

DGRI 'allotment' Fruit and Vegetable Outlet

Interim Evaluation Report

Introduction

This report details the findings from a study into the first 6 months operation of a fruit and vegetable stall at Dumfries and Galloway Royal Infirmary (DGRI).

In April 2008 the Scottish Government released CEL 14 (Health Promoting Health Service – Action in Acute Settings). One of five themes highlighted in the 'letter' related to actions around food and health. Based upon current evidence and best practice from existing projects one of the required actions detailed in the CEL is around **increasing availability and access** to competitively priced fruit and vegetables through the provision of fruit and vegetable outlets. In this respect the project has the potential to support NHS Dumfries and Galloway in achieving a number of health improvement related outcomes and is one of NHS Dumfries and Galloway's responses to the Health Promoting Health Service programme.

The planning for the provision of a fruit and vegetable stall at DGRI began in January 2009 and a small stall opened in July 2009. The project has been developed through a partnership approach involving Nithsdale Council of Voluntary Services (NCVS) and NHS Dumfries and Galloway and has been set up to be delivered for an initial one year period. Non re-occurring NHS Dumfries and Galloway funding of £9,740 has been provided. In addition NHS Dumfries and Galloway currently offer an 'in-kind' contribution in terms of a member of staff who assists with the transportation of equipment and support from the Health Improvement Programme Lead (Workplaces) and Nithsdale Health Improvement Team.

Currently the stall operates within the main foyer/reception area of DGRI selling fruit and vegetables every Wednesday between 9.30 and 2.45pm. The stall is 'manned' by a sessional worker employed through NCVS and a volunteer recruited through NCVS. Produce is delivered direct from Gallovidian Foods.

Aims of study

Within public health it is necessary to evaluate interventions in order to determine effectiveness, efficacy, appropriateness, accountability and enable theory building which allows the application of learning to improve other projects. This evaluation study aims to explore customer and non-customer perceptions about the DGRI fruit and vegetable stall (in relation to issues such as quality, price, availability etc) and to assess the effect the project is having on customer fruit and vegetable intake and knowledge of current government recommendations in relation to intake of fruit and vegetables. The evaluation has targeted staff, patients and visitors.

Aims:

- 1) To report fruit and vegetable sales in terms of income (profit/loss)
- 2) To determine perceptions of the DGRI allotment stall in relation to quality, availability and product price
- 3) To appraise knowledge and understanding of government guidelines and recommendations regarding fruit and vegetable intake

Methodology

This evaluation was completed on the basis of there being no previous baseline data for comparison.

A questionnaire comprising 23 questions (see Appendix 1) was developed by the allotment Steering Group. The questionnaire was divided into three clear sections focussing on the themes of customer sales/buying habits, customer/non-customer perceptions and finally knowledge about government guidelines in relation to fruit and vegetable intake. Therefore, the results are grouped together by order of relevance to the aims of the study.

Two data collection techniques were utilised to obtain responses. Firstly, Health Improvement staff and allotment workers engaged with customers at the DGRI allotment, with customers being asked to complete the questionnaire. Where necessary assistance was given to support respondents in completing the questionnaire. Secondly, in order to target staff and staff non-users an electronic questionnaire was distributed via survey monkey to all staff based at DGRI, Crichton Hall and Nithbank sites

