

## **Abstract Title**

Reliability Testing of a Nutrition Acuity Score (NAS) Tool

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## **Abstract**

**INTRODUCTION:** Dietetics lacks a nutrition acuity scoring (NAS) tool that categorizes inpatients based on nutrition diagnosis. We created an instrument that ranks nutrition diagnoses based on the need for medical nutrition therapy. The tool specifies a four-point scale and is organized according to nutrition diagnosis domains. The tool was content validated with a sample of Canadian dietitians but required inter-rater reliability testing.

**OBJECTIVE:** To measure the inter-rater reliability of the NAS when applied to inpatients.

**METHODS:** Dietitian raters were required to have a minimum of 1 year of experience in a variety of practice areas in acute care. Raters were trained concurrently using simulated cases until they indicated they understood the tool and study procedures. The cases reflected a variety of patient types and were previously tested with experienced staff. Patients were selected randomly. Raters prospectively assessed the same inpatients independent and within two hours of each other. Inpatient assignment order to raters was random. Raters were debriefed regarding NAS disagreement upon study completion.

**RESULTS:** Raters (N=2) were female with 1.0 year of work experience. Inpatients (N=41) were from either surgical or medical wards in a teaching hospital, 64.3% male (n=26), averaged 62.2 years (SD 14.9, 64-85 years) and 24 days from admission to NAS assignment (SD 34 days). Agreement between raters was 0.52 (linear weighted kappa). Raters felt agreement could have improved with changes to their training rather than the tool itself.

**CONCLUSIONS:** The NAS was found to be moderately reliable. Reliability may improve if raters were trained using actual patients rather than simulated cases. However, further research is required for confirmation.

**SIGNIFICANCE TO THE FIELD OF DIETETICS:** With rising patient acuity and complexity of care, dietitians need a validated metric to describe and monitor their patients' nutrition acuity.