Using Quality Improvement methods to improve Malnutrition screening rates on a Frail Elderly Ward in Beaumont Hospital

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INTRODUCTION

Malnutrition is associated with complications such as falls and pressure ulcers, increased lengths of stay and poorer outcomes amongst patients admitted to acute hospitals. Results from the BAPEN Nutrition Screening Week survey⁷ in 2011 showed that in Beaumont Hospital 28.2% of all patients admitted were considered to be at risk of malnutrition. 81% of these were considered to be at high risk of malnutrition (higher than the national average of 75%).

Nutrition support intervention (including food fortification, oral nutritional supplements, enteral feeding and parenteral feeding), when indicated and used appropriately, is known to improve clinical outcomes and quality of life.

To ensure patients receive the right intervention at the right time requires that there are systems in place to:

1. identify patients at risk of malnutrition
2. prevent patients from becoming malnourished

A key recommendation of current national guidelines for preventing undernutrition in acute hospitals is the use of the Malnutrition Universal Screening Tool (‘MUST’) 5 steps screening tool. The ‘MUST’ is a method of identifying the patient at nutritional risk and assignment of a risk score which leads to a subsequent plan of care.

AIMS & OBJECTIVES

SMART AIM: Team Hardwicke will increase admission ‘MUST’ assessment of frail older patients by 60% by October 15⁰ 2015 (from a baseline of 20%).

METHODS

The multi-professional QI Project Team used the Model for Improvement (MFI)⁸ as an approach to improving rates of malnutrition screening using the ‘MUST’ tool on an acute frail elderly unit. Combined with the Plan, Do, Study, Act (PDSA) cycle this model is a simple, yet powerful tool for accelerating improvement (see figure 1). To help illustrate the MDT’s ideas and theories for the project a driver diagram⁹ was created (See figure 2).

RESULTS

Figure 3. Completed MUST run chart

DISCUSSION

As demonstrated in the above run chart (figure 3) the QI MDT team achieved and exceeded their SMART aim during this project timeline. This aim was achieved through the completion of a number of PDSAs:

- Provision of additional equipment to enable timely weight and height checks
- The inclusion of the MUST form in all nursing admission documentation
- The introduction of a checklist for all inpatient nursing notes to prompt MUST completion

A malnutrition awareness campaign was commenced through education sessions both at ward level and throughout the hospital e.g. journal clubs, grand rounds, “lunch and learn QI sessions.”

There were challenges experienced along the way such as the physical move of ward to new location during the project. There were key team members on extended leave and the ward had staff shortages which impacted on completing PDSAs initially.

We learnt the importance of following the model for improvement that converted the theory into practice and the importance of having a SMART aim.

We also learnt that small changes can have a big impact and by utilising the PDSA cycle we were able to break down change needed into small, manageable bite-size pieces and test small changes without upsetting the whole system.

CONCLUSION

A significant improvement in screening rates for malnutrition using the ‘MUST’ was achieved using the MFI and PDSA cycles. Screening is now embedded into the admissions process on the ward and dietetic intervention takes place earlier in the patient’s journey. There are regular audits of ‘MUST’ compliance at ward level and the QI MDT are now looking into using QI methodology to ensure compliance with the care plans for all patients identified as being ‘High Risk’. There are also plans to roll out the use of ‘MUST’ across the hospital using this methodology.

REFERENCES

2. BAPEN Nutrition Screening Week 2010 & 2011.