Finance

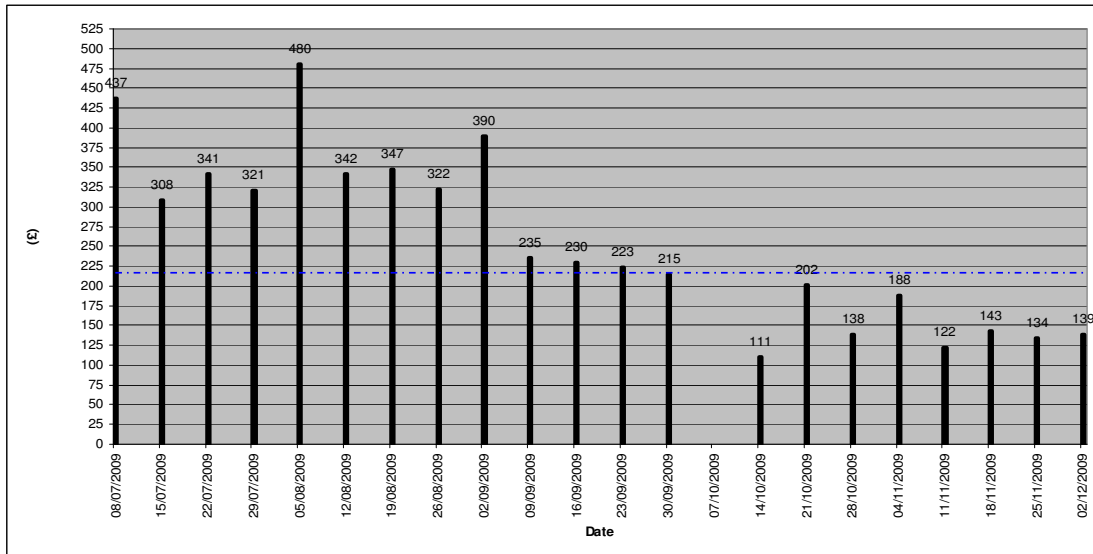
Non-reoccurring NHS Dumfries and Galloway funding of £9,740 has been allocated to this initiative. This funding is controlled by NCVS with quarterly budget reports being presented to the allotment Steering Group.

To date (end November 2009) the project spend is:

Recruitment costs	249.20
Equipment (set up costs)	1575.49
NCVS Sessional Worker Salary	1150.00
NCVS Management Fee	600.00
Total spend	3374.69

In terms of budget spend to date the initiative is on target to meet its financial projections.

The graph below highlights the weekly income in terms of sales achieved between July and November 2009.



DGRI allotment weekly income from sales

The trading breakeven figure for the stall has been calculated at £220 per trading session, based on a 35% mark up on produce costs and inclusive of associated staffing costs. Figures indicate that for the first 9 weeks of operating the stall traded in profit. More recently there has been a decline in actual sales and the stall has operated at a loss. There are a number of identified factors which have contributed to this drop in sales, namely a natural drop-off in custom following an initial surge of interest and secondly, an element of seasonality in terms of fruit and vegetable sales (for example in fruit and vegetable sales it is widely accepted that there are ‘peaks and troughs’ in terms of profit margins – profits margins from summer soft fruits are much greater than profits gained from winter fruits and vegetables). This presents obvious challenges in respect of promoting and marketing the stall and in terms of the type of produce being sold on the stall.

Survey Results

Participant Characteristics

A total of 176 questionnaires were completed with 153 being returned through survey monkey and 23 being collected at the stall. The characteristics of the study respondents are detailed in Appendix 2.

Initiative

The results from questions 6 to 16 are considered of particular importance in evaluating the operation of the initiative and as such provide an indication of purchasing behaviour and perceptions of quality and price, reasons for purchase, appropriateness of location and opening times and whether any improvements could be made.

Have you purchased fruit and vegetables from the DGRI allotment stall?

60% of respondents indicated that they had used the DGRI allotment stall. Observations at the stall indicate that approximately 65% of stall customers are staff.

How often do you buy fruit and vegetables from the DGRI allotment stall?

Those respondents who do currently/or have previously used the stall indicated that they purchased produce on the following basis; weekly 29%, fortnightly 25%, monthly 14%, other 32%. Other responses included; 'occasionally when I remember', 'when I get time' and 'when I happen to be in Dumfries'.

How often do you buy fruit and vegetables elsewhere?

The majority of respondents (59%) purchase fruit and vegetables elsewhere on a weekly basis as part of the weekly shop. A quarter (25%) of respondents indicated that they purchase fruit and vegetables elsewhere on 2-3 occasions each week.

How would you rate the quality of the fruit and vegetables at the DGRI allotment stall?

83% of respondents reported that the produce being sold at the stall was of a good quality while 15% believed it was of a fair quality. Less than 4% of respondents reported that they felt the produce was of a poor quality.

