Scottish Needs Assessment Programme

Health Promotion in Primary Care

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Health Promotion Network

Health Promotion in Primary Care

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EXECUTIVE SUMMARY

Health Boards, Community Healthcare Trusts, Health Promotion Departments and General Practitioners were surveyed on the subject of health promotion in primary care.

The results show a wealth of work and experience in, and enthusiasm for the subject area, but highlight the poor links and lack of awareness in others’ work and roles.

Costs and resources are extremely difficult to identify and measure.

A variety of methods for monitoring and evaluation are used but not in a strategic way.

The problems with assessing the effectiveness and cost-effectiveness of health promotion in primary care are reviewed, as is the available literature on this area.

Priorities for the future are identified from the surveys.

Suggestions are given to help in the development of a strategy for health promotion in primary care.

KEY RECOMMENDATIONS

Purchasers/commissioners should ensure that there is a strategy for health promotion in primary care in place locally. The strategy, which should be a key component of an overall health promotion strategy, should address the three key elements below.

1 Approaches to Health Promotion

The strategy should:

- adopt a holistic approach to health promotion involving organisational, structural and operational development across public and private sector health and non-health service organisations

- involve multidisciplinary collaboration between health promotion specialists, primary care practitioners and other health care and non-health care professionals

- ensure the coordination of the activities of the different agencies involved in health promotion in primary care

- identify the strength of links between the various agencies and, where links are found to be weak, identify joint action to strengthen these links

- involve joint action between Health Boards, health promotion departments and primary health care teams to ensure health promotion strategies are incorporated into practice development plans. Plans should include development of information systems for needs assessment in primary care.
2 Monitoring and Evaluation

Purchasers/commissioners, in collaboration with providers of health promotion and other agencies, should ensure systems are in place for monitoring and evaluating health promotion in primary care covering the following:

- research and audit
- cost of health promotion
- mechanisms for accessing appropriate evaluation methodologies in light of the particular difficulties in evaluating health promotion (see chapter 8)
- standardisation of methodologies where possible to enable comparisons of cost, activity, and outcomes of health promotion in primary care across Health Board areas.

3 Resources

- As a first step, purchasers/commissioners should consider whether they have the financial and staff resources available locally to deliver an effective strategy for health promotion in primary care. If additional resources are required, consideration will have to be given to the relative priority of allocating further resources to this area.
- Purchasers/commissioners and providers should consider allocating additional resources to quantitative and qualitative multidisciplinary collaborative research undertaken on a regional or national basis.
1 INTRODUCTION

1.1 Group Remit

1.1.1 The SNAP Health Promotion in Primary Care Group was established as part of the Scottish Needs Assessment Programme, with the following remit: "The SNAP Group will carry out a critical review of Health Promotion in Primary Care with regard to its scope, effectiveness and cost-effectiveness, and produce a framework for monitoring and evaluation."

1.2 Background

1.2.1 The importance of health promotion was recognised nationally in 1992 by the publication of the policy documents "Scotland's Health: a challenge to us all" and the Health of the Nation. The Ottawa Charter (1986) and the Health for All principles have been important landmarks in the development of health promotion. More recently, this importance was re-emphasised in the Shields Report "Roles and Responsibilities of Health Boards" which says "Health promotion and education is a key responsibility for all Board members and an integral part of Boards' work".

1.2.2 The redirection of the NHS to becoming more primary care centred has necessitated a fresh look at health promotion in primary care, as primary care becomes the focus for strategic planning and purchasing and increases its scope for the provision of care. The Scottish Office discussion paper entitled "Primary Care: The Way Ahead" (1996) points out that "the new health promotion arrangements in general practice and the Shields Report recommendations on the delivery of health promotion give an opportunity for joint working between primary care and health promotion professionals to target what is worthwhile in a local context, taking account of the national priorities".

1.2.3 This discussion paper also suggests that there "needs to be a more conscious targeting of resources in areas of health inequalities, in partnership with other agencies " - issues which are covered in more detail by a SNAP report on "Health Needs and Health Promotion in Deprived Areas in Scotland" which is to be published soon.

1.2.4 Other recent publications include the HEBS resource pack "Health Promotion in Primary Care: a rough guide" (1996) and a summary of the findings of the Short Life Working Group on Health Promotion in Primary Care (1996) which looks at the scope for improving the coordination and delivery of health promotion activities in the primary care setting.

1.3 Method

1.3.1 The group searched the literature, in particular for articles concerning the cost-effectiveness of health promotion in primary care. It conducted two surveys; one to gather details from both purchasers and providers in Health Board areas, and a second to gather GP views. The group also drew upon 'grey' literature and the breadth of their own experience of the subject.
1.4 Recent changes in GP contract

1.4.1 Since the final draft of this report was completed the new GP health promotion payment arrangements have come into being. Although the background material for this report was gathered in the context of the old "banding" system, the new arrangements are in line with the conclusions that were reached.

1.4.2 The recommendations of this report are highly pertinent to the implementation of the new scheme.

1.5 Definitions

1.5.1 Health Promotion

The SNAP group adopted the definition of health promotion which is outlined in "Health Education in Scotland: A National Policy Statement". It recognises that actively fostering good health and well-being is as important as preventing illness. It also acknowledges that many different elements contribute to and determine health and well-being, including personal, social, economic, political and environmental factors.

1.5.2 Primary Care

The term 'primary care' is defined as the first point of contact to the Health Service for the population, and encompasses general practitioners, community nursing services, pharmacists, dentists, opticians, professions allied to medicine, community psychiatric nurses, and independent practitioners. However, in view of the recent publication of the Oral Health Strategy, the SNAP group decided to exclude health promotion in relation to oral health for the purposes of this report.

1.5.3 Effectiveness and Cost-Effectiveness

Effectiveness is the impact of a service or intervention with respect to predefined goals, such as reducing the incidence of stroke and cancer, reduced mortality or improved quality of life. It differs from efficacy in that efficacy is the impact of a service under controlled, experimental or other research conditions, whereas effectiveness refers to the impact the services have in routine practice (St Leger et al, 1992).

Cost-effectiveness is the relationship between the costs of a health care intervention and its impact, outcome or effectiveness, measured in units such as life years saved, cases successfully treated or detected, or cases averted. It is usually expressed as a cost-effectiveness ratio such as cost per case detected. It is a measure of efficiency. Broader measures of efficiency which relate cost to multiple outcomes are provided by cost-utility and cost benefit analysis (Drummond and Maynard (eds), 1993).
THE AIM AND OBJECTIVES OF THE REPORT

2.1.1 In formulating the aim and objectives of the report, the group discussed the needs of the intended audience - purchasers and providers of health promotion in primary care in Health Boards, general practitioners and primary health care teams, health promotion units and Trusts providing community nursing.

2.1.2 The report reviews the current situation within Health Board areas in Scotland, which should allow the reader of the report to compare the current practice within their area with that of other areas. It outlines themes and trends in the development of health promotion in primary care. It highlights gaps in knowledge and problems with the economic evaluation of health promotion. It provides a strategic evaluation framework adapted from one currently in use. A useful list of current projects with contact names and addresses has been produced as a supplement to the report and is available on request from the SNAP Secretariat.

2.2 Overall aim

2.2.1 The overall aim of this SNAP report is to help purchasers and providers develop a strategy for health promotion in primary care.

From their own experience and from 'sounding out' colleagues, the group felt that there was a lack of coordination and direction for health promotion in primary care - that is, there was no strategic framework. To find out if this reflected the true situation, the group sent out two questionnaires to every Health Board area in Scotland. The first questionnaire (see appendix 1) was sent to health promotion department managers, directors of nursing in community Trusts, directors of primary care divisions and consultants in public health medicine with responsibility for either health promotion or primary care. The second questionnaire (see appendix 2) was sent to general practitioners and their primary health care teams. Respondents were also asked to look at the scope and vision for the future (see 2.3.1, 2.3.2 and 2.3.4 for more details of these questionnaires).

2.3 Objectives

Where are we now?

2.3.1 To gather information on current activity and costs of health promotion in primary care.

Chapters 3, 4, and 5 of this report review the results of the activity, networks and costs sections of the SNAP questionnaire which was sent out in July 1995. This questionnaire was intended to establish a baseline - what are Health Boards currently purchasing in the way of health promotion in primary care?; what are the networks for health promotion in primary care within Health Board areas?; can current resources in terms of staff and finance be identified?; and what do Health Boards, Health Promotion Units and Trusts think of the effectiveness of the current activity?

Chapter 6 summarises the results of a questionnaire that we sent to general practitioners to look at current activity and views of general practitioners in relation to health promotion in primary care. It was essential to gather their views as they are often key players in the delivery of this area of health promotion. In addition, the 'banding' initiative has attracted a lot of criticism in the medical press and was felt to
have had an adverse effect on the enthusiasm of general practitioners for health promotion - we wanted to gauge if this was, in fact, the case.

2.3.2 To outline the principles for monitoring and evaluation of health promotion in primary care. Chapter 7 of this report outlines the information gathered from the questionnaire on the evaluation and monitoring of health promotion in primary care within Health Board areas.

A strategic framework for evaluation and monitoring of projects is attached and could be adapted for individual Health Board use (see Appendix 3).

Where do we want to be?

2.3.3 To review the literature on effectiveness and cost-effectiveness of health promotion in primary care. Chapter 8 discusses effectiveness and cost-effectiveness in relation to health promotion. It reviews the economic evaluation of health promotion in primary care. It provides purchasers and providers with help in deciding “where do we want to be?” based on that review.

2.3.4 To consider the scope for health promotion in primary care. Chapter 9 of this report pulls together the themes or trends in the development of health promotion in primary care which were outlined in the returned questionnaires.

2.4 What next?

How do we get there? We have left this for discussion at Health Board level but give some suggestions in Chapter 10.

NOTE: The questionnaire surveys were not intended to be comprehensive or analysed in great detail. The lack of baseline information was such that we could only hope to provide a broad picture of activity, costs and ideas to allow Board areas to consider further what information they should gather on health promotion in primary care. It is a starting point.
3 HEALTH PROMOTION ACTIVITIES IN THE PRIMARY CARE SETTING

3.1 Health Promotion Specialists identified a number of different types of activity undertaken by themselves and their health promotion departments.

