Catering for patients

Prepared for the Auditor General for Scotland

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AUDIT SCOTLAND

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The study team was Angela Cullen and Catherine Vallely, under the general direction of John Simmons.

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Contents

Main findings
Page 2

Part 1. Introduction
Background
Page 4

The study
Page 6

Part 2. Nutrition
Main findings
Menu planning
Identifying patients' nutritional needs
Page 7

Nutritionally analysed menus
Page 8

Recommendations
Page 9

Part 3. Quality and patient satisfaction
Main findings
Presentation and delivery of meals
Page 10

Communication between wards and the catering department
Page 12

Patient satisfaction
Recommendations
Page 15

Part 4. Costs of the catering service
Main findings
Total costs of the catering service
Patient catering services
Page 16

Non-patient catering services
Page 18

Recommendations
Page 20

Part 5. The catering service
Main findings
Managing the catering service
Page 21

Food safety and hygiene
Page 23

Recommendations
Page 24

Part 6. Recommendations
Nutrition
Quality and patient satisfaction
Costs of the catering service
The catering service
Page 25

Appendix 1. Study advisory group
Page 27

Appendix 2. List of references
Page 28

Main findings

Nutritional care needs to be given a higher priority by all staff (Part 2)

Around 70% of trusts have a validated tool that allows them to screen patients for risk of undernutrition.

Eighty-six per cent of trusts have nutritionally analysed menus. However, the extent of this analysis varies with some menus being fully analysed whilst others have only a small number of menu items analysed for nutritional content.

One in four hospitals do not have standard recipes. This makes the nutritional analysis of menus difficult and the measuring of the nutritional intake of patients even more challenging.

The majority of trusts undertake a formal menu planning process. But very few trusts fully comply with the principles of menu planning set out in published guidance.

Our findings show that around three in five catering specifications do not fully comply with the model nutritional guidelines for catering specifications in the public sector in Scotland.

The quality of the catering service is satisfactory and patient satisfaction is high (Part 3)

All long stay hospitals have at least a three week menu cycle in place in line with good practice.

Ninety-eight per cent of hospitals have at least two main meal choices on the menu at each mealtime but there is limited choice for vegetarians, patients on therapeutic diets and for patients with eating or swallowing difficulties.

All hospitals have arrangements in place to offer meals to minority ethnic patients but not all ward staff are aware of these arrangements. This limits the choice available to patients.

Only 43% of hospitals are operating a system that allows patients to order their meals no more than two meals in advance.

We found that in half of hospitals, 10% or more of patients said that they did not receive the meal that they ordered.

All hospitals have kitchens at ward level where snacks can be prepared for patients and three-quarters of hospitals are able to provide snacks outwith meal times from the hospital kitchen.

Sixty-nine per cent of trusts carry out patient satisfaction surveys. Patient satisfaction with the catering service is high ranging from 74% to 100% and averaging around 92%. The auditors' survey of patient food supports these findings.

We found no relationship between patient satisfaction levels and the cost of the service or the provider of the service.

Ward wastage needs to be reduced (Part 4)

Ward wastage, or meals not actually served to patients, is high in some hospitals ranging from under 1% to over 40% in the hospitals reviewed.

If a target of 10% was set for wastage from unserved meals, around three in five Scottish hospitals would have to reduce their ward wastage levels and savings of up to £1.9 million could be made.

Fifty-six per cent of hospitals are monitoring wastage levels regularly, but only 32% have set targets.

Spending on food and beverages for patients varies significantly (Part 4)

A large proportion of catering departments (42%) are basing the catering service budget on historical information.

Around 40% of hospitals have set a daily food allowance but less than one in five hospitals are using this to calculate the budget required for the catering service.

There is a wide variation in costs. The majority of hospitals total net catering costs range between £3.50 and £7.50 per patient day. The cost of patients' food and beverages ranges from around £1.25 to over £3 per patient day. The variation in costs may be as a result of the quantity of ingredients used in production, poor portion control or levels of food waste.

We found no relationship between cost and production type or patient satisfaction.

Non-patient catering is being subsidised (Part 4)

Only one-third of hospitals reviewed were able to split the costs of the catering service between patient and non-patient activities.

Three-quarters of hospitals are subsidising the catering service provided to staff and visitors. Most hospitals are doing this unknowingly. The total cost of this subsidy is nearly £4.2 million per year or an average hospital subsidy of around £110,000.

Conclusion

NHSScotland's hospitals are providing good quality catering services, which have high levels of patient satisfaction. In this report we have identified a number of weaknesses, and make some recommendations that will have cost implications. However, we have also identified a number of potential cost savings that may be used to offset the cost of implementing our recommendations.

Part 1. Introduction

Background

1.1 The effective delivery of food and fluid and the provision of high quality nutritional care are crucial for the well being of patients[1]. Hospital catering is generally regarded as a non-clinical service within the NHS. As a result it is normally grouped with services such as cleaning and portering. This can lead to clinical staff believing that hospital food and the catering service are not their responsibility.

1.2 Recent studies have shown that at least one person in three who enters hospital has lost weight and one in ten has become seriously malnourished[2]. In Scotland similar research by the Clinical Resource and Audit Group (CRAG)[3] has revealed that one in five older people in long-term care establishments, including NHS hospitals, are undernourished. High quality, nutritious food is not only desirable but necessary for all patients in hospital to maintain and aid recovery.

Putting hospital catering in context

1.3 Each year NHSScotland provides approximately 28 million patient meals costing around £55 million[4]. Since 2000 total spending on NHSScotland has increased by around 8% each year. During the same period spending on catering services has been reducing slightly each year. On the whole, catering services are becoming a smaller proportion of overall NHSScotland spending.

1.4 NHSScotland directly employs around 3000 catering staff (2000 whole time equivalents)[5]. Private contractors who provide catering services to NHSScotland's hospitals also employ a number of catering staff.

1.5 For a catering service to be effective it cannot be delivered solely by catering staff. A catering service that meets the nutritional needs of patients also requires input from other staff including domestic and portering staff, nurses, clinicians, dietitians and other allied health professionals.

Service delivery

Service providers

1.6 There were 116 catering production units providing services to 216 in-patient hospitals in 2001/02. In some trusts, one or two large central production units provide catering services for all hospitals in the trust. At the other extreme, all or most hospitals in the trust have a kitchen where meals are prepared on-site.

1.7 Eighty per cent of catering service providers are in-house teams. Private contractors provide catering services to the other 20% of hospitals, as a result of a Private Finance Initiative/Public Private Partnership deal or as a direct result of market testing of the service.

Production methods

1.8 There are four main production methods available, all of which were in operation in NHSScotland in 2001/02 (Exhibit 1). Due to the small numbers involved cook-chill and cook-freeze production are reported together in Exhibit 1.

Meal delivery service

1.9 There are two ways in which meal services can be delivered to wards and patients, bulk or plated (Exhibit 2).

Working with others

NHS Quality Improvement Scotland

1.10 Standards on food, fluid and nutritional care were published in September 2003. NHS Quality Improvement Scotland will assess trusts compliance with these standards.

1.11 Audit Scotland and NHS Quality Improvement Scotland ensured their work was complementary to avoid duplication. Our study has concentrated on quality and patient satisfaction, costs and the catering service and limited its review of nutritional care as this is being reviewed as part of the NHS Quality Improvement Scotland process. Our review was restricted to considering the following aspects of nutritional care as high level issues only:

- planning the menu to ensure it meets patients' needs
- identifying patients' nutritional needs
- ensuring menus provide sufficient nutrients to satisfy patients' needs.

1.12 NHS Quality Improvement Scotland will carry out a detailed review of nutritional care as part of their assessment process for the food, fluid and nutritional care standards. NHS Quality Improvement Scotland's review will cover detailed areas of nutritional care such as screening patients, staff training, assisting patients with feeding and monitoring patients' nutritional intake.