How would you rate the price of the fruit and vegetables at the DGRI allotment stall?

In terms of product pricing 72% of respondents considered prices at the stall to be 'average'. 23% of respondents felt that prices were expensive.

What encourages you to buy fruit and vegetables from the DGRI allotment stall?

73% of respondents indicated that availability (convenience) was the reason that they used the stall. Only 20% of respondents based their use of the stall on the belief that prices are competitive. Respondents also indicated a number of other reasons why they used the stall including; friendly and helpful staff, support for a local business, supporting the NHS in a health promotion initiative, ethos of the stall.

What is your average spend at the DGRI allotment stall?

56% of respondents reported spending between £2 and £5 on each visit to the stall. Of interest are the 17% of customers who indicated that they spend between £6 and £10 on each visit. Nearly a quarter of all respondents spent less than £2 per visit.

Do you feel that the stall is well located within the hospital?

Over 90% of respondents indicated they felt the stall was well located within the hospital. A number of respondents did suggest that the stall may not be seen by lots of staff who use other entrances. Several responses raised concerns over infection and hygiene issues.

What suggestions could you make to improve the stall?

A number of respondents made suggestions for improving the stall. These suggestions included; need to make prices more competitive with supermarkets, more choice of produce e.g. flowers, organic products and more local produce, more 'pick and mix', re-locating of the stall to an area nearer the Staff Dinning Room, increase the number of days and longer opening hours,

Please tell us why you do not currently use the DGRI allotment?

Respondents were given the option of identifying reasons why they did not use the stall. A significant number of respondents (85%) indicated that they did not have enough time to visit the stall during their working day. Nearly a quarter (25%) of respondents suggested that the stall was too expensive, while 10% cited unsuitable opening times as the reason for non use. There were also a number of other responses indicating reasons why respondents did not use the stall. These can be grouped under the following themes; respondents indicating that they forget about the stall, bring fruit from home and produce is not locally and/or organically produced.

Consumption and Knowledge

The results from questions 17 to 23 relate to the consumption of fruit and vegetables and knowledge of recommended fruit and vegetable intake guidelines.

Only 30% of respondents indicated that they consumed the recommended levels of fruit and vegetables (5 or more portions) each day. The majority of respondents consumed between two and three portions a day.

13% of respondents indicated that their fruit and vegetable intake had increased as a result of the stall.

A significant number of respondents (98%) claimed to be aware of the current recommendations which encourage the daily consumption of fruit and vegetables and claimed to know the number of portions recommended. 73% of respondents correctly stated 5 portions as the current government recommendation.

Respondents were then asked to identify, from a list provided, the fruits and vegetables which do count and do not count as a portion by government recommendations. 96% of respondents correctly identified an apple as being a portion while 81% correctly identified a potato as not being a portion. However, 53% incorrectly identified 150 ml of orange squash as a portion.

Conclusion

The aims of this evaluation exercise were to provide interim feedback on performance outcomes of the DGRI allotment initiative in relation to; financial performance, customer

perceptions (quality and affordability) and knowledge of government recommendations for fruit and vegetable consumption.

Finance

Taking into account current financial spend to date it would appear that the initiative will meet its targets in terms of spend, based on one year's allocated funding of £9,740. From a financial perspective there is funding available to enable the initiative to continue until July 2010. This creates a challenge for the future sustainability of the stall. The NHS is required to decide if the stall is to operate on a self-financing basis or if funding could be identified to support the initiative. Sales income to date would suggest that the stall could operate within small profit margins during the summer months (when sales of soft fruits are high), however the small profits generated would appear to be offset by losses incurred over the winter months. There is a need to undertake further work in terms of exploring issues around supply of produce and prices and the correlation with profit/non-profit margins

Customer/non customer perceptions

The second aim of the evaluation was to determine customer/non customer perceptions of produce quality and affordability. Results show that 83% of respondents find the produce on sale to be of a good quality. However, the majority of respondents believe the prices to be 'average' and 23% indicated they thought prices were expensive. These findings have implications since while it would appear that the initiative is reasonably well perceived from a quality aspect, price sensitive individuals will not be attracted to the stall if prices do not appear to be competitive. In effect it would appear that either the stall is required to offer something different from local supermarkets in terms of produce sold e.g. organically/locally grown produce or sell produce at a cheaper price than local supermarkets. These issues have important ramifications for the initiative in terms of meeting its objectives around increasing access to affordable fruit and vegetables.