3.1.1 The types of activity can be categorised under several headings.

*Policy development and implementation, including:* -

- workplace policy (e.g., smoking, alcohol, food and nutrition)
- Health Board policy in relation to health promotion
- support for implementation through training, monitoring and evaluation

*Training/Skills Development, including:* -

- trainer-training of educators from a variety of backgrounds
- generic health promotion training for workers in all primary care settings
- the development of specific skills (e.g., motivational interviewing, producing leaflets for patients)

*Support, including:* -

- specialist advice in all aspects of health promotion
- resources (e.g., leaflets, posters, teaching packs, books, videos)
- professional support through meetings, steering committees etc

*Coordination/Liaison, including:* -

- special events (e.g., No Smoking Day)
- multi-agency development (e.g., healthy alliances, health for all)
- planning for health promotion (e.g., health promotion strategy, local health strategy)

*Monitoring and Evaluation, including:* -

- needs assessment research across all settings
- identifying appropriate 'process' and 'outcome' measures for health promotion
- outlining appropriate qualitative and quantitative methods
Information-giving, including:-

- briefing days for professionals
- press releases/briefings/interviews to the media
- locally produced news sheets and leaflets

Project Development, including:-

- innovative work across professional groups
- new initiatives within a specific site or for a specific topic
- on-going/follow-up work in established projects

3.1.2 These activities are carried out in a variety of different ways, with different professional groups working in primary care.

3.2 Activities undertaken by professionals other than health promotion specialists

3.2.1 These tend to be focused more on clinical/medical issues and include CHD prevention, well woman clinics and chronic disease management clinics, e.g. for diabetes and asthma.

3.2.2 Within primary care teams, delivery of health promotion is seen as integral to the consultation be it with GP, nurse or health visitor. This gives the potential to tailor advice/information to the individual, but also makes evaluation difficult.

3.2.3 Working with agencies and people other than health professionals was identified in some areas, in relation to both questions 2 and 3 of the survey. This included work with the local authority, particularly leisure and recreation departments and community education. In a few areas, work with the police and local voluntary organisations was identified.

3.3 Conclusion

In conclusion, the range of activity and variety of initiatives in primary care across Scotland is consistent and impressive. Differences between Health Board areas are notable in number, rather than scope.

3.4 Recommendations

3.4.1 Health Promotion activity within Board areas would be more effective if coordinated and targeted. An overall health promotion strategy should be developed in consultation with local authorities, Trusts, primary care professionals, voluntary bodies and the public.

3.4.2 Over the last few years, changes in the health service have placed health promotion more formally within the remit of primary care. With the move towards primary care led purchasing and further changes in the GP contract, the
development of health promotion must continue to focus on organisational, structural and operational issues which encourage multidisciplinary collaboration.

3.4.3 Teamworking should be encouraged at practice and locality levels and health promotion activity supported within a framework which encompasses both target setting and process measures as legitimate for health promotion.

3.4.4 Health Promotion Departments are a valuable resource for primary health care professionals in developing good practice in health promotion. Commissioners need to determine the resources required to deliver the health promotion strategy in relation to primary care.

3.4.5 It may be helpful for Board areas to use a model such as the health promotion compass (Hanlon et al, 1995), or the model described on page 33 (table 6), to describe and, indeed, prioritise their activity. Thus, they would describe who (groups), what (topics), where (settings) and how (methodologies) for each health promotion activity or project. A consistent approach across Health Board areas would facilitate better information exchange.

3.4.6 The different emphasis on activity by health promotion departments and by other professionals should be seen as complementary. There should be scope within the strategy for health promotion at both the individual and population level and in primary care and community settings.
4 NETWORKS FOR HEALTH PROMOTION IN PRIMARY CARE

4.1 Introduction

4.1.1 Respondents to the questionnaire were asked to identify the networks/links for health promotion in primary care in their Health Board area in a diagrammatic form. They were asked to note on the diagram if they thought the links were "strong" or "weak".

4.1.2 On looking at the replies from Board areas, a rough judgement was made of the degree of agreement between the identified networks or links in Board areas from which there was more than one reply.

4.1.3 The comments in this chapter are of a general nature based on perceptions of the diagrams.

4.2 Situation of the Health Promotion Department

4.2.1 Replies were received from 12 Health Board Areas. Of these, eight areas had health promotion units which were managed within Health Boards and three in Trusts. One area had a health promotion unit which was managed as a separate agency, neither within the Board nor a Trust.

4.2.2 The siting of the health promotion unit within or outwith the Board appeared to have no identifiable effect on whether the respondents from that area had a similar perception of the links or not.

4.3 Health Promotion Department Links

4.3.1 HEBS and Primary Health Care Teams/GPs/general practices and Pharmacists were mentioned by all but one of the 12 respondents from health promotion departments.

4.3.2 Trusts/Community Staff, Dentists, Public Health Medicine and Primary Care Divisions were next most frequently mentioned, although two units identified their links with public health medicine and primary care divisions as weak.

4.3.3 Dentists/Dental Health and District and Regional Councils were also mentioned by the majority of units.

4.3.4 Community/Voluntary groups, Opticians/Optometrists, postgraduate education/advisers and PAMs were mentioned by a minority.

4.4 Primary Care Division Links

4.4.1 The respondents for primary care divisions came from a variety of backgrounds due to the different structures within Health Boards.

4.4.2 The majority of respondents mentioned health promotion units, primary health care teams and Trusts. Half or less than half mentioned pharmacists, dentists, public health medicine, HEBS, voluntary bodies, local councils, education and workplaces.
4.5 Public Health Medicine Links

4.5.1 There were four replies from Consultants in Public Health Medicine.

4.5.2 Three mentioned links with Primary Care Divisions, two each mentioned links with Health Promotion Units, Trusts, Primary Health Care Teams, voluntary organisations and local councils. One mentioned opticians, pharmacists and dentists.

4.6 Trusts’ Links

4.6.1 There were replies from nine Trusts sited within six Health Board areas.

4.6.2 All but one mentioned a link with the health promotion department.

4.6.3 Five each mentioned Primary Health Care Teams/Practice Staff/GPs and voluntary bodies.

4.6.4 Other groups mentioned by a minority included - local councils, dentists, pharmacists, HEBS, PAMs, schools/Community Education, opticians and public health medicine.

4.7 Conclusions

4.7.1 No identifiable difference was found in the knowledge or perceptions of links from different departments/organisations within a Board area, whether the health promotion unit was sited within or outwith the Board.

4.7.2 Network patterns were similar in only four Board areas out of nine areas from which there was more than one reply.

4.7.3 As might be expected, health promotion units had the greatest number and variety of links of all the groups of respondents.

4.7.4 Other than general practitioners, links with independent contractors seemed to be best with pharmacists, followed by dentists. Links with opticians appear few and far between.

4.7.5 Many primary care divisions replied wholly in terms of "banding" arrangements when identifying links.

4.7.6 Public Health Medicine involvement in health promotion in primary care appears variable.

4.7.7 Trusts often viewed "primary care" as their community nursing staff and identified links for health promotion in primary care in those terms, without identifying links to general practices.

4.7.8 The group felt that a contributing factor to these obvious weak links was the frequent organisational changes in the health service in recent years.

4.7.9 There is room for improvement in the different departments' and organisations' actual networks and knowledge of networks for health promotion within primary care within their own area.
4.8  Recommendations

4.8.1  Partners forming a strategy for health promotion within primary care should consider how to increase their knowledge of networks and their understanding of how these can help to achieve the aims of the strategy. (See below for examples of people/organisations to link with at strategic and practice/locality level.)

4.8.2  A local strategy should address points identified in the above conclusions and determine who needs to be involved to achieve the aims of the strategy.

4.8.3  It may be useful for Board areas to identify the strength of links between the various partners when developing a strategy for health promotion in primary care. Where weak links are found, action could be identified within the strategy to improve this.

EXAMPLE OF LINKS AT STRATEGIC LEVEL

<table>
<thead>
<tr>
<th>HEALTH PROMOTION</th>
<th>HEBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care HPOs</td>
<td>SPORTS COUNCIL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>LOCAL AUTHORITY</th>
</tr>
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<tbody>
<tr>
<td>Public Health</td>
<td>Community Education</td>
</tr>
<tr>
<td>Primary Care</td>
<td>Leisure Services</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMUNITY HEALTHCARE TRUST</th>
<th>AREA MEDICAL COMMITTEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Nursing</td>
<td>AREA PHARMACEUTICAL COMMITTEE</td>
</tr>
<tr>
<td>Professions Allied To Medicine</td>
<td>AREA OPTICAL COMMITTEE</td>
</tr>
<tr>
<td></td>
<td>AREA DENTAL COMMITTEE</td>
</tr>
</tbody>
</table>

| LOCAL GROUPS/VOLUNTARY BODIES | |
|------------------------------| |

EXAMPLES OF LINKS AT PRACTICE/LOCALITY LEVEL

<table>
<thead>
<tr>
<th>HEALTH PROMOTION</th>
<th>PRIMARY HEALTH CARE TEAM</th>
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</thead>
<tbody>
<tr>
<td>General Practitioners</td>
<td></td>
</tr>
<tr>
<td>Practice Nurses</td>
<td></td>
</tr>
<tr>
<td>other staff and attached staff</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<th>SCHOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Nurses</td>
<td>Parents</td>
</tr>
<tr>
<td>Professions allied to medicine</td>
<td>Teachers</td>
</tr>
<tr>
<td>Clinical medical officers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LOCAL GROUPS</th>
<th>LOCAL PHARMACISTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUNTARY ORGANISATIONS</td>
<td>LOCAL OPTICIANS</td>
</tr>
<tr>
<td>LOCAL LEISURE FACILITIES</td>
<td>LOCAL DENTISTS</td>
</tr>
</tbody>
</table>
5 COSTS AND RESOURCES

5.1 Introduction

5.1.1 The single most important finding from this section of the questionnaire which was sent out to Health Board areas was how difficult the respondents found it to quantify resources used for health promotion in primary care, either in terms of whole time equivalent staff or in terms of actual cost. There was little consistency in the way this question was answered by the various groups of respondents, even amongst health promotion units.

