

## Implementing the malnutrition universal screening tool in a teaching hospital

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Implementing the malnutrition universal screening (MUST) tool at this Trust has involved five separate projects over three hospital sites including a total of thirty-four wards. These projects involved determining the rationale for change, implications for resources, determining the effect on referrals to the Dietetic Service, staff training and an audit of the uptake of MUST compared to the local tool.

A comparison to assess validity between the local tool and MUST was undertaken in both inpatients (*n* 161) and outpatients (*n* 86). Criterion measures were subjective global assessment (SGA) and percentage weight loss >10%. An equipment audit assessed the resources on the wards (*n* 33). An evaluation of dietetic referrals was completed on sixty-one patients assessing the impact of MUST compared to the local tool. A training programme was orchestrated and a ward audit comparing the rates of completion for MUST and the local tool was conducted.

The level of agreement using  $\kappa$  for SGA and weight loss >10% was 0.64 ( $P=0.0001$ ) and 0.47 ( $P=0.0001$ ) respectively for MUST and for the local tool was 0.01 ( $P=0.77$ ) and 0.02 ( $P=0.35$ ) respectively. The scales audit on wards showed that fifteen (45%) had standing, twenty-four (72%) had sitting and four (12%) had hoist scales. Only one ward was without scales.

Risk	Low		Moderate		High	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
MUST	17	28	10	16	34	55
Local Tool	12	20	28	46	21	34

Using the MUST tool to initiate referrals to the dietitians for high-risk patients would result in a 21% increase. Training was localised on each ward every day for 2 weeks. A total of 556 nurses were trained over 6 weeks from thirty-two wards. The uptake of MUST on the wards was audited and the results were compared to a previous audit of the local tool:

	Wards ( <i>n</i> )	Patients ( <i>n</i> )	Total patients screened		Weight recorded		Height recorded		BMI Recorded	
			<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
MUST	23	451	319	71	342	76	220	49	157	35
Local tool	10	188	124	66	92	49	35	19	0	

The MUST was found to have a higher level of agreement with SGA and weight loss >10% when compared to the local tool. This justified change within the organisation to a tool with improved validity. Identifying equipment led to capital bids within the Trust to improve resources. The comparison of the tools to pre-empt the effects on dietetic referrals led to the revision of response times and the development of an integrated care pathway outlining the action required for each risk category. The training was intensive and time consuming requiring the commitment from all dietitians and senior nursing management. The change to MUST improved screening rates and the documentation of anthropometric measurements. Continued audit is required to sustain and improve screening rates along with an ongoing training programme.