Knowledge of guidelines

The third aim of the evaluation was to appraise respondents knowledge and understanding of government guidelines and recommendations regarding levels of fruit and vegetable intake. Results show that 98% of respondents are aware of current recommendations. The government recommendation is 5 portions of fruit and vegetables per day. In order for this to be implemented correctly the consumer must understand what constitutes a single portion. Only 73% of respondents correctly identified the correct type and size of portion. This figure is considered low and indicates that a significant number of respondents may not actually be aware of the current recommendations. This would suggest that consideration should be given to expanding the health promotion and nutritional messages associated with the initiative.

Other issues

The main objective of the initiative is to increase access to affordable fruit and vegetables and consequently make a contribution towards tackling health inequalities. It is clear from observations at the stall that a significant number of users of the stall are NHS members of staff (70%). This would indicate that there are clearly groups of people using the initiative (e.g. NHS employees) which have a bearing on the ability of the initiative to achieve its aim of increasing fruit and vegetable intake within deprived sectors of the community and tackle health inequalities). It is only through offering competitive prices that the initiative can fulfil its main aim.

Qu 8. How often do you eat fruit and vegetables?

Daily Weekly Fortnightly Monthly Other

Qu 9. How would you rate the quality of the fruit and vegetables at this stall?

Good Fair Poor

Qu 10. How would you rate the price of the fruit and vegetables on the stall?

Average Cheap Expensive

Qu 11. What encourages/has encouraged you to buy fruit and vegetables from this stall?

Price Quality Availability Other _____

Please tick **all** that apply

Qu 12. Who are you buying for?

Self Patient Family Other

Please tick **all** that apply

Qu 13. Do you feel the stall is well placed within the hospital?

Yes No

If no, why not?.....

Qu 14. What suggestion(s) could you make to improve the stall?

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Qu 15. Do you have any further comments on the stall?

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Knowledge and Consumption

Qu 16. Do you believe that your fruit and vegetable intake has increased as a result of this stall?

Yes No

Qu 17. Do you know how many portions of fruit and vegetables the Government recommends you should eat daily?

Yes No

If yes, how many?

Qu 18. How many portions of fruit and vegetables do you consume each day?

None 1-2 3-4 5-6 7 or more

Qu 19. Which of the following do you consider to be a portion of fruit or vegetable? (Please tick all you think apply)

Heaped tablespoon of dried fruit
150ml of orange squash
2 heaped tablespoons of vegetable
1 Apple

Qu 20. Which of the following is not considered a part of the 5 a day recommendations? (Please tick all you think did not apply)

Spinach Pumpkin
Potato Dates

Qu 21. Have you used the free information and recipes available at the stall?

Yes No

Qu 22. Is there any other information you feel you would find helpful?

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***Thank you for completing this questionnaire
Your responses will remain anonymous***

Appendix 2 – Respondent Profile

	Number of respondents	% of respondents
Female	139	79
Male	37	21
Under 18 years	1	<1
18-25 years	13	7
26-35 years	22	13
36-45 years	37	22
46-65 years	91	51
66-75 years	10	5
76+ years	2	1
Admin and Clerical	65	43
Management	8	5
Nursing and Midwifery	30	20
Medical	9	6
Support Services	4	2
AHP	22	15
Other	11	9
Based at DGRI	86	58
Based at Cresswell Maternity Unit	7	5
Based at Crichton Hall	31	21
Nithbank	18	12
GP Practice – Dumfries Locality	1	<1
Other	6	4
Staff	149	86
Patient	8	5
Visitor	19	9

NB: Figures for staff designation and location are calculated as a percentage of staff responses not total responses