5.2 Health Promotion Units

5.2.1 Costs ranged from £69 per 1000 residents to £520 per 1000 residents. Seven out of the eleven health promotion units answering this question spent under £200 per 1000 residents. Most health promotion units identified a health promotion officer responsible for this area of health promotion work plus clerical support. Some health promotion units also identified an amount of money for resources, and some also identified additional project staff.

5.3 Primary Care Divisions

5.3.1 There was a great variety in the way the questionnaire was answered by primary care division staff. Only one primary care division identified screening staff as a cost. Some primary care divisions attempted to quantify time spent by prescribing advisers, registration managers, services managers, project officers, development managers, finance staff, contracts officers, pharmacist facilitators, administrative assistants, dietetic facilitators, nurse advisers and information managers. The costs identified ranged from £4 per 1000 residents to £243 per 1000 residents spent.

5.3.2 It should be noted that two primary care divisions had health promotion officers or health promotion facilitators based with them.

5.4 Trusts

5.4.1 Several Trusts responding to this question identified community staff, health visitors, district nurses and community psychiatric nurses as being involved in health promotion in primary care. However, few attempted to quantify this resource. One Trust also mentioned school nurses, dietetic and "cookery" staff and dental services as being involved. One Trust quantified time spent by several staff at a Health Promotion Steering Group meeting.

5.5 Consultants in Public Health Medicine

5.5.1 At Health Board level, four Public Health Medicine Departments attempted to quantify the involvement of their consultants in health promotion in primary care. This ranged from 0.05 whole time equivalent (WTE) in two Health Board areas to 0.35 WTE (approximately £2,250 - £15,750).
5.6 Total costs identified by the questionnaire

5.6.1 Information on costs and resources was only complete for one Health Board area (i.e. information was received from all four of the various respondents). In this Health Board area the total cost identified across all the areas was approximately £163,000. This is equivalent to approximately £411 per 1000 residents.

5.7 "Banding" Costs

5.7.1 Information on the total cost of GP "banding" payments was gathered via the questionnaire. Diagram 1 overleaf shows the scale of "banding" costs and other identified 'health promotion in primary care' costs, for 12 Health Board areas. (Comparison with the total health promotion budget could also be made.)

5.8 Conclusion

5.8.1 Although the 'health promotion in primary care' costings identified via the questionnaire are incomplete, there is no doubt that the cost of the "banding" payments made to general practitioners is in the order of 3-4 times as much as the other identified costs put together.

5.9 Recommendations

5.9.1 Purchasers/providers should consider carefully how to measure the costs for health promotion in primary care, e.g. financial resources, staff time, project funds.

5.9.2 Purchasers/commissioners should consider if the level of investment is appropriate to the expected outcomes/outputs of the strategy.
6 GP VIEWS OF HEALTH PROMOTION IN PRIMARY CARE

6.1 Introduction

A report on Health Promotion in Primary Care would not be complete without an account of what is happening in general practice.

6.2 Background

6.2.1 Payments to General Practitioners for carrying out health promotion were first introduced in the 1990 GP contract. To qualify for a fee at least ten people had to be seen at a Health Promotion clinic run by the GP or a suitably qualified member of the team. The clinic had to be approved by the Health Board and be on a topic related to promoting health. This system allowed flexibility in the topics which could be covered but it was difficult for small practices to have enough patients to attend one session to make a clinic viable.

6.2.2 In 1993 the Health Promotion Regulations were completely changed to target Coronary Heart Disease and Stroke - and also to distribute the health promotion money more equitably. Many GPs who had struggled for three years to get clinics running suddenly found the rules had changed and they had to adapt to a new system.

6.2.3 During the summer of 1996 (as this report was in first draft) further changes were made to the GP contract. These allow for greater flexibility in the type of health promotion work undertaken and give the responsibility for monitoring to the GPs themselves. The system will be run locally by a Health Promotion Committee consisting of four LMC members, two Health Board representatives and an audit representative.

6.3 GP Survey carried out while the 1993 regulations were in operation

6.3.1 In order to make an assessment of the feeling among professionals actually working in primary care views were sought from a 20% sample of Scottish GPs randomly selected from lists of principals provided by Health Boards. A postal questionnaire was sent to 680 GPs and returned by 329. This represents a response rate of 48%. (The questionnaire is attached at Appendix 2). Although directed at GPs, encouragement was made to complete the questionnaire as far as possible on behalf of the whole team.

6.3.2 Table 1 overleaf shows the response rate from each area, the sex of the respondent and the year of qualification as a GP. The sample is representative of the pattern of GPs in Scotland.

Of the respondents 88% were approved to carry out Band 3 level Health Promotion programmes and only 3% were not taking part.

6.3.3 Table 2 on page 16 shows the effect of 1993 funding arrangements on the amount of health promotion carried out and the income from health promotion.
Table 2

<table>
<thead>
<tr>
<th></th>
<th>Increased</th>
<th>Decreased</th>
<th>Not changed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of health promotion carried out in my practice</td>
<td>36%</td>
<td>7%</td>
<td>57%</td>
</tr>
<tr>
<td>Income from health promotion</td>
<td>35%</td>
<td>22%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Interestingly, although 57% of all GPs said that the new health promotion arrangements had not changed the amount of health promotion carried out in the practice, the figure was 86% when only Band 2 GPs were looked at. Similarly, 69% of Band 2 doctors said that their income had not changed compared with 39% of Band 3 GPs indicating an increase in their income.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current funding arrangements benefit my patients</td>
<td>14%</td>
<td>81%</td>
</tr>
<tr>
<td>Current funding arrangements encourage me personally to discuss health promotion issues with patients</td>
<td>27%</td>
<td>71%</td>
</tr>
<tr>
<td>Current funding arrangements have prevented me carrying out health promotion work in areas other than coronary heart disease</td>
<td>27%</td>
<td>73%</td>
</tr>
<tr>
<td>Current funding arrangements have made us consider health promotion in most consultations</td>
<td>22%</td>
<td>76%</td>
</tr>
<tr>
<td>Would you like to continue the banding scheme in its present form?</td>
<td>19%</td>
<td>78%</td>
</tr>
</tbody>
</table>

6.4 Banding Scheme

6.4.1 78% of GPs do not wish to continue with the banding scheme in its present form (see Table 3). Those GPs were asked to describe the sort of changes they felt would be useful and many took the opportunity to comment.

6.4.2 The most common view was that the scheme should be scrapped as it was felt to be merely data collection involving considerable paperwork for doubtful clinical benefit.
6.4.3 Several GPs noted their resentment at being dictated to by government and felt that GPs were in a good position to assess their own patients' health promotion needs at a practice level. More flexibility and freedom to organise specific practice projects would be welcomed.

6.4.4 Several doctors took the view that if financial reward is to be given it should be for those who have devised, implemented and audited projects or actually provided or purchased interventions.

6.4.5 There was strong feeling that media campaigns especially involving the soap opera script-writers would be a more cost effective way of delivering health promotion messages to a wide target audience.

6.5 Existing Health Promotion Projects

6.5.1 In addition information was sought about the number of health promotion projects being carried out in practices and about areas of health promotion which the GPs would like to develop. The future developments results are given in Chapter 9.

6.5.2 48% of respondents said they had carried out health promotion projects in their practice. Doctors qualifying within the last five years or during the 1970s were more likely to have carried out health promotion projects in their practices.

6.5.3 These projects cover a wide variety of topics, the most common of which are stop smoking initiatives, well woman and well man clinics, post MI clinics and taking part in local campaigns, e.g. Good Hearted Glasgow and Be Better Hearted. Other initiatives included teenage health clinics, stresswise project and "exercise on prescription".

6.6 Team Members Involved

6.6.1 It was evident from the replies to Question 5 that in most practices several professionals are involved in the delivery of Health Promotion. The types of staff and numbers of professions involved are given in Table 4.

<table>
<thead>
<tr>
<th>Category of staff</th>
<th>No of GPs who ticked this category</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Practitioners</td>
<td>312</td>
</tr>
<tr>
<td>Practice nurses</td>
<td>296</td>
</tr>
<tr>
<td>Health Visitors</td>
<td>247</td>
</tr>
<tr>
<td>Community nurses</td>
<td>142</td>
</tr>
<tr>
<td>Midwives</td>
<td>113</td>
</tr>
<tr>
<td>Other</td>
<td>27</td>
</tr>
</tbody>
</table>

Other professionals involved included receptionists, dieticians, physiotherapists, psychologists and so on.
6.7 Conclusion

6.7.1 There is clear interest among General Practitioners in the development of health promotion. Historically, however, the mechanism of the introduction of health promotion payments and the regulations surrounding them appear to have engendered resentment among GPs. In addition, the collecting of data is seen by many as an unnecessary burden with little or no clinical benefit. There is enthusiasm to develop preventive services in the primary care setting but there must be more support from government and society as a whole if it is to happen.

6.7.2 This group welcomes the recent decision to amend the regulations pertaining to health promotion and the GP contract. The new 1996 Health Promotion arrangements permit a wider spread in the type of health promotion work carried out in primary care settings. Practice teams must be cognisant of local and national priorities, while addressing the needs of their own practice population. This can be achieved by making use of the strengths within each team. This is an opportunity for the Health Promotion "specialists" to work in partnership with primary care professionals to develop appropriate, workable and effective initiatives.

6.7.3 Health Promotion is a process and health professionals should not become disillusioned by the pace of change. Plans have had to be made rapidly for the new Health Promotion regulations because of short deadlines set by government. However, there remains tremendous opportunity over the next 18 months for partnership between "specialists" and those "on the ground" offering mutual advice and support which should ultimately benefit individuals and the community.

6.8 Recommendations

6.8.1 LMC led Health Promotion Committees should take the opportunity that the new arrangements give, to use health promotion and audit expertise along with GPs practical experience to develop meaningful work in practices, localities and communities.

6.8.2 GPs should recognise that because of their important position in any community their support for health promotion is vital, whether or not they themselves have any specialist interest or skills in this area.

6.8.3 Boards should continue to offer support and assistance to primary care teams in developing health promotion plans.

6.8.4 A strategic framework for setting up initiatives, monitoring progress and evaluation must be developed at local level.
7 EVALUATION AND MONITORING

7.1 Introduction

7.1.1 There was a great variety of methods for monitoring and evaluation reported by respondents. Some common themes emerged, but very few respondents mentioned any mechanism or strategy for evaluating health promotion in primary care.

7.2 Information gathered from the questionnaires sent to Health Board areas

7.2.1 28 respondents contributed 46 methods of monitoring or evaluation. Two respondents said they had no specific mechanism for evaluation and monitoring. Six respondents did not answer this question (see diagram 2 overleaf).

7.2.2 Eight mentioned using evaluation forms at health fairs and training sessions.

7.2.3 Six mentioned internal evaluation, usually on a superficial basis, for example assessing reports of projects.

7.2.4 Five respondents mentioned using an evaluation or monitoring or steering group for projects.

7.2.5 Three mentioned reviewing GP practice annual reports and assessing health promotion banding; a further two respondents mentioned the potential to monitor using the databases they had compiled on annual reports but had not yet done so; one respondent did use the information gathered from annual reports and fed back anonymised data to GPs.

7.2.6 Three respondents mentioned using external evaluation perhaps from academic bodies for some of the larger projects in their district.

7.2.7 Four health promotion departments mentioned assessing their activities using a variety of methods. One assessed against measurable objectives, one had a proforma for use by health promotion officers, one had an evaluation proforma, and one had an operational protocol which was built into the development of projects.

7.2.8 Three respondents mentioned using staff and consumer surveys and questionnaires.

7.2.9 Five respondents mentioned a more systematic approach to evaluation. One Health Board area developed an evaluation framework (see appendix 3) which was used in assessing applications for funding and in reviewing completed projects. This had been done by an individual officer or by a review team. One respondent had a dedicated projects officer mostly for Primary Care Development Fund projects. The officer reviewed reports and also used an evaluation panel in assisting in the evaluation of completed projects. One respondent had requested money from the Management Executive to assist in the evaluation of Primary Care
Development Fund projects, and was using GP locality representatives to assess projects within their area. One respondent was currently working on an evaluation strategy. One respondent had requested funding from the Health Board for a co-ordinator to set up monitoring and evaluation systems.

7.2.10 Two respondents mentioned evaluation by the relevant professions through the contracting process.

7.2.11 In addition, one respondent each mentioned - using the Lifestyle Survey to monitor the impact of health promotion activities; using community nursing data; audit; staff training; and evaluation.

7.3 Conclusion

7.3.1 Although evaluation goes on to a greater or lesser extent in most Health Board areas, it appears disorganised and unsystematic. Current evaluation methods may have some impact on the individual project or activity that was studied, but the responses to the question did not indicate that evaluation was used in a strategic way - that is, to influence the overall direction of health promotion in primary care.

7.4 Recommendations

7.4.1 Health Boards should collaborate, so that exchange of information on projects, activities and their evaluation would avoid duplication of effort and allow a more consistent approach to the evaluation of effectiveness and cost-effectiveness.

7.4.2 There is a need for a mechanism or system for accessing standard evaluation methodologies in health promotion.

7.4.3 There is a need to explore how research methodologies and audit are being used in monitoring and evaluating health promotion.

7.4.4 The evaluation of effectiveness or cost-effectiveness of priority areas/topics should be undertaken at national level as it is unlikely that any one district would have appropriate research resources available. All Health Boards could contribute resources and benefit from properly conducted trials.
8 THE EFFECTIVENESS AND COST-EFFECTIVENESS OF HEALTH PROMOTION IN PRIMARY CARE

8.1 Introduction

8.1.1 Health promotion in primary care covers a range of interventions by a variety of health care professionals delivered in a range of settings. It is important in terms of the resources it consumes, not least through the system of payments to General Practitioners for health surveillance and health promotion activities. It is also important in terms of the political emphasis placed upon it (Scottish Office Dept. of Health, 1996) and the research effort currently devoted to it.

8.1.2 Several reports have appeared recently which include reviews of the available evidence on the effectiveness and cost-effectiveness of health promotion in primary care (Scott and Maynard, 1991; Hughes, 1993; Shackley and Donald, 1993; Buck and Godfrey, 1994; Bunton et al, 1994; Daykin et al, 1994; Tolley and Rowland, 1995; Russell, 1995; Scottish Office Dept. of Health, 1996). There have also been papers and reports which discuss the methodological and conceptual issues raised by the evaluation of health promotion in general (Tolley, 1993; Cohen, 1994; Burrows et al, 1995) and the evaluation of health promotion of primary care in particular (Pehl, 1994; Russell, 1995).

8.1.3 This report does not represent a systematic review and summary of all the available literature, partly because of the wealth of review literature already available, and partly because we have identified a need amongst purchasers for help in interpretation of the available information. Both the review literature and the original papers often cite the results of studies with little methodological discussion, making it difficult to judge the robustness of the results.

8.1.4 In this chapter we therefore:

- draw out broad themes from the available literature;
- discuss the methodological issues which should be borne in mind in interpreting the literature;
- illustrate the points made with detailed review of a selection of articles from that literature.

8.2 Main findings

8.2.1 There is an absence of good, generalisable evidence on the effectiveness and cost-effectiveness of most health promotion activities (Scott and Maynard, 1991; Hughes, 1993; Shackley and Donald, 1993; Tolley, 1993; Tolley and Rowland, 1995; Scottish Office Dept. of Health, 1996). Health promotion in primary care is no exception.

8.2.2 Methodological problems are particularly acute in the evaluation of health promotion (Tolley, 1993; Pehl, 1994; Burrows et al, 1995).

8.2.3 Health promotion in primary care tends to take an individual perspective. Interventions are targeted at individuals whether identified on a mass screening or opportunistic basis. The individual approach should not be looked at in isolation from a community or population approach, partly because the balance between individual and population approaches should reflect their relative effectiveness and cost-
effectiveness, partly because they should not be seen as alternatives. Intervention at
the individual level within primary care is likely to have a greater impact if it is set in
the context of a coordinated population-based approach (Russell, 1995; Scottish
Office Dept. of Health, 1996).

8.2.4 The appropriateness of the biomedical model of health promotion implicit in
much of existing policy and research has been questioned. Calls for greater
emphasis on social causes of ill health, lay definitions of need, empowerment and
participation in, as opposed to passive receipt of, health promotion have been made,
both to increase the impact of health promotion, and to increase our understanding
of health promotion as a basis for more valid evaluation (Daykin et al, 1994; Russell,
1995).

8.2.5 Research has shown that people's understanding of risk markers is greater
than is often assumed. Therefore, health promotion based on the belief that
people's failure to adopt the behaviours encouraged by health promoters reflects
ignorance or irrationality, is unlikely to be effective. Patchy uptake of health
promotion messages reflects the constraints faced by many people on the lifestyle
'choices' they make. It also mirrors 'experts' own partial understanding of the links
between lifestyle and ill-health, and the mixed messages to which this uncertainty is
perceived to give rise (Frankel et al, 1991; Sheldon et al, 1993). Health promotion
strategies need to be devised which recognise these constraints.

8.2.6 Concern has been expressed that health promotion based in primary care will
widen health inequalities as there is evidence that the inverse care law applies to the
 provision of health promotion clinics (Gillam, 1992; Langham et al, 1995; Davis et al,
1996).

8.2.7 There is considerable doubt regarding the effectiveness and cost-
effectiveness of payments to GPs to undertake health promotion as part of the GP
contract (Scott and Maynard, 1991; Hughes, 1993; Russell, 1995). Opportunistic
approaches with health promotion advice tailored to the needs and circumstances of
individual patients would be more effective and cost effective than routine checks on
unselected individuals. The current GP contract places too much emphasis on the
blanket collection of data on risk markers and too little on the use of such data to
target effective interventions on patients most likely to benefit (Oliver, 1992;
Shackley and Donald, 1993; Stott, 1994; Field et al, 1995; Imperial Cancer Research
Fund OXCHECK Study Group,1995; Toon 1995).

8.2.8 A range of health promotion schemes within primary care were found not to
be effective in terms of their impact on 'objective' measures of risk, although they did
seem to impact upon perceived well-being and lifestyle (Gibbins et al, 1993; Cupples
and McKnight, 1994; Lindholm et al, 1995; Imperial Cancer Research Fund
OXCHECK Study Group,1995).

8.2.9 There is relatively robust evidence that GP advice to stop smoking is effective
and cost-effective (Cummings et al, 1989; Sanders, 1992; Buck and Godfrey, 1994).
8.2.10 The evidence on the effectiveness and cost-effectiveness of counselling in primary care is limited (Tolley and Rowland, 1995).

8.3 Methodological Issues

8.3.1 Health Boards’ purchasing decisions with respect to health promotion involve two kinds of choices:

- Within the overall budget of the Health Board, how much should be spent on health promotion? This question requires information on the effectiveness and cost effectiveness of health promotion relative to curative, rehabilitative and other broad categories of health intervention.
- Within the resources allocated to health promotion, what combination of activities would have maximum impact in reducing morbidity, mortality or any other target of health promotion activity? This question requires information on the relative effectiveness and cost effectiveness of different forms of health promotion.

8.3.2 There are important methodological issues which need to be considered before attempting to review the available evidence on the cost-effectiveness of health promotion (Drummond, 1980; Tolley, 1993).

Issue 1 Defining the relevant comparator

8.3.3 The cost-effectiveness of interventions can only be judged in relation to other services competing for the available resources. Definition of the choices different agencies face, and therefore the comparisons between services which need to be made, are therefore crucial.

8.3.4 Important issues in health promotion within primary care include:

- is population screening or opportunistic case finding a more cost-effective way of detecting people at risk of coronary heart disease, stroke, various cancers etc?
- are health promotion target payments a cost-effective way of encouraging GPs to detect and attempt to modify the risk factors of people at risk of these diseases?
- are drug therapies, such as cholesterol lowering drugs, more cost effective than counselling and other non-pharmacological methods of reducing risk factors?
- is risk factor modification either feasible or effective in altering the subsequent incidence and prevalence of disease, or do socio-economic factors prevent any effective interventions?

