Introduction:
Patients admitted to the intensive care unit (ICU) are usually at high risk of malnutrition.1,2 The purpose of our study was to compare the accuracy of Nutric score, NRS 2002 and SGA in predicting LOS-ICU, LOS-HOSP and in-hospital mortality.

Methods:
A total of 348 consecutive patients admitted between March to June 2016 in a mixed (medical/surgical) ICU were assessed on day of admission using the three screening tools to classify them into high-risk and low-risk of malnutrition. Day 1 APACHE 2 scores and demographic data were recorded. LOS-ICU, LOS-HOSP in-hospital mortality and secondary outcomes studied were need for supplemental nutritional support, need for ventilation and need for dialysis in high-risk and low-risk patients by each nutrition assessment tool.

Results:
Of the 348 patients studied, 221 (63.5%) were males and 127 (36.5%) were females. 67.87% males and 71.65% females were found to be at a high risk of malnutrition by at least one of the scores. The mean APACHE 2 score for patients at high risk (using any one screening tool) was 15.11 (SD 6.10) and 8.04 for the low risk group (SD 3.34; p < 0.01). The NRS 2002 and SGA demonstrated statistically significant correlation (p=0.001) for length of ICU stay for both the high risk and low risk group whereas only the NRS 2002 correlated significantly for the length of hospital stay (p=0.002). Mortality was significantly higher in high risk patients identified using all 3 scores.

Conclusion:
There was a wide difference in the percent of patients identified as high-risk using each of the 3 scores.

References: