Identifying malnourished patients

Nurses in Beaumont Hospital driving change

Mary Corcoran speaks with Elaine Bradley, Carmel O'Hanlon and Marie Hennigan in Beaumont Hospital about how they are identifying and intervening with patients at risk of malnutrition while saving money.

With malnutrition affecting 145,000 patients in Ireland at any time, this growing issue is one which nurses in practice, the community and hospitals are facing everyday.

The latest figures from the Irish Society for Clinical Nutrition and Metabolism (IrSPEN) show that about 4 per cent of the total population are malnourished, or are at risk of becoming malnourished. Some 95 per cent of these patients are community based and are at an increased risk of serious, but often avoidable complications such as increased GP visits and hospital stays.

Those most at risk are those with 'disease-related malnutrition' which "affects those with diseases or conditions that reduce appetite or otherwise make eating or utilising food difficult or impossible." This list includes older people, particularly those living alone, people with cancers, COPD or progressive conditions like dementia and people with conditions which affect digestion such as cystic fibrosis and Crohn's disease.

Carmel O'Hanlon, Clinical Specialist Dietitian; Elaine Bradley, Clinical Nurse Manager 2 and Marie Hennigan, Nursing Continuing Education Co-ordinator.

In 2010, the British Association of Parenteral and Enteral Nutrition (BAPEN) extended its annual Nutritional Screening Week Survey to include centres in Ireland. This survey, amongst other things, identifies levels of malnutrition amongst patients.

Their results showed that in 2010 and 2011 one in three to four patients admitted to Irish hospitals were at risk of disease-related malnutrition, 74-75 per cent of whom were at high risk.

Dublin's Beaumont Hospital responded to the results by establishing a multidisciplinary Nutrition Screening Steering Group to look at how the hospital could address the issue.

Establishing a nutrition screening steering group and programme

"We established a multi-disciplinary group tasked with looking at this issue at a time when there were existing budget constraints. In Beaumont, we had a multidisciplinary team set up for tackling refeeding syndrome in the hospital, and we used core members from this group to look at Phase 1 Implementation of Nutrition Screening. We decided to look at average length of hospital stay (ALOS), as this is associated with an average increase of 30 per cent in malnourished patients. ALOS is already recorded by the hospital so it was an easy parameter to show an effect," explained Carmel O' Hanlon, Clinical Specialist Dietician at Beaumont.

After careful consideration it was decided that nurses would undertake nutritional screening of their patients by introducing the Malnutrition Universal Screening Tool (MUST) on one medical and one surgical ward, before extending it. This tool was chosen as it had been validated across care settings and across patient populations, and had been recommended for use in Irish hospitals by the Department of Health and Children as part of standard care. "Several other tools were available to us, but MUST suited us. The nursing homes in our catchment area also use MUST, and this is another reason why we chose this tool," explained Ms O'Hanlon.

How does the screening programme work?

Putting the screening programme in place was not without its challenges, but overall was relatively easy to do explained Elaine Bradley, Clinical Nurse Manager, Marie Hennigan, Nursing Continuing Education Co-ordinator and Carmel O'Hanlon.

The MUST screening tool itself has five steps. Nurses first measure the height and weight of their patients to get a BMI

score. If the patients BMI is greater than 20 they receive a score of 0, if it is between 18.5 and 20, they receive a score of 1 and if it is less than 18.5 they receive a score of 2.

Nurses then establish if the patient has had any unplanned weight loss in the last three to six months. If they have lost less than 5 per cent of their overall weight, they are given a score of 0, if they have lost between 5 and 10 per cent of their weight, they receive a score of 1 and if they have lost more than 10 per cent body weight they are given a score of 2.

Nurses next establish if the patient is acutely ill and if it is/has been likely not to be, any nutritional intake for five days. If this is the case, they are given a score of 2.

Nurses then add the scores together to assess the patients overall risk of malnutrition. A score of 0 means the patient is at low risk of malnutrition, a score of 1 puts them at medium risk and a score of 2 or higher puts them at high risk.

Finally, based on the patients score, nurses will use the results to develop a care plan for their patients.

Patients in Beaumont with a score of 0 will be screened weekly during their stay at the hospital and the patient's MUST score is reviewed if their condition deteriorates.

If a patient receives a score of 1, assistance is provided with eating and drinking, the patient must be highlighted to catering staff and offered snacks between meals. Food record charts are also commenced on these patients and if less than 50 per cent of their meals are consistently taken over the period, they must be referred to the dietician. Patients with a must score of 2 or higher are referred to the dietician immediately and the care plan for medium risk patients are followed.

"There is a clear pathway for nurses to follow," explains Carmel O'Hanlon. "When they are referring a patient to us, they will put the patients MUST score at the top of their referral which allows us to prioritise patients. The key to this is early intervention, the earlier you can catch someone is where the cost savings are," she said.

Results of trial

The results of the trial made for very interesting reading. The medical ward showed 87 per cent compliance with use of the MUST tool and showed a 3 day reduction in ALOS during the intervention period. The trial report noted that nurse champions were evident on this ward and motivation was high. The surgical ward showed lower compliance (29 per cent) with MUST. A higher turnover, a shorter lead-in period and a reduction in key nursing staff, may have impacted on this. A smaller decrease in ALOS was seen compared with the medical ward, although this was still above the hospital average.

Impact on and feedback form nurses

Like the introduction of any other new work practice, it took time for nurses to adapt to the screening programme.

Initial nursing satisfaction survey results showed that nurses perceived using MUST as relatively time – consuming. With further training however and as staff have become more confident in undertaking screening, this has changed.

"It's a very quick tool once you know how to use it. It only take three – five minutes to do once you are used to it," explains Carmel O'Hanlon. "Initially, however, it took a lot longer," says Elaine Bradley. "Nurses were concerned that it was time consuming, but this became easier and it takes less time now."

One of the bigger challenges for nurses, according to Ms Bradley, was actually getting access to directly referring patients to the hospital's dieticians. "It was new for the nurses to be able to refer directly to dieticians and this took some time to get organised. Some nurses questioned if they should check with the doctor first before referring on a patient, but now they know to refer directly. Overall the feedback from nurses has been very positive, they wouldn't be without it now [the screening tool]."

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Future

Phase 2 Implementation of Nutrition Screening is now underway at Beaumont Hospital and eight wards have been trained and are either starting to use the MUST tool, or, are at an advanced stage of using it. The steering group are now looking at introducing the screening to a ninth ward. This is linked to the roll out of the 'Productive Ward' at the hospital, a programme aimed to empower frontline staff to drive improvements in the health service forward through redesigning and streamlining the way they deliver care. As new wards come on board for Productive Ward, they also commence MUST training for implementation at the same time.

Implementing screening in general practice

Elaine Bradley, Carmel O'Hanlon and Marie Hennigan agree that nurses are key to the initiation of screening, and can be leaders in implementing screening in the community. Ms Bradley explains that while work is being done on including MUST on transfer forms between community and hospital, so there is continuity of nutritional care, there is no reason why practice nurses could not begin using screening tools like this sooner. "Practice nurses could be using this tool and this could possibly even lead to better communication about a persons risk of malnutrition before they go into hospital," she explained. "It's easily transferrable," added Marie Hennigan who said there was plenty of scope for practice nurses to use this in their own practice.