8.3.5 Isolating the key issues in this way is crucial because cost-effectiveness is context-specific in a number of ways. Firstly, the distinction needs to be made between the intervention per se and the use of an intervention in a particular care setting. The issue for this report is not whether to undertake health promotion, but whether it is cost-effective to do so in primary care.

8.3.6 Secondly, there is no such thing as the cost-effectiveness of health promotion in primary care. Assessment of the over 75s, for example, may be cost-effective if delivered on an opportunistic case finding basis, but not on a population basis. It may be more cost-effective for the over 85s than for the over 75s. The key point is that the cost-effectiveness of an intervention depends upon the intervention with which the comparison is made, which in turn should depend upon the purchasing decision which is being made.
8.3.7 Thirdly, purchasing decisions are often concerned with changes in expenditure on different elements of an overall 'package' of services, rather than complete withdrawal of existing services or implementation of new ones (Cohen, 1994). The relevant comparison is usually the costs and benefits of marginal increases or reductions in particular health promotion services both of which will depend on the current level of service, and will usually differ from the cost-effectiveness of the service as a whole.

In reviewing studies on the cost-effectiveness of health promotion in primary care, it is therefore necessary to assess the interventions compared in each study before generalising the results to other settings or patient groups. The alternatives compared should be clearly defined in each study. Often this is not the case.

**Issue 2 Objectives of health promotion**

8.3.8 The benefits of health promotion are often discussed in terms of the resource savings arising from reductions in morbidity or mortality. This is questionable for three reasons:

- it suggests that health promotion which does not save resources would not be justified on economic grounds;
- the short term resource savings are likely to be offset by additional resource use overall arising from people's greater longevity;
- the ultimate objective of the health service in general and health promotion activity in particular, is not to save money, it is to enable people to lead longer, better quality lives.

8.3.9 Evaluations which claim resource savings as a reason for giving a particular activity a high priority should therefore be viewed with caution (Cohen, 1994).

8.3.10 This emphasises the importance, in both evaluation and in the interpretation of evaluations, of being clear and precise about the objectives of the intervention evaluated. The objectives of a particular intervention may constitute one of a broad range of potential intermediate objectives such as changing knowledge and attitudes (of patients and health care professionals), changing behaviour or structural changes to institutions, policies etc.

8.3.11 Involvement in the process of health promotion may itself confer benefits in the form of increased awareness of health issues or enhanced self-esteem. Patients may value increased awareness of health issues in itself, or they may value the knowledge that they are doing what they can to improve their health or reduce the risk of ill-health. The results of a screening test which indicates they are in good health may improve their perceived quality of life (against which one has to consider the potential for increased anxiety or reduced self-esteem should screening or other health promotion activities incorrectly diagnose patients as being at high risk of a particular condition, or correctly diagnose a risk about which nothing can be done because effective interventions do not exist). Such benefits may be important objectives of health promotion.

**Issue 3 Measurement of outcomes and costs**

8.3.12 The list of potential objectives of health promotion suggests a wide range of outcome measures are needed to evaluate health promotion. Within a biomedical model, 'objective' measures such as mortality or blood pressure may be easy to take,
but they are difficult to interpret because of the large number of imperfectly
understood links between such variables and the health promotion activity (see
Section 8.3.19 below). Intermediate outcome measures such as changes in
behaviour are more directly related to the health promotion activity but raise
measurement problems of their own. Self-reported changes in smoking behaviour
should ideally be checked biochemically and over a long enough time period to be
certain that the change is genuine and sustained. Self-reported dietary changes are
notoriously unreliable. Other outcomes, such as changes in knowledge of risk
markers or changes in self-esteem are more difficult still to measure and are likely
not to be measured at all, yet they represent important potential benefits of health
promotion. How important is itself a matter of debate requiring empirical analysis.

8.3.13 Measurement on the cost side raises similar issues of scope and accuracy.
Dietary changes encouraged by health promotion may impose financial costs on
patients. Participation may impose less tangible costs in the form of stress or
anxiety. At the same time as receiving GP advice, patients may be exposed to
health promotion messages from other sources which incur costs but which are
difficult to apportion to individual patients. The costs of GP advice are often
estimated solely in terms of GP time, with no estimate made of the administrative
support costs involved in storing data, managing clinic sessions and so on.

8.3.14 It is important in interpreting study results to question the scope and assess
the likely accuracy of measures of cost and outcome (Drummond, 1980). The
measurement issues raised in evaluating health promotion are particularly difficult
(Tolley, 1993; Scottish Office Dept. of Health, 1996, pp32-33). Guidance on the use
and relative merits of different approaches to costing is available (Drummond, 1980;
Tolley, 1993).

Issue 4
Discounting

8.3.15 It is conventional in economic evaluation to discount both the costs and
benefits of the interventions being evaluated. This reflects the assumption that most
people faced by the choice of paying £100 now or in the future would delay payment,
whereas faced with the option of receiving £100 now or in the future most people
would choose to have the cash immediately. In short, delaying costs or benefits
diminishes their real value. Economists refer to this as time preference.

8.3.16 Concerns have been expressed that this biases evaluations of health
promotion because costs incurred in the present do not yield benefits often for many
years into the future (Cairns, 1992; Parsonage and Neuberger, 1992). Discounting
means that the value of these benefits within an evaluation of a particular
intervention can be very small, even if, in undiscounted terms, they may seem
significant. The assumption that time preference applies to health in the same way
as it applies to financial or other resources has therefore been questioned, and the
suggestion made that benefits should not be discounted.

8.3.17 Four important arguments against not discounting benefits are:

- It would be inconsistent with evaluations from other areas of economic activity;
- It would be inconsistent with the treatment of costs. Costs, according to the
  notion of opportunity cost, are benefits foregone. Failure to discount benefits
  whilst discounting costs can mean that interventions with very small benefits
  which continue for ever can be considered worthwhile irrespective of the initial
cost;
• national real income is rising, so £1 now represents a larger proportion of total income than it will in the future;
• people’s behaviour suggests they do discount future health benefits. For example, people undertake risky behaviors, even though they know it increases the likelihood of ill-health in the future. They may trade-off the immediate pleasure derived from that behaviour, and the risk that some other event might prevent them from living their natural lifespan, against the risk of future illness.

8.3.18 These issues can not be resolved because they involve value judgements regarding the value of postponed benefits. This will vary from person to person. However, two partial solutions to the problem are (Tolley, 1993; Cohen, 1994):

• sensitivity analysis - check whether evaluations have tested the effect on the results of different discount rates. If results are not sensitive to the discount rate used, then arguments regarding the 'correct' rate are redundant;
• consider the short term benefits of health promotion. Measurable changes in physical health may be delayed for many years, or they may not appear at all, but individuals may still derive benefits in the form of immediate reassurance, satisfaction and self-esteem (Daykin et al, 1995). Short term benefits should be considered for the sake of completeness, and to reduce the bias against interventions which have an impact on physical health delayed into the future.

Issue 5 Attribution

8.3.19 The complexity of the causal chain linking health promotion to improvements in health means that it is usually difficult to be confident that observed changes are the result of the intervention under study, and unusually difficult to control for confounding factors in study designs. Observed changes may result from other causes and may not be generalisable to other care settings or geographical locations. The absence of any observed effect may disguise a true effect that was swamped by other factors.

8.3.20 These problems arise due to the sheer number of links in the chain between a health promotion intervention and its impact on health, and due to the number of confounding factors weakening the links in this chain. For example, health promotion target payments need to change the GP's behaviour, the GP has to change the patient's behaviour, the change in behaviour has to reduce the level of the risk factor, such as blood cholesterol levels, and the change in the risk factor has to translate into reduced incidence of disease. The breakdown in any one link in this chain means that an intervention may be neither effective nor cost-effective even though it achieves its immediate objective, such as changing doctors' or patients' behaviour at reasonable cost. Doctors do seem to respond to financial incentives, i.e. the first link in the chain is intact, but it is not clear whether their responses will always be those intended or whether the responses represent more efficient practice (Hughes, 1993).

8.3.21 The problem also stems from the large number of factors which determine the nature and extent of risk-taking behaviour. Many of these factors are very poorly understood. Much of the understanding we have comes from medical sociology and psychology based on qualitative techniques. It has been suggested that:

"[i]n such circumstances, calls for strict 'scientifically' rigorous evaluations of new initiatives can be related to individual or sectional special interests, rather than intellectual integrity or the pursuit of the broader public good. They may
be intended merely to delay or to undermine the implementation of reasonable policies." (Taylor and Bloor, 1994, p85)

8.3.22 The judgement of 'reasonableness' still needs to be based on defensible criteria and analyses, however. There is a balance to be drawn between undue weight being placed on the results of poor analyses and no use at all being made of the results of imperfect analyses or analyses which do not fit preconceptions or techniques conforming to a narrow view of validity or robustness. 'Quantitative' should not be equated with 'robust' or 'valid'. The nature of health promotion is such that qualitative techniques will often be more suitable, even if the results are not easily translated into the quantitative frameworks which currently dominate clinical and economic analysis.

8.3.23 There is also a need for consistency of methodological standards across curative, rehabilitative and preventive care. The particular difficulties in evaluating health promotion, which in part explain the relative dearth of good research evidence on the effectiveness of health promotion, do not in themselves justify a low priority being attached to health promotion with respect to acute or rehabilitative care. There is a risk that lack of evidence is interpreted as evidence of ineffectiveness, especially where sectional interests are competing for scarce resources. In any case, the evidence of effectiveness and cost-effectiveness of acute or rehabilitative care is often equally thin.

8.3.24 There are quantitative techniques which can be used in estimating the impact of health promotion programmes. One method is to model statistically the interactions between different variables using the evidence that is available on the links between health promotion, risk factor modification and changes in health status. These models rely on a number of assumptions to fill in gaps in the available evidence. They facilitate analysis of the sensitivity of the conclusions to the assumptions that have been made. Assumptions can be replaced as new research evidence becomes available. Different assumptions can be made to reflect local factors such as risk factor prevalence. One such model is PREVENT. Studies based on PREVENT are summarised in Appendix 5.