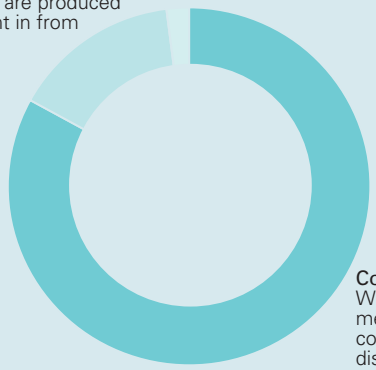
1. 'Clinical standards for food, fluid and nutritional care in hospitals', NHS Quality Improvement Scotland (2003).
2. 'Hospital food as treatment', BAPEN (1999).
3. 'The nutrition of elderly people and nutritional aspects of their care in long-term care settings', CRAG (2000).
4. Scottish Health Services costs year ended 31 March 2002, Information & Statistics Division (ISD).
5. Workforce Statistics as at 30 September 2002, ISD.

Exhibit 1

The percentage of hospitals using different production methods

Cook-chill and cook-freeze 15%
Food is prepared in advance and then held in a chilled or frozen state and then reheated at an appropriate time. Meals are produced by an in-house team or bought in from a commercial supplier.

Hybrid 2%
A combination of the cook-serve and cook-chill/freeze methods.



Cook-serve 83%
With this meal production system, meals are generally prepared and cooked within the hospital kitchen for distribution to the ward.

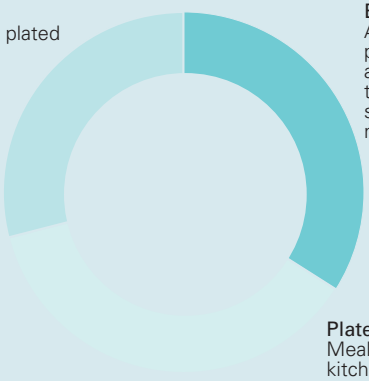
Source: Audit Scotland

Exhibit 2

The percentage of hospitals using different methods of meal delivery service

Hybrid 29%
A mix of bulk and plated meal services.

Bulk 34%
A meal service where hot or cold food is portioned into large food containers which are then put into heated/chilled bulk meal trolleys and delivered to wards; meal service staff then plate up the patients' individual meals according to their personal choice.



Plated 37%
Meals are individually plated within the hospital kitchen. They are then delivered in a trolley to the wards and served by a member of staff.

Source: Audit Scotland

Departmental Implementation Group

1.13 The Scottish Executive Health Department set up an advisory group in winter 2001 drawn largely from the NHS and representatives of patients' organisations. This group supported the implementation of the standards on food, fluid and nutritional care and will produce a report soon providing advice to the NHS on the provision of nutritional care in hospitals. We understand that the Department will consider the need for additional guidance to NHSScotland on food, fluid and nutritional care in winter 2003 in light of that report and our recommendations.

The study

1.14 This is a report by Audit Scotland on behalf of the Auditor General for Scotland. This is the first review of hospital catering by Audit Scotland and is based on 2001/02 data. The findings and recommendations set out in this report will be followed up by Audit Scotland on behalf of the Auditor General for Scotland in due course. Trusts have received reports setting out local findings and recommendations.

1.15 We reviewed 26 NHS bodies including trusts, island NHS boards and the State Hospital (for ease of reference the term 'trusts' will be used throughout this report) and 41 hospital sites.

1.16 Hospital sites were selected for review if they were a reasonable size and had on-site catering facilities. The majority of hospitals selected have 75 or more staffed beds. A few smaller hospitals were also selected for review. The selection of all hospital sites was agreed between trusts and their local auditors prior to the review commencing. Hospital sites reviewed cover all types of production and service delivery. The hospitals selected include acute, maternity, teaching, psychiatric, learning disabilities, community and other long stay hospitals and provide a reasonable geographical spread throughout the country. Overall, the 41 hospitals reviewed represent nearly 50% of the total staffed beds in NHSScotland in 2001/02.

1.17 This report provides a summary of the main issues arising from the review, detailed findings on nutrition, quality and patient satisfaction, costs and the catering service and makes a number of recommendations.

Part 2. Nutrition

How is the nutritional care of patients addressed?

Main findings

The majority of trusts plan their menus but very few fully comply with the recognised principles of menu planning.

Around one in five of trusts do not have a tool to screen patients for risk of undernutrition.

86% of hospital menus have been analysed for nutritional content but the extent of this analysis varies considerably.

Around one in five hospitals do not have standard recipes in place.

Three in five catering specifications do not fully comply with the model nutritional guidelines for catering specifications in the public sector in Scotland.

2.1 In this chapter we look at the nutritional care of patients in terms of:

- planning the menu to ensure it meets patients' needs
- identifying patients' nutritional needs
- ensuring menus provide sufficient nutrients to satisfy patients' needs.

Menu planning

2.2 Menus should be planned to ensure that they meet patients' needs and are nutritionally sound. A wide range of professionals within trusts hold the appropriate knowledge and information to do this properly. Planning the menu should, therefore, be carried out by a group of people who bring their own expert knowledge to the process. The group should include, as a minimum, a catering manager, dietitian, nurse and a clinician.

2.3 In the past decade a number of publications[6789] have set out the principles of menu planning specifically for the NHS and older people. We found that the majority of trusts undertake a formal menu planning process. However, trusts' compliance with the principles outlined in these documents varies. The majority of trusts reported that they generally adopt the recognised principles whilst a few trusts do not comply at all.

Identifying patients' nutritional needs

2.4 In recent years published research has raised concerns about the prevalence of malnutrition among hospital patients. Up to 40% of adults admitted to hospital were at least mildly undernourished on admission or became malnourished during their stay in hospital[10].

6. 'The health of the nation – Nutrition guidelines for hospital catering', Department of Health (1995).
7. 'Hospital catering: Delivering a quality service', NHS Executive (1996).
8. 'Eating well for older people', The Caroline Walker Trust (1995).
9. 'Nursing Homes Scotland Core Standards', Scottish Executive (MEL (1999) 54).
10. 'Incidence and recognition of malnutrition in hospital', McWhirter JP, Pennington CR (1994).

Case study 1
Good practice example

Ayrshire and Arran Primary Care NHS Trust routinely undertakes nutritional care assessments for older people.

Ayrshire and Arran PCT has developed a nutritional screening tool to identify elderly patients who were already undernourished or those at risk of becoming undernourished in hospital. On admission all patients receive nutritional screening, which is completed by qualified nursing staff. Evaluation within the trust has proven the tool to be reliable and valid*. To support the tool, the trust has devised a training pack that includes guidelines for completion of the nutrition screening tool and a suggested care pathway.

*Mackintosh M A and Hankey C R (2001) Reliability of a Nutrition Screening Tool for use in elderly day hospitals. Journal of Human Nutrition and Dietetics. 14 129-136.

Source: Audit Scotland

2.5 Nutritional screening of all patients should be an integral part of clinical practice. Nutritional screening is a simple and rapid process that identifies the characteristics associated with malnutrition[11]. If risk of undernutrition is detected patients should be referred to a dietitian. Patients may also need to be referred to other allied health professionals such as a speech and language therapist. Staff trained in the use of a validated nutritional screening tool should undertake screening.

2.6 Around 70% of trusts have a validated nutritional screening tool in place. A further 10% of trusts are screening patients for risk of undernutrition, but are using a screening tool that has not been validated for the patient group. This means that nearly 20% of trusts do not have an effective nutritional screening tool at all. We identified some good practice in this area and Case study 1 provides details of an example.

Nutritionally analysed menus

2.7 Menus should be analysed for nutritional content to ensure that patients are provided with nutritionally sound meals. This analysis may be done in three stages: an analysis of the nutritional value of each menu item, comparison of these values against the recommended minimum nutritional content, and an analysis of the entire menu to ensure that it is nutritionally balanced. Eighty-six per cent of trusts have nutritionally analysed menus, but the extent of this analysis varies considerably. For example, in some trusts the first two stages may be complete but the menu may not have been assessed for nutritional balance. In other trusts the first stage may not yet be complete with only a few menu items analysed for nutritional value.

