An Audit of Meal Service and Provision in a Large Teaching Hospital in Dublin.


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Introduction
Malnourished patients develop more complications, have poorer outcomes and have longer hospital stays than nourished patients. One in three patients admitted to Irish hospitals are at risk of malnutrition with over 75% of these at high risk. Nutritional status often declines during hospitalisation, with one study showing that 29% of previously well nourished patients showed deterioration in nutritional status during their hospital stay. Most patients depend on ordinary hospital food to improve or maintain their nutritional status in order to optimise their recovery from illness. Food service in hospitals must be given a high priority and recognised as an integral and important part of the patients’ treatment and care. The Department of Health & Children published guidelines in 2006 for food and nutritional care in hospitals, recommendations included:

- All patients should be able to order extra foods; nourishing snacks and drinks should be served between meals and be available on wards at all times.
- Assistance should be available where needed at time of serving.
- There should be at least four hours between the end of each main meal and the beginning of the next, meal times should be spread to cover most of the waking hours & interruptions minimised.

Aims and Objectives
To evaluate food service & provision to patients in Beaumont Hospital.

Methods:
- An observational audit was conducted by dietitians across breakfast, lunch and evening meal times on one day over a week period.
- The audit was conducted on seven hospital wards, both medical & surgical.
- Timing and duration of meal service, staffing levels on the ward, meal and snack ordering, assistance, interruptions, and delivery of meals were recorded.

Results:
- 203 patients were included in the audit.
- A total of 484 meals were delivered across the 7 wards.

- Meal interruptions in the form of doctors’ rounds, drug rounds or allied health professional assessments were observed on at least 1 ward for every meal occasion.
- Lunch was interrupted in some form on every ward.
- The average time from meal trolley arrival onto the ward to delivery of the last patient tray was 23.1 minutes (range 7-55mins).
- Breakfast was highlighted as the meal with the slowest delivery time (average delivery time of 36.7 minutes, range 22-55mins).
- Eighty five percent of those requiring assistance received it.
- Every patient received at least 30 minutes to eat each meal.

Discussion
- Meal delivery time from trolley to patient was variable ranging from 22-55 minutes, which may have an impact on food temperature and therefore consumption.
- Staffing levels varied from ward to ward and may influence ability to provide assistance at meals. We observed that 73% of patients in need of assistance received it on a ward with only 7 staff, but 100% received it on a ward with 16 staff. However, only 72% of patients that needed assistance received it on a ward with 11-12 staff, which suggests that there are other influencing factors. One such factor was the occurrence of nursing handover during breakfast. If responsibility for feeding patients was clearly assigned it may ensure that assistance is available at the time a meal is served.
- Errors at the evening meal were particularly noticeable. Two factors which contributed significantly to this were the omission of: a dessert for patients on a high protein high calorie diet (53% of orders not received) and milk ordered on the menu (51% of orders not received). Improved communication and education of both catering and nursing staff regarding the importance and impact of therapeutic diets may be beneficial.
- Wastage was noted in 20% of meals. Patient feedback would be useful here. We suggest that for ill hospitalised patients, smaller, nutrient rich meal portions with consistent availability of more substantial snacks on the ward would lead to less wastage.

Conclusion
This audit highlighted the need for improved meal time care including focussed staff support at meals and increased, consistent delivery of snacks and milk.

References
1. BAPEN Nutrition Screening Week 2010 & 2011.