8.3.25 Another way that has been suggested is to estimate the number of cases of a particular disease that would need to be prevented for the health promotion activity to generate savings that would outweigh the initial costs (A Walker, Greater Glasgow Health Board, personal communication). These estimates could then be compared with whatever evidence is available on the impact of health promotion to see whether the 'required' effectiveness fell within a plausible range. This makes an assumption that activities which do not generate net savings are less worthwhile. As argued above, this assumption is contentious.

8.3.26 These methods do not solve the fundamental problem of lack of information. However, choices are made, have to be made and will continue to be made. Quantitative modelling methods help in making these choices by maximising the usefulness of the available information, by clarifying the judgements required in making those choices and by testing the effects of different assumptions on the choices made.

8.4 Summary of Papers
8.4.1 As explained in the introduction, this report does not contain a systematic review of all the available literature. The appendices contain summaries of a range of publications selected on the basis of the following criteria:

- review papers/reports/books which provide a quick way into the available literature and illustrate broad conclusions arising from that literature;
- studies with randomised designs which represent some of the best available quantitative evidence of the cost-effectiveness of specific interventions within health promotion in primary care;
- studies which illustrate some of the methodological issues discussed earlier in this report.

8.4.2 Appendix 4 contains a summary of three reviews of available literature on different aspects of health promotion in primary care. The first reviews literature on the effectiveness of health promotion in primary care delivered by different health professionals (Daykin et al, 1995). The second and third cover smoking cessation advice in primary care. The second (Buck and Godfrey, 1994) was selected because it is the only study found which reviews evidence of cost-effectiveness. It also includes a secondary analysis of a study which is often quoted in support of the cost-effectiveness of GP advice to stop smoking, in spite of the very crude assumptions upon which that study was based. It illustrates that more sophisticated or up to date assumptions do not necessarily overturn the original conclusions. The third (Sanders, 1992) was included because it illustrates the rigorous standard which should ideally be set in selecting articles for review.

8.4.3 Appendix 5 summarises reports describing modelling approaches to the estimation of the effectiveness and cost-effectiveness of health promotion in primary care relative to other health promotion interventions. The articles illustrate the data sources, assumptions and methods typically used in such approaches.

8.4.4 Appendix 6 covers randomised studies. Apart from representing some of the best available evidence, they also illustrate methodological issues such as:

- the need for precision in the definition of the intervention evaluated;
- definition of benefit, ranging from physiological factors to perceived quality of life and behavioural change;
- measurement issues;
- potential biases;
- the care required in interpretation of results.

8.4.5 Appendix 7 includes a non-randomised study to illustrate some of the limitations on the conclusions that can be drawn from such study designs.

8.5 Conclusions

8.5.1 There is a dearth of good evidence of effectiveness and cost-effectiveness in health promotion in primary care, in part because of particularly acute methodological difficulties in assessing the costs and outcome of health promotion. Other methodological issues include discounting, definition of appropriate and precise objectives and choice of appropriate alternatives against which to compare health promotion interventions.
8.5.2 Some of the best available evidence suggests that GP advice to stop smoking is effective and cost-effective whereas considerable doubts exist regarding the current banding system of payments to GPs to undertake health promotion.

8.6 Recommendations

8.6.1 Results of published studies should be interpreted in the light of the methodological issues discussed in section 8.3 and the more general issues raised in section 8.2.

8.6.2 Purchasers and providers should consider allocating additional resources to quantitative and qualitative multidisciplinary collaborative research on issues of both national and local importance. Collaboration within and between Health Board areas would reduce duplication of effort, maximise impact and enable research expertise to be pooled (see section 7.4).

8.6.3 Purchasers and providers need to recognise that we are not yet at a stage where reliable effectiveness and cost-effectiveness evaluation can be applied across the board. Use of inappropriate evaluation methods may result in rejection of completely sound projects and funding of projects not “worth it”.
9 PRIORITIES FOR THE FUTURE

9.1 The Survey

9.1.1 There were responses from 12 Health Board areas which consisted of:

- 11 responses from Health Promotion Departments
- 2 from Public Health Departments
- 4 from Primary Care Departments
- 2 from Planning and Contracts
- 5 from Trusts

9.1.2 Common themes continue to focus on topic areas, particularly lifestyle issues, some of which fall within the national and local targets. With a poor response from Trusts it is difficult to assess nationally what health promotion is being considered in the planning process at a provider level.

9.1.3 Community care is mentioned a couple of times with the role of the primary health care team taking a wider involvement in community participation, identifying the needs of carers, getting involved in health alliances and addressing inequalities of health.

9.1.4 The role of dentists, opticians and pharmacists is identified as an area for development.

9.2 Key Themes

- need for a more coordinated and strategic approach to health promotion involving purchasers, providers and users

- develop interagency working, e.g. health needs assessment to help shift focus from disease risk factors to address the determinants of health

- narrow the gap between research and practice

- more support for teamworking

- health promotion should be intrinsic in practice development planning, responding to local population needs and Health Board health promotion strategy

- the development of the health promoting establishment in primary care

- current health promotion contractual arrangements require to be changed to allow a population perspective and positive health emphasis

- improve contracting process

- training and education of primary health care team

- encourage jointly funded initiatives
Table 5 shows the top issues for each of the groups of respondents.

### Table 5

<table>
<thead>
<tr>
<th>Health Promotion Units</th>
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<th>Primary Care Trusts</th>
<th>GPs</th>
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<td>• Alcohol and addictions</td>
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<td>• Mental health</td>
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<td>• Diet and nutrition</td>
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<tr>
<td>• Primary health care team links with others</td>
<td></td>
<td></td>
<td>• Smoking</td>
</tr>
</tbody>
</table>

The responses may reflect the different roles of these groups in that health promotion units have a training and supporting role.

### 9.4 GP priorities for the future

#### 9.4.1
43% of doctors indicated that there were areas of health promotion they would like to develop. Of these more than 20% singled out smoking as the main priority area to tackle and 10% felt that teenage and adolescent groups should be targeted specifically, not only about smoking but about a variety of health issues.

#### 9.4.2
Despite comments made in question 2 of the GP survey about proof of efficacy not being there to back up the Banding Scheme, 20% of those who wished to develop health promotion areas wanted to do so by modifying lifestyle factors (other than smoking), particularly increasing physical activity and improving nutrition. Other areas of interest were:

- menopausal counselling and osteoporosis screening
- screening for cancer
- men's health
- social deprivation and its effect on health
- improving breastfeeding rates
- prevention of child abuse and non-accidental injuries

#### 9.4.3
Several GPs commented that more resources, especially suitably trained personnel, are vital to be able to develop in this way.
9.5 Health Promotion Activities for the next five years

What would you consider important to develop in health promotion in primary care for your population over the next five years?

Appendix 9 summarises the replies from all 12 responding Health Boards.

9.6 Conclusion

9.6.1 There is a difference in approach to priorities from the different groups of respondents (see 9.3). GPs and Trusts tend to concentrate on topics or issues whereas health promotion units emphasise training and teamworking.

9.6.2 The need for a strategy for health promotion in primary care is recognised.

9.6.3 Health promotion interventions should naturally follow on from needs assessment within a general practice's practice development plan (see Diagram 3 overleaf for suggested framework). This framework could also be used at locality level to identify health promotion activity required to target assessed needs.

9.7 Recommendations

9.7.1 Partners in Health Board areas should use a framework to prioritise and describe current activity and projects. Table 6 suggests a way of prioritising under the different headings of groups (who), settings (where), topics (what) and methodologies (how).

<table>
<thead>
<tr>
<th>Priority</th>
<th>groups (who)</th>
<th>settings (where)</th>
<th>topics (what)</th>
<th>methods (how)</th>
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<td>smoking</td>
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<td>3</td>
<td>new mothers</td>
<td>GP surgery</td>
<td>breastfeeding</td>
<td>peer support</td>
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9.7.2 Health Board areas should develop a strategy for health promotion in primary care which includes relevant advice on effectiveness and cost-effectiveness, and prioritise future areas of activity according to local need and national targets.

9.7.3 Health promotion within general practice or within a locality should form part of the practice development plan or locality plan respectively and should be prioritised.
9.7.4 Purchasers and providers need to work together to develop efficient information systems for needs assessment and health promotion in primary care.

9.7.5 The primary health care team needs support to develop a broader, more positive approach to health promotion, rather than a disease/topic approach. Other local primary care professionals, e.g. opticians and pharmacists, could also be involved. This may be facilitated by a strategy for health promotion in primary care and by the criteria used by the new Health Promotion Committees. Additional resources may be required for this type of development.
Points for consideration

10.1 Introduction

10.1.1 The strategy for health promotion in primary care should ideally be a component of an overall multi-agency health promotion strategy.

10.1.2 The announcement that the GP Banding Scheme is to be amended was made after the first draft of this report had been completed. The proposed new, more professionally-led scheme is in line with our conclusions and recommendations.

10.1.3 Board areas might find it useful to have suggestions about factors which could be taken into consideration when implementing the new arrangements, as well as in the development of a strategy for health promotion in primary care.

10.1.4 It was the intention of this SNAP working group to emphasise the place of ophthalmic opticians and pharmacists as well as primary health care teams in relation to this subject, however we had difficulty in identifying material to use. We feel that these other primary care professionals are probably an underused resource and further work is required to promote their involvement in health promotion.

10.2 Who needs to be involved?

10.2.1 Consider involving or consulting with the following groups:

- Health Promotion Departments
- Public Health Consultants
- General Practitioners
- Practice Managers & Reception Staff
- Practice Nurses
- District Nurses
- Health Visitors
- Community Midwives
- Health Promotion Committee for the new GP Health Promotion Scheme
- Pharmacists
- Dentists
- Opticians
- Local Councils (social work, leisure services, community education, education)
- Community Groups
- Voluntary Groups
- Professions Allied to Medicine
- Director of Primary Care of the Health Board
- Local Health Council

10.3 Where are we now?

10.3.1 Re-examine the activities and networks/links of those who are involved. The replies to our questionnaire clearly showed that people in the same Board are not always aware of others or their activities. Use the framework described in 9.7.1.