2.8 Once a menu has been analysed for nutritional content the preparation of meals needs to be standardised. This ensures that the same ingredients are used and cooking method applied each time the meal is prepared. Otherwise the nutritional content of the same meal could vary from one day to another. Standard recipes are fundamental to the whole process of providing nutritionally analysed food to patients. Nearly four in five hospitals have standard recipes in place. The Department of Health's Better Hospital Food website[12] offers a large range of standard recipes, all of which have been nutritionally analysed.

2.9 The Scottish Diet Action Plan[13] recommended that catering specifications should comply with the model nutritional guidelines for catering specifications in the public sector in Scotland. Our findings show that around three in five catering

11. 'Nutrition – assessment and referral in the care of adults in hospital', Best practice statement, Nursing & Midwifery Practice Development Unit (2002).
12. www.betterhospitalfood.com
13. 'Eating for health – A diet action plan for Scotland', Scottish Office (1996).

specifications do not fully comply with the model nutritional guidelines.

2.10 The Departmental Implementation Group has considered issuing national nutrition and catering specifications. We would recommend this as good practice, with benefit for all catering service providers and patients.

Recommendations

Menu planning

- Trusts should plan their menus in line with the recognised principles of menu planning.

- All trusts should set up a group to plan the menu, ensuring that all available knowledge and experience within the trust are used where appropriate.

Identifying patients' nutritional needs

- Trusts should ensure that patients are screened on admission for risk of undernutrition.

- Trusts should use a validated nutritional screening tool to screen patients and staff should be trained in how to use this tool.

Nutritionally analysed menus

- All menus should be nutritionally analysed. To avoid duplication of effort and maximise the use of limited dietetic resources this could be done as part of the national database of standard recipes recommended below.

- All catering production units should use standard recipes. The cost associated with these standard recipes should be calculated and maintained. The Scottish Executive Health Department should consider developing a national database of standard recipes for NHSScotland. This database could be held on NHSScotland's website (Scottish Health On the Web) to allow easy access.

- Trusts should ensure that catering specifications comply with the model nutritional guidelines for catering specifications in the public sector in Scotland.

- The Departmental Implementation Group should develop or commission national catering and nutrition specifications for NHSScotland.

Part 3. Quality and patient satisfaction

What affects the quality of the catering service and how do patients perceive it?

Main findings

Patient satisfaction levels are high.

We found no relationship between patient satisfaction and the cost or provider of the service.

All long stay hospitals have at least a three week menu cycle in line with good practice.

Most hospitals offer a sufficient choice of meals to patients eating everyday meals but the choice for vegetarians and special diets is limited.

All hospitals have arrangements in place to offer meals to minority ethnic patients but not all staff are aware of these arrangements.

More than half of patients are ordering their meals more than two meals in advance.

In half of hospitals more than 10% of patients reported that they did not receive the meal they had ordered.

Every hospital has ward level kitchens where snacks can be prepared for patients.

Around 70% of trusts undertake patient satisfaction surveys.

3.1 In this chapter we look at the quality of the catering service and patients' perceptions in terms of:

- the presentation and delivery of patient meals
- communication between wards and the catering department
- patient satisfaction.

Presentation and delivery of meals

The menu cycle

3.2 Menu planning includes setting a menu cycle. This involves planning the menu to provide three meals a day with no item repeated within a specific time period. The length of menu cycle varies among hospitals. A shorter length of menu cycle is sufficient in acute hospitals where the average length of stay for patients is around four days. In long stay hospitals, however, this can be a major problem when patients are faced with the same menu choices on a regular basis, and may increase their risk of becoming malnourished. The CRAG report recommended that at least a three week menu cycle should be in operation for long stay elderly patients.

3.3 All long stay hospitals have at least a three week menu cycle in place in line with good practice. Three-quarters of acute hospitals are also operating at least a three week menu cycle. The remaining acute hospitals are operating a two week menu cycle. This is likely to be sufficient for the majority of acute hospitals. However, those acute hospitals with long stay wards or beds should ensure that they are operating a three week menu cycle, at least for these patients.

Patient choice

3.4 Menus should contain a sufficient range of meals to meet the dietary needs and preferences of all patient groups including patients who:

- are children

Case study 2
Good practice example

Dumfries & Galloway Acute and Maternity Hospitals Unit has developed a hotel list to provide patients with an alternative to meals on the menu.

If a patient does not find anything on the menu that appeals to them, they can write on the menu card what they would like to eat. This may be a lighter meal such as scrambled eggs or a more substantial meal such as scampi or steak. The catering department will try to meet this request wherever possible whilst ensuring that the facility is not abused. In circumstances where the catering department cannot provide the patient's preferred meal they will speak to the patient and discuss alternatives that can be provided. This practice helps maintain patients' nutritional intake and increases patient satisfaction.

Source: Audit Scotland

- are vegetarian or vegan
- are from minority ethnic groups
- require the texture of food to be adapted because they have problems eating or swallowing
- require therapeutic meals due to a medical condition such as diabetes.

3.5 Ninety-eight per cent of hospitals have at least two main meal choices on the menu at each mealtime. Many hospitals offer alternatives to main meals such as salads and sandwiches, aimed at patients who do not want to eat two large meals each day. Some other good practice was identified in extending the choice available to patients. For example, some hospitals offer up to six choices for lunch and evening meal. A specific example of good practice is outlined at Case study 2.

3.6 But there is a limited choice for vegetarians, patients on therapeutic diets and for patients with eating or swallowing difficulties. In some cases, only one choice was available from the menu for these types of diets, and in some hospitals these meals were not available from the menu but had to be requested by patients and ward staff. For example, one in ten hospitals do not offer a vegetarian option from the menu every day.

3.7 All hospitals have arrangements in place to offer meals to minority ethnic patients. In a few wards visited staff were not aware of these arrangements potentially limiting the choice available to patients. The review also identified some areas of good practice where separate ethnic menus were available at ward level. Case study 3 highlights one of these areas of good practice.

3.8 Menus should, wherever possible, give patients enough information to choose their own meal. This may be done through providing a description of dishes on the menu and offering different portion sizes. Menus should also be coded to show which meals are suitable for vegetarians, therapeutic diets and patients with swallowing or eating difficulties.

3.9 Nearly all menus provide an accurate description of dishes that are easily understood by patients and the majority provide a range of portion sizes. We also identified that 83% of menus are coded for special dietary needs, allowing patients to choose a meal that is suitable for them.

3.10 Where patients may have communication difficulties it is good practice to have menus available in languages other than English, or picture menus. These menus ensure the meal service is accessible to all patients and can help patients make their choice. Our review also highlighted some good practice in this area and an example is outlined in Case study 3.

Case study 3
Good practice examples

Lanarkshire Acute Hospitals NHS Trust and Lanarkshire Primary Care NHS Trust have special menus for minority ethnic groups and patients with communication difficulties.

Lanarkshire Acute Hospitals NHS Trust

Wishaw General Hospital has a multicultural menu for patients. The menu, devised by Serco, is available in Hindi, Arabic, Cantonese, Urdu, and Punjabi. Requests for religious or minority ethnic meals from this menu are made to the Patient Meals Service Coordinator in the catering department. All of the menu choices are numbered to allow patients to indicate to the coordinator which option they would like. This practice enables non-English speaking patients to select meals that are suitable for their religious beliefs or traditions.

Lanarkshire Primary Care NHS Trust

The trust has taken significant action to improve the quality of service for patients with sensory impairment. All catering managers are currently completing a sign language course to enable them to communicate better with hearing impaired patients. In addition, pictorial menus have been piloted. For patients with visual impairments, menus on audiotape will be introduced. All of these measures will allow patients with sensory impairments to have more control over their menu choice, and enable them to communicate their preferences or comments on the catering service more effectively.

Source: Audit Scotland

Ordering and delivery of patient meals

3.11 Patients should choose their meal as close to the actual meal time as possible. This can raise patient satisfaction and avoid unnecessary wastage as a result of patients having been discharged, transferred or receiving treatment during meal times. The Patients' Charter recommends that patients should order their meals no more than two meals in advance of the mealtime. In any normal day this would mean patients ordering their lunch and evening meal at breakfast time.

