

Don't just assess nutritional risk and prescribe supplements – developing a performance indicator to help drive improvement in nutritional support after fragility fracture

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Introduction

The importance of nutritional support has been extensively investigated in studies of people with hip and fragility fractures. However, national audit work in the UK, Australia and New Zealand has demonstrated that hospitals vary enormously in the quality of nutritional assessments they perform, and this limits the extent to which risk assessment can be viewed as a meaningful indicator of the quality of nutritional support being provided.

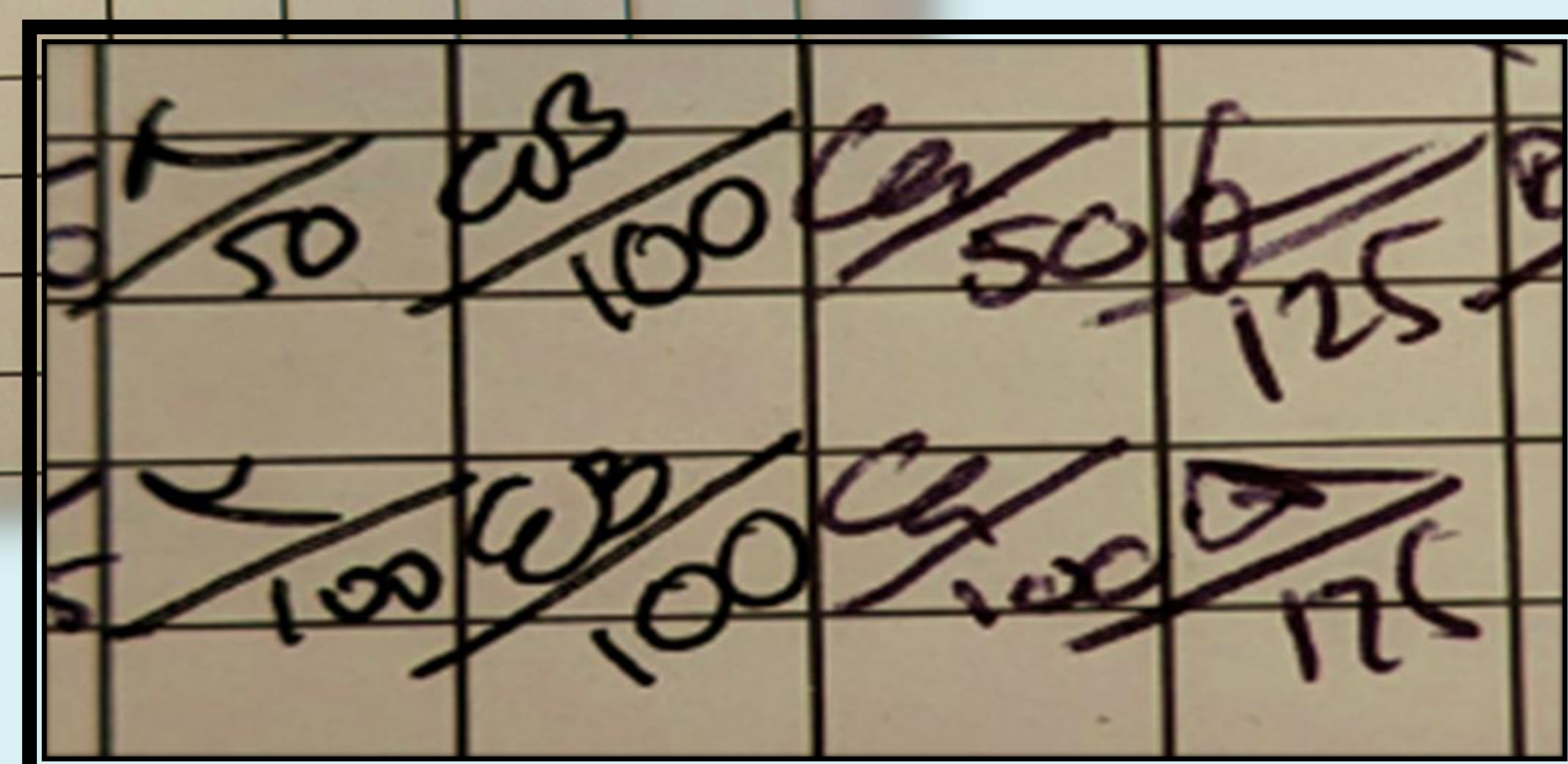
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PATIENT'S NAME HEALTH RECORD NUMBER

MORNING (around 08:00); MIDDAY (between 12:00 & 14:00); EVENING (around 18:00); BEDTIME (around 22:00)

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY		REGULAR MEDICINES		MONTH	YEAR					
DATE →	ROUTE →	DOSE ↓	SIGN	Date	12	13	14	15	16	
11/5	PO									
				MEDICINE (Approved Name)		SPECIAL INSTRUCTIONS				PRESCRIBER'S SIGNATURE
				FORTISIP		strawberry				
				COMPACT PROTEIN		Medicines Reconciliation (circle)				
				Started	Continued	Dose Changed	Bleep No.			
Morning		125ml			100	50	100	50	125	100
Midday										
Evening		125ml			125	100	100	100	100	125
Bedtime										



Method

Following nutritional risk assessment the prescription and distribution of supplements continued to be recorded on patients' drug chart in the usual way. In addition, our new protocol required that when supplement cups were cleared nurses should annotate the drug chart with the volume of supplement each patient had actually consumed.

Following this protocol's introduction and a period of staff familiarisation in April 2024, we conducted a point prevalence survey of patients' supplement consumption in our orthogeriatric rehabilitation wards in May 2024.

Conclusions

The prevalence of nutritional risk and malnutrition among patients with hip fracture would suggest that all should be considered 'at risk'. A potential performance indicator might therefore be constructed which starts with this assumption and then measures whether such patients have actually consumed nutritional supplements, or been shown not to be at risk.

The simple approach that we describe would provide a way in which to capture actual consumption, and at the same time would remind nurses and others of the importance of nutrition in improving the care of this high-risk patient group.

References

- Duncan DG, Beck SJ, Hood K, Johansen A. Using dietetic assistants to improve the outcome of hip fracture: a randomised controlled trial of nutritional support in an acute trauma ward. *Age Ageing* [Internet]. 2006 Mar 1;35(2):148–53. Available from: <https://doi.org/10.1093/ageing/afj011>
- Bradley L, Rees C. Reducing nutritional risk in hospital: the red tray. *Nurs Stand*. 2003 Mar;17(26):33–7.

Results

Of 25 inpatients with hip fracture, 21 (84%) had been identified as being at nutritional risk and prescribed Fortisip compact protein. On different occasions individual patients were recorded to have consumed between 50 and 100% of the provided supplement.

This quantification of actual consumption of each supplement allowed us to calculate that on average these patients with hip fracture had consumed an average of 188ml/day— which would provide an additional daily 27.4g of protein and 460 kcal of energy.

Figures for 15 patients with other forms of orthopaedic injury indicated that 8 (53%) were at risk. These patients recorded very similar levels of supplement consumption, and daily protein and energy intake as those with hip fracture.

"We know what they like. We aren't allowed to record it – we tell the nurse" (HCA)

"I am definitely collecting more empty cups"

"We are recording it a lot more. It's easy to do it on the drug chart as we go around"

"Before, everyone was cleaning them away, sometimes they were full"