10.3.2 Identify the resources (funds and staff-time) currently being used for health promotion in primary care in your area. What should be included? Are the resources being used effectively? Are they distributed equitably in relation to the health needs of the local population?
10.3.3 What methods of monitoring and evaluation are used? Are the results of evaluation robust? Are they used strategically to consider the appropriateness of existing resource use across health promotion in primary care?

10.4 Where do we want to be?

10.4.1 Agree definitions for the purpose of your strategy:

- Does 'primary care' include activities led by primary care professionals in community settings as well as activities within primary care premises?
- Does 'health promotion' include prevention, such as immunisation and screening, as well as promotion?

10.4.2 Agree priorities across the different dimensions of health promotion - who (groups), what (topics or issues), where (settings within primary care), how (methodologies).

10.4.3 Use available literature on effectiveness and cost-effectiveness to help in the prioritisation process. Chapter 8 provides guidance on the interpretation of available literature.

10.4.4 Use available area, locality or practice health needs assessment data to help in the prioritisation process.

10.4.5 Are your priorities likely to contribute towards the achievement of other Board strategies, e.g. health strategy, primary care strategy, health promotion strategy, health targets?

10.5 How do we get there?

10.5.1 Look at the vision of where you want to be and your identified priorities. Look at where you are now and identify the gaps.

- What can you do to fill the gaps?
- Who needs to be involved?

10.5.2 It is likely that the greater part of the resources available in your area for health promotion in primary care will be managed through the new GP health promotion scheme. How can that resource be most effectively used? Can Practice Health Promotion Plans follow on from Needs Assessment within the practice and become part of Practice Development Planning?

10.5.3 Can the new GP Health Promotion Committee use your strategy to help encourage health promotion activity that will contribute to the strategy? Can Practice Health Promotion Plans be required to fit within your strategic framework in addition to responding to locally identified needs?

10.6 Conclusion
10.6.1 There is a great opportunity to make a positive impact on the health of our populations by redefining, through a strategy, what we want to achieve with the resources available for health promotion in primary care. Every effort should be made to use this opportunity to best effect.

10.7 Recommendation

10.7.1 Purchasers/commissioners should lead the development of a strategy for health promotion in primary care within the framework of a multi-agency health promotion strategy. Health promotion plans should be developed at locality and practice level within the framework of these strategies.
11 REFERENCES


Bunton R, Burrows R, Gillen K Muncer S, Interventions to promote health in economically deprived areas, Report to the Northern Regional Health Authority, 1994.


Cohen D, Health Promotion and Cost-Effectiveness, Health Promotion International, 1994, 9(4) 281-287


Daykin N et al, Effective Health Promotion in Primary Care, 1995, University of the West of England, Bristol.


Drummond MF, Maynard A (eds), Purchasing and providing cost-effective health care, Churchill Livingston, 1993.


Field K et al, Strategies for reducing coronary risk factors in primary care: which is most cost-effective?, BMJ, 1995, 310: 1109-1112.


Gillam SJ, Provision of health promotion clinics in relation to population need: another example of the inverse care law?, *British Journal of General Practice*, 1992, 42:54-56


Scottish Needs Assessment Programme, *Health Needs and Health Promotion in Deprived Areas* (draft), 1996.


# APPENDIX 1

**HEALTH PROMOTION PROJECTS IN PRIMARY CARE NOT FUNDED BY PRIMARY CARE DEVELOPMENT FUND**

**Ayrshire and Arran**

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<th>Project title</th>
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<th>Source of funding, if known</th>
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<tr>
<td>Young Person's Clinic</td>
<td>Dr Patricia Muirhead Kilwinning Medical Group Kilwinning</td>
<td>Health Board</td>
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<tr>
<td></td>
<td>Practice Nurse Bourtreehill Medical Practice Bourtree Irvine</td>
<td>Health Board</td>
</tr>
<tr>
<td>Pre-Pregnancy Advice</td>
<td>Dr A McGuire South Beach Surgery Ardrossan</td>
<td>Health Board</td>
</tr>
<tr>
<td>Sleep Management Clinic</td>
<td>Professor Colin Espie Glasgow University</td>
<td>Chief Scientist Office/Health Board</td>
</tr>
<tr>
<td>Stress Wise</td>
<td>Ms Alice Muir c/o Stewarton Medical Practice Stewarton</td>
<td>Health Board</td>
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<tr>
<td>Adolescent Clinic</td>
<td>Dr E Guthrie, Isle of Arran c/o Susan Dawson Health Promotion Unit Ayrshire General Hospital Irvine</td>
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<td>Vascular Study</td>
<td>Susan Dawson Health Promotion Unit Ayrshire General Hospital Irvine</td>
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<td>Community Health Worker - Muirton</td>
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</tr>
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<td>Teenage Health Initiative</td>
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<td>Dr D Bell Tayside Health Board</td>
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<td>Prescribing exercise for the elderly</td>
<td>Dr M Murdo/Dr Z Mathewson Tayside Health Board</td>
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<td>Mr T Dodd Tayside Health Board</td>
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<td>Young Person's Health and Information Project</td>
<td>Mr J Hosie Dundee Healthcare NHS Trust</td>
<td>Health Board/Regional Council/Urban Aid (evaluation - HEBS)</td>
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<td>Incontinence Project based in Community Pharmacies</td>
<td>Fiona Macrae</td>
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<td>Reducing use of anxiolytic and hypnotic drugs</td>
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<td>Investigation into dietary habits of travelling people</td>
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## Lothian

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<td>S Blackwood Midlothian District Council</td>
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<td>Liz Simpson Health Promotion Facilitator Lothian Health</td>
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<td>Dr C Bond Department of General Practice</td>
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<td>B Nettleon Health Promotion Department S Burnham HIV/AIDS Development Officer</td>
<td>HIV/AIDS Development funds</td>
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APPENDIX 4

REVIEWS OF EVALUATIONS OF HEALTH PROMOTION IN PRIMARY CARE

Daykin N et al, Effective Health Promotion in Primary Care, 1995, University of the West of England, Bristol.

One to one advice in primary care

‘Substantial’ evidence of effectiveness exists, in particular in relation to smoking prevention (based on an American meta-analysis of 39 randomised controlled trials [RCTs] carried out in 1988 and an assessment of the effectiveness of 169 interventions undertaken by the US Preventive Services Task Force in 1989). A 1979 study found a 5% cessation rate after GP advice accompanied by a leaflet and a warning of a follow up. This cessation rate was ‘significantly higher’ than in the non-intervention group. Effectiveness of GP advice has also been found with respect to dietary attitudes and alcohol consumption, the latter from an RCT.

Health promotion clinics and advice from practice nurses

The evidence is mixed. There is evidence to suggest that such clinics are more popular with patients than one to one advice, but two randomised controlled trials suggested that the impact of such clinics in relation to the cost is slight (see OXCHECK, 1995; Family Heart Study Group, 1994), although they did not take into account qualitative benefits of involvement in the health promotion activity. A concern was expressed that the inverse care law operates for these services, with low attendance amongst those in most need. The authors conclude such interventions may be effective if integrated in a broader strategy involving targeting on certain patients, such as those already motivated to change (which begs the question as to whether they would have changed anyway) or those whose disease has already been diagnosed.

Health promotion by community health staff

A recent RCT of health promotion advice by health visitors on cardiovascular risk factor management amongst angina sufferers found no impact on smoking habits, blood pressure, cholesterol concentration or body mass index, but higher levels of exercise, healthier diets and fewer restrictions on everyday activity amongst the intervention group.

Survey data suggest community health staff regard their roles as being particularly well suited to the delivery of health promotion within primary care although often this work is not integrated with that of the remainder of the primary health care team. No systematic evidence of the relative merits of different vehicles for health promotion in primary care is presented.

The authors stress the importance of integration of health promotion strategy and information across the full range of health promotion activity.
Banding

Issues raised:
- element of coercion;
- administrative burden;
- policy in general and the payments in particular are not related to burden imposed by socio-economic characteristics of practice population;
- stifles initiative rather than encouraging good health promotion;
- evidence base for policy is weak and evaluation has not been undertaken to strengthen it.

“Negative comments on the new organisational arrangements for health promotion outnumbered positive comments by almost 4:1”.


The authors reviewed the cost-effectiveness of a range of smoking cessation interventions in a variety of care settings. Results from the literature were presented, along with a commentary on the methodological strengths and weaknesses of each study. For some studies, the authors undertook secondary analysis of the results quoted in the literature to establish the sensitivity of the results to alternative assumptions or to the inclusion of more up date evidence on costs and/or effectiveness. The review highlighted the paucity of robust research-based data on both the effectiveness and cost-effectiveness of smoking cessation health promotion in primary care and other care settings.

Conclusions

The authors found one cost-effectiveness study, by Williams (1987). It was non-experimental, used effectiveness data from other sources and made very heavy use of simplifying assumptions:

- 1000 middle aged male patients consult, 500 of whom smoke, ratio of 1 in two;
- 5% of the smokers quit;
- heart attack rate reduced by 1/1000 by quitting, no other diseases considered;
- consultation lasts five minutes, with opportunity cost of 5 minutes of both GP and patient time included.

The resultant cost per discounted QALY was £167 in 1985 prices. Buck and Godfrey updated the cost figures to 1992-93, reduced the assumed smoking prevalence to 1 in 3 on the grounds that smoking has declined since Williams’ study, assumed a greater effect of stopping smoking on the heart attack rate(assumed cut of 1.4/1000), and reduced the duration of the intervention for non-smokers to 30 seconds on the grounds that it takes very little time to establish that the patient does not smoke. The cost per QALY fell to £119. Both estimates suggest brief GP advice to stop smoking is highly cost effective.

Systematic review of studies included if they passed the following criteria:

- adequate sample size;
- included randomisation to intervention and control groups;
- follow up of at least one year;
- include validation of self-reported cessation (some studies were included that did not pass this criterion if they did pass the other criteria);
- subjects were patients in health service settings recruited as addition to routine care (to avoid self-selection bias).