3.12 We found that only 43% of hospitals are operating a system that allows patients to order their meals no more than two meals in advance. Exhibit 3 shows the timescales for ordering patient meals in 2001/02. From Exhibit 3 it can be seen that 17% of hospitals indicated that they were operating an 'other' system of meal ordering. In some of these hospitals when the meal is ordered depends on the patient group. For example, acute patients order their meals forty eight hours in advance whilst care of the elderly patient meals are ordered one week in advance.

3.13 As part of a patient satisfaction survey we asked patients if they had received the meal that they ordered. We found that in half of hospitals surveyed, 10% or more of patients said they did not receive the meal that they ordered (Exhibit 4).

Out of hours services

3.14 Most hospitals operate fixed meal times. Meals and refreshments should be available to patients outwith these fixed meal times. This may be necessary for patients who have missed a meal or because the time between the evening meal and breakfast can be long. The standards on food, fluid and nutritional care state that a substantial snack should be provided where the time between evening meal and breakfast is fourteen hours or more.

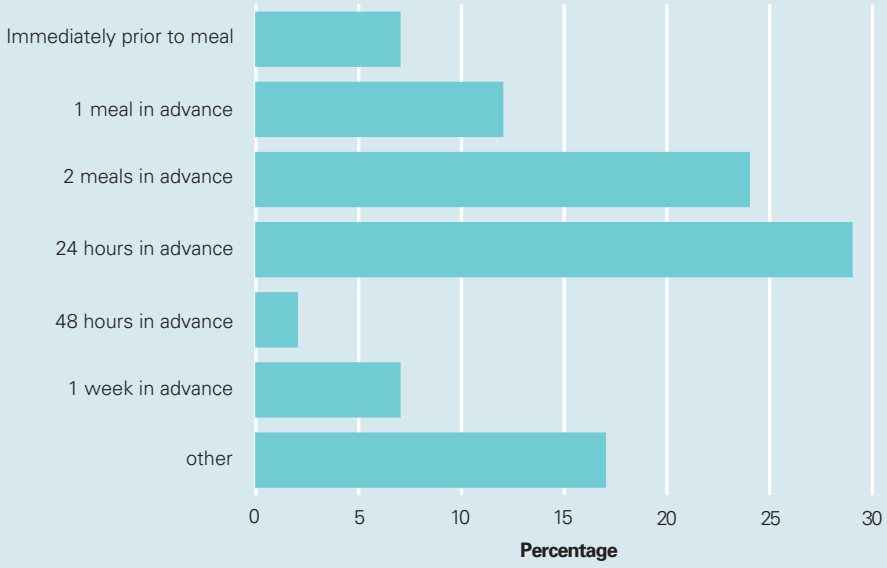
3.15 All hospitals have kitchens at ward level where snacks can be prepared for patients and three-quarters of hospitals are able to provide snacks outwith meal times from hospital kitchens. Our review identified good practice in providing out of hours catering and an example is detailed at Case study 4 overleaf.

Communication between wards and the catering department

3.16 Good communication between wards and the catering department is vital to the provision of a quality patient meal service. It is essential that all staff involved in the catering service (from production, through delivery, to helping patients to eat) work together as a team. They should communicate with each other to ensure that patients receive the best quality of service possible. Good communication between wards and the catering department can result in:

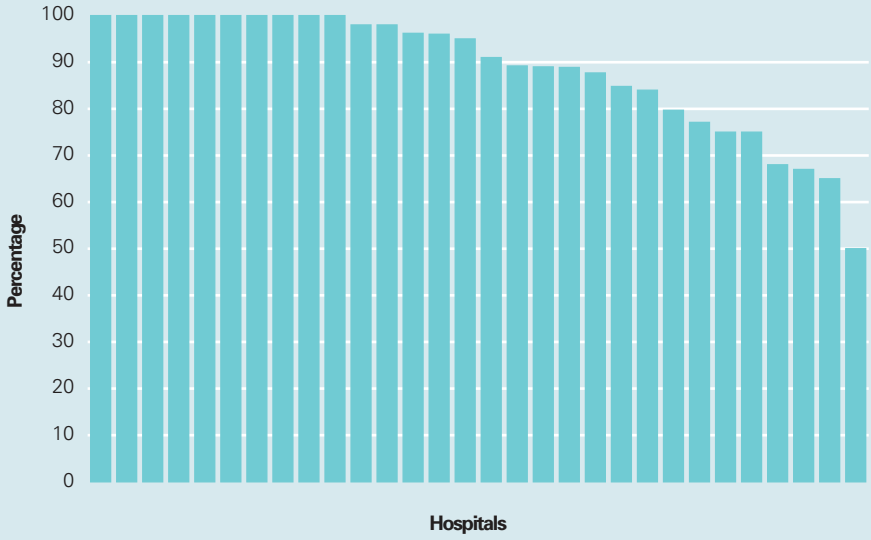
- higher patient satisfaction levels
- patients actually receiving the meal they ordered
- fewer meals being ordered and wasted
- problems being dealt with efficiently
- potential problems being identified early and addressed.

Exhibit 3
Advance ordering of patient meals



Source: Audit Scotland

Exhibit 4
Percentage of patients who said they received the meal they ordered



Source: Audit Scotland

Case study 4
Good practice example

Highland Primary Care NHS Trust has developed its out of hours catering by introducing a late admissions tray at Caithness General Hospital.

Patients admitted to Caithness General Hospital after the patient meals have been ordered from the kitchen are supplied with a 'late admission tray'. This tray consists of soup, sandwich, and yoghurt. This out of hours service ensures that all patients receive a nutritionally sound meal.

Source: Audit Scotland

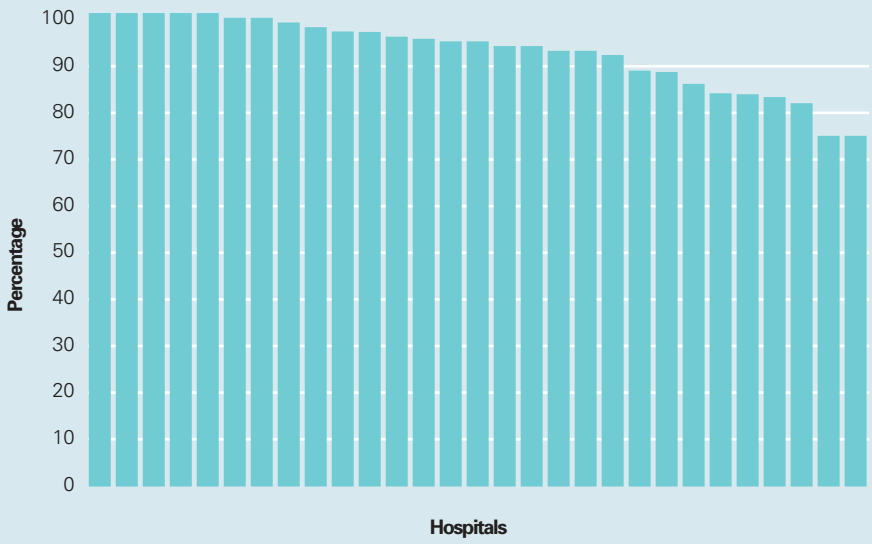
Case study 5
Good practice example

Grampian University Hospitals NHS Trust has improved communication between wards and the catering department by introducing a twinning system.

The trust has recently introduced a system whereby each cook or assistant cook is twinned with a ward. This provides ward-based staff with a familiar point of contact within the catering department whom they can approach with any queries or complaints. This development should also lead to catering staff having an increased sense of responsibility towards their particular ward. Overall the aims are to help improve communication and the working relationship between ward and kitchen staff and ensure a better quality service for patients.

Source: Audit Scotland

Exhibit 5
Percentage of patients scoring the catering service as satisfactory or above



Source: Audit Scotland

3.17 We identified some good practice where wards and the catering department were communicating effectively. An example of good practice is highlighted at Case study 5.

Patient satisfaction

3.18 Patients are encouraged to eat and drink when they are in hospitals to aid their recovery and avoid malnourishment. It is therefore essential that trusts seek patients' views about their needs and whether these are being met by the hospital catering service.

