Malnutrition - The Problem

• Underestimated
• Underdiagnosed / Misdiagnosed
• Undervalued
• Under the Radar
• Undertreated

Can I tube feed her? Please? Pretty Please??
Confessions of a treating team...

Observations, reflections and actions took us to places we didn’t expect to go...
Malnutrition – Underestimated in Hip Fracture patients

• Strong independent predictor of 12 month mortality (OR 2.4 (1.3-4.7))

• Associated with
  − Discharge destination
  − Time to mobilise
  − Delirium

• Comorbidity with the largest increased hospitalization cost

• Comorbidity most likely to increase of length of stay

Bell et al (2016) ANZ J Surg
Bell et al, 2014 Eur J Clin Nutr
Pulle et al, 2014 Aust J Ageing
Nikkel et al, 2011 JBJS
Malnutrition – Underdiagnosed & Misdiagnosed

- Poor malnutrition screening tool sensitivity leads to undiagnosed malnutrition and lost casemix $$$
- Albumin and BMI results in under-reporting and misdiagnosis
- ICD-10 AM coding for malnutrition highest concurrent and predictive validity

Bell et al (2013) J Hum Nutr Diet
Bell et al (2014) JAGS
ICD10-AM Coding Criteria

Subjective Global Assessment

‘B’ or ‘C’

or

BMI < 18.5kg/m²

“the culture... hospital wide is very task oriented and nutrition is one of those things down the bottom”

“We’re forgetting the basics; it’s all about the bling, bling, kind of things”

“We do so much else to the patients in terms of sticking things into all parts of their body without a second thought a lot of times, and it is really interesting that it's the one thing that we're like, ‘Oh, you know, I don't think we'll do it’
Malnutrition – Undertreated

Prevalence on admission: 52%

Incidence (during acute inpatient stay): 11%
What have we done about it?

Clinical practice improvements identified, developed and implemented by the treating team using pragmatic action research approach

*Multidisciplinary, multimodal, systematic nutrition care*

- Proactive nutrition assessment & intervention; all patients
- ‘Medicalisation’ of nutrition – recognising malnutrition as a disease, and nutrition as the clinical intervention
- Coordinated multidisciplinary approach and delegation of care
- Enhanced foodservices system
- Improving nutrition knowledge and awareness

Bell et al (2014) *Clinical Nutrition*
Bell et al (2014) *BMC Medical Research Methodology*
Multidisciplinary and multimodal vs Intensive individualised nutritional care

- Substantial and significant reduction in nutritional barriers
- Doubled energy and protein intakes
- Tripled return home discharge rates
- 4 x reduction in inpatient nutritional deterioration

Bell et al (2014) BMC Medical Research Methodology
What are our challenges from here?
Summary
Malnutrition in Hip Fracture Patients

• Underdiagnosed & Misdiagnosed
• Independent predictor of Mortality
• Co-Morbidity associated with hospitalization cost
• Improve Value of Adequate Nutrition
• Clinical Frailty Scale
• Essential part of Multi-disciplinary care for Hip Fracture patients
• Everyone’s Business!
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