related, moderate malnutrition related to inadequate enteral nutrition intake as evidence by 11% weight loss x past 7 days, BMI z-score -2.14 and receiving only 45% goal enteral nutrition intake x 7 days.