3.19 All trusts obtain patients' views on the catering service. Sixty-nine per cent of trusts carry out patient satisfaction surveys. The frequency of surveys varies considerably with some trusts carrying out monthly surveys whilst others have carried out only one survey in two years. For patient satisfaction surveys to be of any benefit to catering departments and patients they need to be carried out on a frequent basis. We found that the 31% of trusts which do not undertake surveys obtain patients' views through other methods such as comment cards, informing staff or the formal complaints procedure. These forms of collecting patients' views place the responsibility for making comments with the patient rather than the trust actively asking for their views. We recommend that all trusts carry out patient satisfaction surveys at least quarterly.

3.20 The results of our patient satisfaction survey are shown in Exhibit 5. Patient satisfaction levels are generally high ranging from 74% to 100% with an average satisfaction level of 92%.

3.21 Auditors also carried out an independent survey on the quality of patient meals in each hospital. Auditors ordered a sample of meals, across four to six wards over a few meal times. Meals were then scored against the following seven criteria: taste, texture, aroma, temperature, appearance, the correct item being received and portion size. Any survey of this type is likely to be subjective, but the results – ranging from 81% to 99% – support the high satisfaction scores from the patient survey. Lower scores tended to be because the incorrect item had been received or food temperatures were inappropriate.

3.22 Trusts should monitor the quality of the catering service on a regular basis. Many trusts do their own internal monitoring where surveys similar to that outlined above (para 3.21) are used. All of the private contractors undertake their own regular monitoring of the catering service. Around half of trusts use patient groups or the local health council to obtain the views of patients and give an independent view on the quality of the service.

3.23 We found no relationship between patient satisfaction levels and the cost of the service or the provider of the service.

Recommendations

Presentation and delivery of meals

- Acute trusts with long stay beds should ensure that they have a three week menu cycle, at least for these patients.
- Menus should be reviewed to ensure they offer sufficient choice to all patient groups. Where it is considered appropriate, separate menus may be developed for ethnic meals and other special diets.
- Trusts should remind all their staff of the procedures for offering, ordering and delivering meals and in particular meals for patients who require a special diet.
- All menus should be dietary coded to help patients make an informed choice.
- All catering services should aim to have patients ordering their meals as close to the meal time as possible and no more than two meals in advance.
- All catering services should aim to provide all patients with the meal they ordered.

Communication between wards and the catering department

- Trusts should encourage communication between ward staff and the catering department.

Patient satisfaction

- Trusts should ensure that they obtain patients' views on the catering service through the introduction of regular (at least quarterly) patient satisfaction surveys.
- Trusts should monitor the quality of the catering service through internal quality assurance surveys and/or using patient and user groups to obtain the views of patients.

Part 4. Costs of the catering service

What is the cost of hospital catering services?

Main findings

Costs of the catering service vary significantly with the majority of hospitals net cost per patient day ranging between £3.50 and £7.50 and food and beverages cost per patient day ranging from £1.25 to over £3.00.

Two-thirds of hospitals cannot split the costs of patient catering from the costs of staff and visitors (non-patient) catering.

Over 60% of hospitals waste more than 10% of food delivered to wards. Reducing ward wastage to 10% in all hospitals could save up to £1.9 million for NHSScotland.

Three-quarters of hospitals are subsidising non-patient catering services. Most are doing this unknowingly as they cannot split their costs. The annual cost of subsidising non-patient catering is around £4.2 million. The average subsidy per hospital is £110,000.

We found no relationship between cost and production type or patient satisfaction.

4.1 This chapter looks at the cost of the catering service at three levels:

- total costs of the catering service
- patient catering services
- non-patient catering services.

The figures used in this part of the report are those calculated by auditors.

4.2 The private contractors providing catering services to eight of the hospital sites reviewed did not supply us with any cost information for commercial confidentiality reasons. Trusts should make every effort to include a clause in contracts with private service providers that allows the disclosure of sufficient financial information for management decision making. Some of the in-house catering providers were also unable to provide us with suitable cost information. The exhibits in this part of the report only include those hospitals where cost information was obtained.

Total costs of the catering service

Budget setting

4.3 Budgets are set for the catering service as a whole taking the patient service and meals provided to staff and visitors (non-patient catering) together. This allows any income generated from non-patient catering to be used to reduce the overall cost of the catering service.

4.4 The largest proportion of catering departments (42%) base their catering service budget on historical information. Other catering departments are basing their budgets on target patient cost per patient week (32%), daily food allowance (18%) and contract price (8%).

4.5 Using historical information to budget generally means increasing the cost element each year for inflation. Budgeting on this basis simply takes account of pay rises and increases in the cost of food and beverages. It does not take account of variation in the number of meals produced or other changes such as revisions to the menu. Income generation targets are likely to be increased each year to offset these increased costs and may be set even higher to reduce the overall catering budget.

Total gross cost of the catering service

4.6 Expenditure on the catering service includes the costs of food and beverages, staffing, other indirect costs such as cleaning materials and a proportion of trust overheads. Exhibit 6 shows the breakdown of total gross costs by these four components. Food and beverages and staff account for just over 90% of total gross cost.

Net costs per patient day

4.7 There is a wide variation in net cost[14] per patient day, with the average cost being £5.50. The majority of hospitals range between £3.50 and £7.50. Some of this variation will be due to the level of income generated from non-patient catering services and the hospitals' pricing policies. We found no relationship between cost and production type or patient satisfaction.

Patient catering services

Costs of the patient catering service

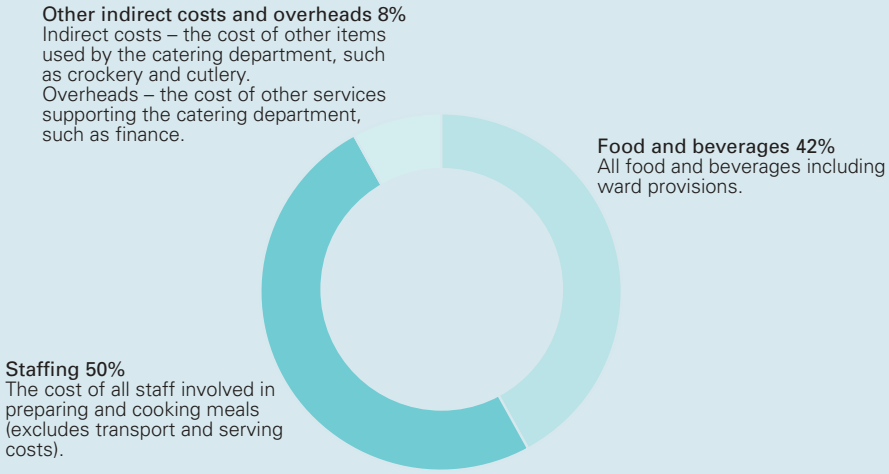
4.8 Only one-third of hospitals that we reviewed were able to split the costs of the catering service between patient and non-patient activities. This highlights a lack of control over the costs of the catering service. For example, if a daily food allowance were set the majority of hospitals would be unable to calculate whether they were meeting this allowance. Around 40% of hospitals have set a daily food allowance but they do not appear to be using this properly. For example, only around half of hospitals are using this to calculate the budget required for the catering service.

4.9 We identified that the cost of patients' food and beverages varies significantly ranging from around £1.25 to over £3.00 per patient day (Exhibit 7). Variations in food and beverage costs do not necessarily mean better or worse ingredients. The vast majority of ingredients are

14. Net costs are the total costs of the catering service (including non-patient catering) less any income generated from catering.

Exhibit 6

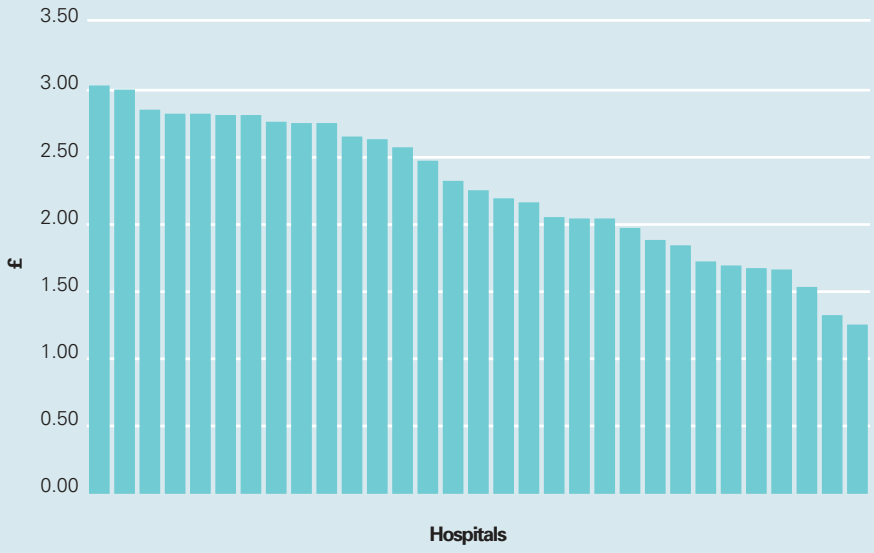
Components of total gross cost



Source: Audit Scotland

Exhibit 7

Cost of patients' food and beverages per patient day



Source: Audit Scotland

purchased through national contracts and so costs vary only marginally. The variation in costs may be as a result of the quantity of ingredients used in production, poor portion control or food waste. This report highlighted earlier that standard recipes are not in place in every hospital and are not used consistently.

Food wastage

Monitoring wastage levels

4.10 The levels of food wastage can affect the cost of a catering service. Food waste may occur at any or all of the following stages: production, unserved meals at ward level, uneaten food left on patients' plates and food wasted in the staff dining room.

4.11 Monitoring wastage enables catering departments to determine how accurately they are planning production. The best controls over food waste are when wastage levels are regularly monitored, wastage targets are set and wastage levels and values measured against these targets. Fifty-six per cent of hospitals are monitoring wastage levels regularly, but only 32% have set targets.

Ward wastage

4.12 As part of the review we carried out a survey of wastage at a sample of wards over a range of meal times. We looked at the number of unserved meals left at each ward after all patient meals had been served. The survey was restricted to unserved meals due to the practical difficulties in measuring waste left on plates after patients have finished eating.

4.13 Wastage rates range from 1% to 44%, but these vary depending on the type of meal service (Exhibit 8).

4.14 Hospitals using a bulk meal service tend to have higher wastage levels than those using a plated meal service. Higher wastage levels are an inherent risk of using a bulk meal service, as meals are issued to wards in trays of a set size. For example, a tray may hold twelve portions but only ten portions are required for patients, leaving two portions (or 17%) unserved. Some catering departments have addressed this problem by using different sizes of trays.

4.15 Plated meal services have the lowest wastage rates, with an average of 10%. The lower quartile level for all hospitals is even less at 7%. Our results show that three in five hospitals surveyed have ward wastage rates over 10% and only a few operating bulk or hybrid meal delivery achieved wastage rates of less than 7%.

4.16 It is very difficult to eliminate wastage from unserved meals, and it is likely that doing so could adversely affect quality. We recommend that hospitals should adopt a target of 10% wastage from unserved meals. This is equivalent to the average wastage rate for plated meals services. Hospitals operating a bulk meals service can achieve this target by adopting some different practices. They can collect information on the meals selected by patients, which will allow more accurate prediction of the uptake of particular dishes. They can also use different size trays when portioning meals for delivery to wards.

4.17 The annual cost to NHSScotland of wastage from unserved meals is around £4.2 million. If all hospitals reduced their wastage to 10% NHSScotland could save up to £1.9 million. This is equivalent to an extra 25 pence on food and beverages for each patient each day.

We have identified some good practice, which has resulted in low wastage rates, and an example is outlined at Case study 6.

Non-patient catering services

4.18 Most hospitals provide non-patient catering services to staff and visitors in the dining room, vending machines and hospitality for meetings and events. Some hospitals have extended this service by operating shops and cafes and providing catering for external functions and parties, and some provide meals to non-NHS bodies such as local care homes and police stations.

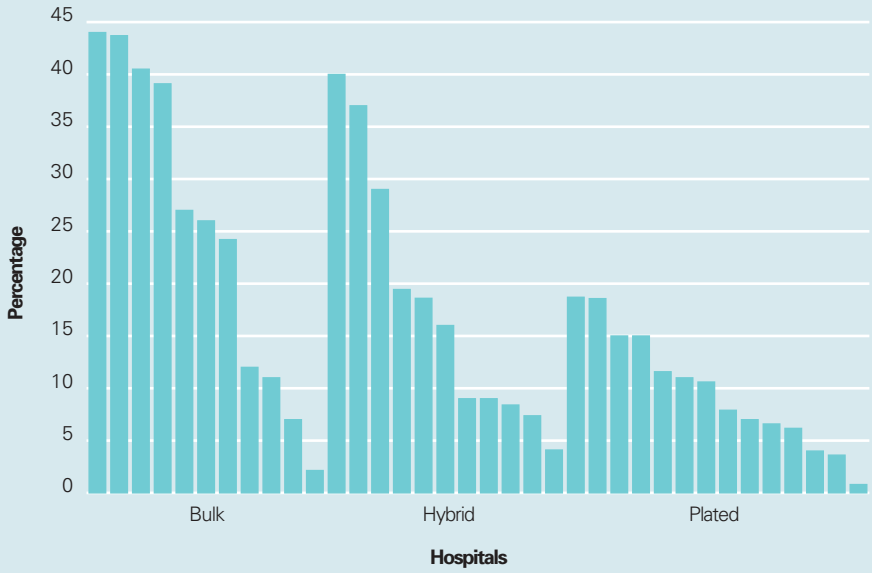
4.19 The income from non-patient services is generally used to offset the cost of the catering service. Our review found that 84% of catering departments have set income generation targets; this allows catering managers to manage their budgets effectively.

4.20 Income from non-patient services should at least cover the costs of non-patient catering, and where possible contribute to the cost of the patient service. The exception to this would be where a trust has a clear, written policy on subsidising staff meals. In such a circumstance, a target level of subsidy should be set and monitored. It is normal to have a pricing policy for staff and a separate policy for visitors (charging higher prices).

4.21 All hospitals have pricing policies in place, but in the main, hospitals are following a pricing policy that was originally set in 1978[15]. This pricing policy states that staff prices should be set at provisions cost plus 50% plus VAT. The pricing policy advised in this circular is unlikely to recover all of the costs associated with providing a non-patient catering service.

15. NHS Circular 1978 (GEN) 6.

Exhibit 8
Percentage of unserved meals wasted on wards



Source: Audit Scotland
(See Exhibit 2 for a definition of meal delivery services)

Case study 6
Good practice examples

Grampian University Hospitals NHS Trust and Highland Primary Care NHS Trust have developed procedures to help reduce levels of ward wastage.

Grampian University Hospitals NHS Trust

Patients in the trust receive menu cards at breakfast time to complete for lunch and evening meal and the following day's breakfast. Ward staff collect the menu cards and forward them to the catering department which uses them for planning production levels. The menu cards are put into pigeonholes within the catering department and prior to each mealtime the ward reception staff update them. Meals ordered for patients who have since been discharged are removed and orders for new patients are inserted. This ensures that all patients receive a meal of their choice and food wastage is kept to a minimum.

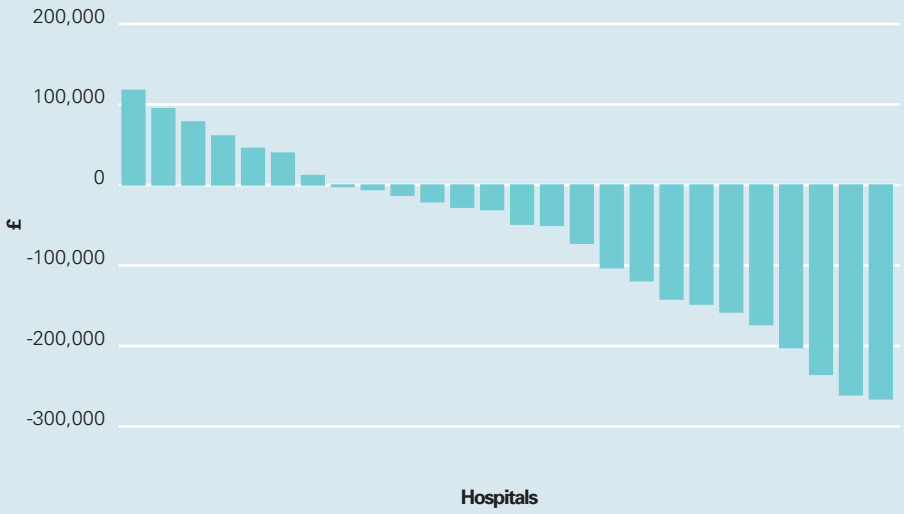
Highland Primary Care NHS Trust

Ward and catering staff at Caithness General Hospital operate a straightforward but effective system that keeps catering staff as up to date as possible with the number of meals required for the day. A white board on each ward details all planned admissions and discharges for the day. Nursing staff note on the board the actual times of each admission or discharge and the time at which the kitchen were informed. This aids communication between the wards and catering department and reduces the amount of unserved meals at ward level.

Source: Audit Scotland

Exhibit 9

Contribution/subsidy level of non-patient catering services



Source: Audit Scotland

4.22 The income generated from non-patient catering rarely covers the costs of the service. Around three quarters of hospitals are subsidising their non-patient catering services and most are doing this unknowingly. Exhibit 9 shows the level of contribution or subsidy achieved in 2001/02 for the hospitals reviewed. This ranges from an annual contribution of £118,000 to a subsidy of £266,000.

4.23 The average hospital subsidy is around £110,000 per annum. The cost of this level of subsidy for NHSScotland is approximately £4.2 million per year.

Recommendations

- Trusts should ensure that they have appropriate financial information on the catering service to allow informed decision making.
- All catering departments should have systems in place which allow them to accurately calculate the costs of providing patient and non-patient catering.
- Trusts should base their catering budgets on the most recent, relevant and accurate information available.
- Trusts should consider setting a daily food and beverages allowance for patients.
- All hospitals should aim to reduce the level of ward wastage (unserved meals) to 10%.
- Trusts should set pricing policies and income generation targets that aim to at least break-even on non-patient catering activities or have a clear, written policy on the level and costs of subsidisation.
- The Scottish Executive Health Department should withdraw circular NHS 1978 (GEN) 6 and replace it with guidance which states that non-patient catering activities should at least break-even.

Part 5. The catering service

How are hospital catering services managed?

Main findings

There is a lack of strategic direction for catering services.

Investment in computerised systems could improve control over the catering service.

Some catering services are suffering from recruitment and retention problems.

Some food handling staff are not appropriately trained in food safety and hygiene.

5.1 This chapter looks at:

- management of the catering service
- food safety and hygiene.

Managing the catering service

Strategic direction

5.2 Many trusts are currently undergoing major service changes due to retraction programmes in long stay hospitals and acute services reviews. In such circumstances trust management should consider the implications of those changes on all services including the catering service. Their decision on the future provision of the catering service should be set out in a formal strategy document.

5.3 Only 15% of trusts have a formal catering strategy. However, some trusts have made recent strategic decisions that have not yet been documented or formally approved.

5.4 The Diet Action Plan for Scotland set out the requirement for food and health policies to include:

- a policy statement recognising dietary problems with reference to the Scottish dietary targets and any locally developed targets and initiatives
- patients' nutritional requirements
- staff meals
- nutritional education
- health promotion.

5.5 Around 90% of trusts have food and health policies although some of these do not meet all of the requirements set out in the Diet Action Plan.

Recruitment and retention of staff

5.6 The NHSScotland Staff Governance Standard[16] states that sickness absence, staff turnover and staff vacancy rates should be monitored by trusts and the key factors affecting turnover should be known eg, pay-related, career development opportunities or employee morale and motivation. To meet these requirements trusts should have introduced measures such as back to work interviews following sick leave and exit interviews.

5.7 Sickness absence rates for the hospitals reviewed are shown in Exhibit 10. These range from 2.4% to 17.5%, with an average of 6.95%. Exhibit 10 also shows that city-based hospitals appear to have a bigger problem with sickness absence than hospitals located in urban or rural areas. Sickness absence in city hospitals is averaging 8.79%, which is above the average for all hospitals.

16. NHSScotland Staff Governance Standard (2002).

Exhibit 10
Sickness absence rates for 2001/02

Source: Audit Scotland

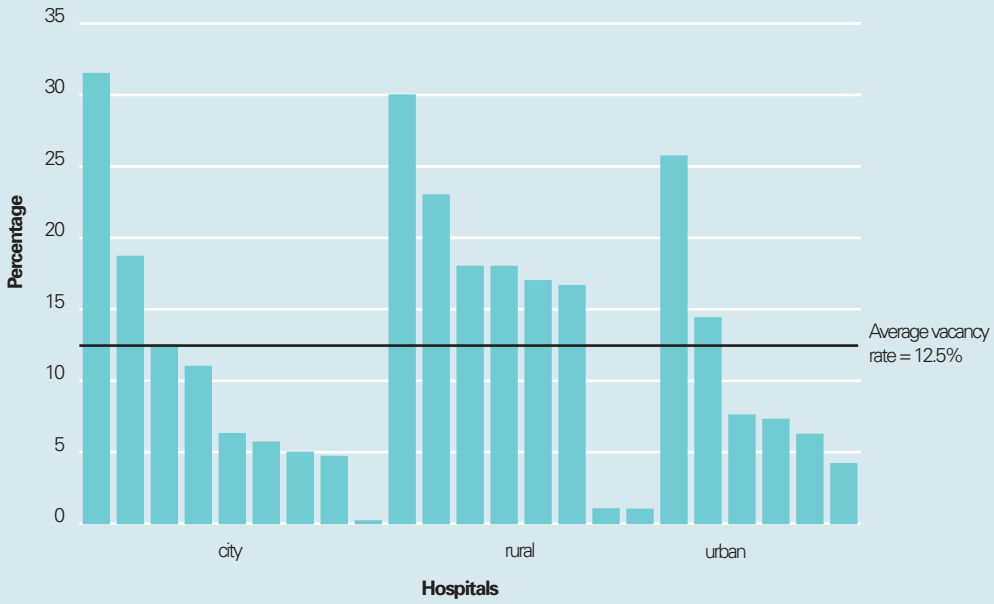
Case study 7
Good practice example

Dumfries and Galloway Acute and Maternity Hospitals Unit has introduced an incentive system to reduce sickness absence in the catering department.

The unit operates a scheme where catering staff are awarded a bonus dependent on the department's performance against the prior year's budget. The bonus is also linked to sickness absence. Each individual's bonus entitlement is calculated using a 'sliding scale' depending on how many days sickness absence they have had. This system increases staff motivation and helps reduce the level of sickness absence.

Source: Audit Scotland

Exhibit 11
Staff vacancy rates for 2001/02



Source: Audit Scotland

5.8 High levels of sickness absence may be due to the nature of the work and the relative low pay of catering staff. We have identified some good practice in targeting sickness absence and an example is given in Case study 7.

5.9 Another factor that may affect the ability of the catering department to meet demand and provide meals of a consistent quality is a large turnover of staff or high vacancy rate. Exhibit 11 shows that vacancy rates for the hospitals included in the study varied between 0% and 32% with an average vacancy rate of 12.5%. Our review identifies that vacancy rates are higher in hospitals based in rural locations. High staff vacancy and turnover rates may be due to the pay rates offered by local competitors, the nature of the work and the location of the hospital.

5.10 The new pay deal for ancillary workers will help to address some of these problems but staff turnover and vacancy rates should continue to be monitored.

Computerised catering systems

5.11 Catering departments should plan their workloads and control the related costs, quality and nutritional content of meals provided. Computerised catering systems provide more accurate production planning and control over the catering department as a whole.

5.12 Over half of hospital catering departments have computerised catering systems in place. The extent to which these systems are used varies considerably. For example, some catering departments are simply using these systems to store standard recipes. Others are making better use of their computerised systems by using them to control stock levels, order goods, record sales in the dining room through electronic point of sale, print menu cards and carry out patient satisfaction surveys.

Food safety and hygiene

5.13 The provision of safe and nutritious food in hospitals for patients and staff is a major undertaking. This is achieved by having a combination of good management, staff trained in safe hygiene practices and catering skills, and appropriate quality controls.

Policies and procedures

5.14 The Scottish Infection Manual[17] sets out the roles and responsibilities of NHSScotland bodies in relation to infection control. It also includes specific guidance relating to the provision of safe food and catering services in hospitals.

5.15 Every hospital reviewed has a food safety control system in place. These systems ensure that food is prepared and served in accordance with recognised food safety procedures and legislation[18].

5.16 As part of our survey on food quality temperature failures were

17. Scottish Infection Manual, The Scottish Office (1998).
18. Food Safety Act 1990, Food Safety (General Food Hygiene) Regulations 1995 and The Food Safety (Temperature Control) Regulations 1995.

identified at the point of serving meals to patients. This may be due to the location of the ward in relation to the kitchen or the use of particularly old equipment to transport or reheat food. Whatever the reason this is an unacceptable food safety risk and action should be taken to deal with this key weakness.

5.17 Some hospitals have developed local policies for using microwaves at ward level and patients and their visitors bringing food in to hospitals. These are particularly useful in avoiding some of the risks associated with ward level catering.

Appropriately trained staff

5.18 Everyone who handles, prepares, processes and distributes food should have an understanding of the principles of food hygiene and good food handling practices. This includes all staff that handle patients' food such as nurses, domestic staff and ward hostesses as well as catering staff.

5.19 Over 90% of hospital catering departments have a training policy and the majority support this with a training plan. All catering staff have been trained in food safety and hygiene matters prior to commencing production and serving duties and we found examples of good practice in this area. For example, where catering staff have not yet been appropriately trained they carry out other non-food handling duties.

5.20 We reviewed a sample of ward based staffs' qualifications and training. This highlighted a number of ward based staff that are serving meals to patients but have not received the appropriate training in food safety and hygiene.

Recommendations

Managing the catering service

- All trusts should have a food and health policy in line with the Diet Action Plan for Scotland.
- Trusts should ensure that a clear strategy has been approved for the future provision of catering services where other services are being reconfigured.
- All trusts should ensure the staff governance standard for NHSScotland employees is complied with for all staff.
- Staff vacancy and turnover rates are high in some areas. Where this is the case trusts should take action to address these issues.
- Trusts should monitor staff vacancy and turnover rates on a regular basis.

Food safety and hygiene

- Trusts should ensure that all food handling staff including ward based staff are appropriately trained in food safety and hygiene.
- Where temperature failures have been identified as local issues for trusts they should take specific action to ensure that food is always served to patients at the correct temperature.

Part 6. Recommendations

A summary of the recommendations made in this report

Nutrition

- Trusts should plan their menus in line with the recognised principles of menu planning.
- All trusts should set up a group to plan the menu, ensuring that all available knowledge and experience within the trust are used where appropriate.
- Trusts should ensure that patients are screened on admission for risk of undernutrition.
- Trusts should use a validated nutritional screening tool to screen patients and staff should be trained in how to use this tool.
- All menus should be nutritionally analysed. To avoid duplication of effort and maximise the use of limited dietetic resources this could be done as part of the national database of standard recipes recommended below.
- All catering production units should use standard recipes. The cost associated with these standard recipes should be calculated and maintained. The Scottish Executive Health Department should consider developing a national database of standard recipes for NHSScotland. This database could be held on NHSScotland's website (Scottish Health On the Web) to allow easy access.
- Trusts should ensure that catering specifications comply with the model nutritional guidelines for catering specifications in the public sector in Scotland.
- The Departmental Implementation Group should develop or commission national catering and nutrition specifications for NHSScotland.

Quality and patient satisfaction

- Acute trusts with long stay beds should ensure that they have a three week menu cycle, at least for these patients.
- Menus should be reviewed to ensure that they offer sufficient choice to all patient groups. Where it is considered appropriate, separate menus may be developed for ethnic meals and other special diets.
- Trusts should remind all of their staff of the procedures for offering, ordering and delivering meals and in particular meals for patients who require a special diet.
- All menus should be dietary coded to help patients make an informed choice.
- All catering services should aim to have patients ordering their meals as close to the mealtime as possible and no more than two meals in advance.
- All catering services should aim to provide all patients with the meal they ordered.
- Trusts should encourage communication between ward staff and the catering department.
- Trusts should ensure that they obtain patients' views on the catering service through the introduction of regular (at least quarterly) patient satisfaction surveys.
- Trusts should monitor the quality of the catering service through internal quality assurance surveys and/or using patient and user groups to obtain the views of patients.

Costs of the catering service

- Trusts should ensure that they have appropriate financial information on the catering service to allow informed decision making.
- All catering departments should have systems in place, which allow them to accurately calculate the costs of providing patient and non-patient catering.
- Trusts should base their catering budgets on the most recent, relevant and accurate information available.
- Trusts should consider setting a daily food and beverages allowance for patients.
- All hospitals should aim to reduce the level of ward wastage (unserved meals) to 10%.
- Trusts should set pricing policies and income generation targets that aim to at least break-even on non-patient catering activities or have a clear stated policy on the level and costs of subsidisation.
- The Scottish Executive Health Department should withdraw circular NHS 1978 (GEN) 6 and replace it with guidance which states that non-patient catering activities should at least break-even.

The catering service

- All trusts should have a food and health policy in line with the Diet Action Plan for Scotland.
- Trusts should ensure that a clear strategy has been approved for the future provision of catering services where other services are being reconfigured.

- All trusts should ensure the staff governance standard for NHSScotland employees is complied with for all staff.

- Staff vacancy and turnover rates are high in some areas. Where this is the case trusts should take action to address these issues.

- Trusts should monitor staff vacancy and turnover rates on a regular basis.

- Trusts should ensure that all food handling staff, including ward based staff, are appropriately trained in food safety and hygiene.

- Where temperature failures have been identified as local issues for trusts they should take specific action to ensure that food is always served to patients at the correct temperature.

Appendix 1. Study advisory group

Members sat on the group in a personal capacity

Mr Scott Carmichael
Head of Performance Management – North Boards, Scottish Executive Health Department

Mrs Marjory Chirnside
Catering Manager, West Lothian Healthcare NHS Trust

Dr Bill Creaney
Consultant Psychiatrist, Psychiatry of Old Age, Ayrshire and Arran PCT

Ms Ellen Davidson
Management Accountant, Forth Valley Acute Hospitals NHS Trust

Mrs Isabella Dickie
Hotel Services Manager, Ayrshire and Arran PCT and Chair, Hospitals Caterers Association (West of Scotland)

Mrs Anne Hanley
Review Manager, NHS Quality Improvement Scotland

Mr Sean Hunter
Catering Manager, Royal Infirmary of Edinburgh and Chair, Hospitals Caterers Association (East of Scotland)

Mrs Cathy McGillivray
Director of Nursing, Argyll and Clyde Acute Hospitals NHS Trust

Mr Brian Main
Support Services Manager, Tayside University Hospitals NHS Trust

Mr Eddie Monks
Lay representative, Argyll and Clyde Health Council

Mr Harry Norton
Finance Manager, Grampian University Hospitals NHS Trust

Mrs Ann Paterson
Head of Nursing, Continuing Care and Psychiatry for the Elderly, Renfrewshire and Inverclyde PCT

Mr George Reid
Trustwide Catering Manager, Grampian PCT

Mr Douglas Seago
Director of Operations, Highland Acute Hospitals NHS Trust

Ms Marjory Thomson
Professional Adviser – Nutrition, Care Commission

Appendix 2. List of references

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14 Circular NHS 1978 (GEN) 6

15 NHSScotland Staff Governance Standard (2002)

16 Scottish Infection Manual, The Scottish Office (1998)

17 Food Safety Act 1990, Food Safety (General Food Hygiene) Regulations 1995 and The Food Safety (Temperature Control) Regulations 1995.

Catering for patients

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