Fifteen studies were found on the effects of GP interventions in primary care. The studies were carried out between 1979 and 1991, 11 of which were undertaken in 1985 or later. Results are summarised in terms of:

- sample size;
- interventions received by intervention and control groups;
- follow up interval;
- percentage not smoking at follow-up and longer term;
- statistical significance of differences between control and intervention groups;
- validation method used to confirm cessation.

Edited abstracts of the key papers are also provided.

Differences in the intervention (for example, in terms of the intensity of the advice and follow-up) and in the study setting (which effects, for example, cessation in the control group) make it impossible to define the effectiveness of smoking cessation in primary care. However, studies consistently found differences in smoking cessation rates between control and intervention groups, which in 8 of the 15 studies were statistically significant.

The authors concluded that:

- advice from GPs is more effective than no advice;
- on average, 5% of smokers will stop smoking for at least one year following brief GP advice during one consultation (the basis of the figure of 5% is not clear);
- more intensive advice has been found by some trials to be more effective, although its overall impact may be offset by constraints on GPs ability or willingness to devote the additional resources required;
- effectiveness of nicotine chewing gum is uncertain;
- the use by GPs of smoking cessation interventions is patchy, but has been demonstrated to increase with reminders, protocols and training;
- interventions by practice nurses and community nurses have been shown to be effective depending on the nature and intensity of, and level of attendance at, smoking cessation clinic.
APPENDIX 5

SUMMARIES OF LITERATURE BASED ON MODELLING APPROACHES TO THE EVALUATION OF HEALTH PROMOTION IN PRIMARY CARE


The authors used a computer simulation model (PREVENT) to predict final health outcomes for ten health promotion smoking cessation interventions, four of which are based on GP advice with various additions such as nicotine gum, health promotion material or the use of nicotine patches. The model converts estimates of smoking cessation rates for each intervention taken from the literature into deaths averted and life years gained. Upper and lower estimates are made based on the range of cessation rates reported in the literature.

The resultant estimates of final health outcomes are then compared to the estimated costs of the interventions from the perspective of:

- the GP: opportunity cost of consultation time, administration and overheads;
- the NHS: the only costs additional to GP costs are costs of promotional material;
- the smoker: the opportunity cost of the smokers’ time in consultations and the costs of nicotine gum or nicotine patches.

The non-GP-based interventions such as No Smoking Days also include costs to society as a whole, for example, costs of media campaigns. All the costs involve a number of assumptions, often on the basis of flimsy evidence. Therefore, the authors report broad spans of cost estimates reflecting wide variability in plausible assumptions.

The simulation was based on the presumption that all interventions were successfully implemented and complied with, although the effects of low compliance were modelled.

The PREVENT model predicts the impact of health promotion over time to take account of the gradual decline in risk after the cessation of smoking. It considers the impact of smoking cessation in reducing the risk of a number of diseases. It also takes account of demographic trends. Both discounted and discounted health benefits are reported. The model makes a range of assumptions which are likely to overestimate the overall gains from smoking cessation. In particular, it assumes that the impact of intervention is permanent i.e. a 5% 12 month smoking cessation rate is assumed to apply to each cohort entering the model so that smoking prevalence is considered to be permanently reduced.

Conclusions

In general, the more intensive is the GP advice and ‘treatment’ (i.e. use of gum, patches or promotional material), the more effective is the intervention, but the less cost-effective it is. The additional costs outweigh the additional benefits of more intensive health promotion interventions. The authors also claim that GP-based interventions compare favorably to broader interventions such as TV campaigns or media promotion of cessation kits, although the cost estimates generally exclude costs to smokers themselves and additional costs to society as a whole involve the most heroic assumptions of all.
Discounting health benefits does not affect the relative cost effectiveness of the different health promotion interventions. It does, however, considerably reduce the overall value of the health benefits for all the interventions because they are realised well into the future. This reduces the cost-effectiveness of health promotion as a whole relative to interventions where the effect of treatment is more immediate.


Client group: hypothetical population disaggregated by sex and age (35-69, five year age bands)

Setting/agent: ‘routine office visit’ for General Practice consultation.

Intervention: one third of consultation (four minutes) devoted to brief advice to quit smoking. Self-help booklet given to patients.

Data/Assumptions:
- cost: one third of average consultation cost (1/3 of $30) plus cost of booklet ($2);
- effectiveness of interventions taken from meta analysis of four studies in primary care which met following inclusion criteria: randomised, follow-up of more than one year. Three of the studies had biochemically validated self-reported cessation. Cessation rate 2.7% higher than controls;
- subsequent relapse amongst those still abstinent at one year assumed to be 10% with none of the health benefits of quitting;
- estimated effect on life expectancy based on data from the American Cancer Society’s 25-state Cancer Prevention Study, estimates similar to estimates based on Framingham model;
- future survival discounted by 5%.

Results:
- $705 per life year saved for 50-54 year old men, to $988 for 35-39 year old men; $1,204 per life year saved for 55-59 year old women, to $2,058 for 35-39 year old women;
- More cost-effective in men than women.

Sensitivity analysis:
- the cessation rate was varied between the upper and lower limit of the 95% confidence interval from the meta analysis: 1.0% (range in cost per life year saved $1905-$5556) to 4.4% ($433-$1,263);
- cost was increased by 50% ($999-$2,915);
- all variables changed simultaneously to 1% cessation rate, intervention cost of $19, 50% relapse ($5,429-$15,833);
- cost-effectiveness compared favorably with other preventive strategies as estimated another studies, for which no methodological detail is given: adding nicotine gum to physician’s advice ($4113), treating moderate hypertension: diastolic BP >110 ($11,300), treating mild hypertension: diastolic BP 90-110 ($24,408), treating hypercholesterolaemia over or above 6,85mmol/l with cholestyramine ($65,511-$108,189).
Field K et al, Strategies for reducing coronary risk factors in primary care: which is most cost-effective?, *BMJ*, 1995, 310: 1109-1112.

*Client group:* all men and women aged 35-64; targeted at coronary risk factors.

*Setting/agent:* primary care based G-grade nurse giving health checks and lifestyle advice to those found to have coronary risk factors; GP prescribing and advising on use of cholesterol lowering drug.

*Intervention:* combination of education and prevention; range of interventions evaluated, which varied in the comprehensiveness of the risk factors assessed in the initial health check.

*Data/Assumptions:*

- prevalence of coronary risk factors taken from 7840 consecutive subjects attending first health check before February 1993 as part of the OXCHECK trial;
- effectiveness of interventions in terms of impact on risk factors assumed to lie between that reported in two recently reported trials (effectiveness varied between upper and lower levels in sensitivity analysis);
- impact of changes in risk factor on mortality estimated using the Framingham model;
- mortality reductions translated into life year gains using survival table.

*Results:*

- The more comprehensive the initial screen, the higher the cost per life-year gained.
- More cost-effective in men than women.
- Cost per life year was lower for older subjects (aged 60-69)
- At high cholesterol concentrations (over 9.5 mmol/l), providing cholesterol screening and treatment was more cost-effective than no cholesterol intervention; cost-effectiveness declined with cholesterol concentration.

*Discussion:*

Sensitivity analysis: relative position of different strategies unchanged; in men, under the worst scenario, the difference between the most and least comprehensive strategies widened.

Applicability of results: target population was in Bedfordshire, where prevalence of risk factors is probably less and therefore absolute cost per life year saved is probably more than, for example, northern England and Scotland. In contrast, the Framingham model overstates the gain from intervention and therefore the study probably understates the true absolute cost effectiveness. Neither factor would affect the relative cost effectiveness of the different interventions.

Methodological paper describing a method for using current life tables in a simulation of the impact of health promotion in terms of life years gained and resource implications. Life tables provided a baseline of mortality experience for a defined population. Adjusted life tables were then calculated using estimates of the likely impact of health promotion. The difference in the number of years lived according to the different sets of life tables represents the health gain arising from health promotion.

**Data/Assumptions**

- Breakdown deaths by age, sex and disease to identify the number of deaths associated with each of the lifestyles that health promotion seeks to modify. These deaths are subtracted from the total deaths for the defined population, and a scale factor then applied to adjust deaths in accordance with the assumed effectiveness of the health promotion, prior to recalculating the life tables. Model used to demonstrate impact of anti-smoking campaign.

- 5% of target population stop smoking.

- A range of epidemiological data are presented on smoking related mortality. The assumptions regarding the link between smoking cessation and reduced mortality are unclear. It would appear that complete cessation is assumed to reduce by 20% mortality from ischaemic heart disease, disease of arterioles and capillaries, and bronchitis.

- Reductions in mortality are not related to age, no time lags between cessation and risk reduction and no account taken of benefit-accrual profiles.

- Short term costs of the health promotion campaign, medium term *reduction* in costs arising from the treatment of smoking related diseases, and the long-term *increase* in costs incurred in supporting the elderly as a result of the reduced mortality from smoking related diseases, were estimated using secondary data sources. Details on how this was done are not provided.

- *Cost* data were discounted by 6%.

**Results**

- Net increase in 0.15% in the total life years experienced by the population (of North West England used as study area)

- Undiscounted costs: broadly neutral overall, rise in total hospital expenditure slightly more than offset by decrease in expenditure on primary care services.

- Discounted costs: substantial savings overall. The effects of discounting are to reduce the real value of the additional costs incurred in the long-term in caring for people who would have died from smoking related-diseases in the absence of health promotion.

**Conclusions**
The purpose of the paper was more to illustrate the potential of the method rather than to provide an accurate case study to inform policy making. Assumptions can be changed as more evidence becomes available on each of the relationships upon which the effectiveness and resource implications depend.

Important points to note are:

- this is not a cost-effectiveness analysis;
- additional treatment arising from increased longevity is regarded as a cost, the implications of which were discussed above;
- as it stands the analysis depends upon questionable assumptions regarding effectiveness;
- arguably, benefits should also be discounted.

*Client group:* all men and women aged under 75 identified by GPs as having had angina for at least 6 months and no other severe illness. Patients identified were sent letters asking for their consent to being interviewed about the effect angina had on their everyday activities, frequency of attacks of angina, drugs taken and lifestyle. 688 out of 1431 patients sent a letter were recruited to the study.

*Intervention:* Patients randomised to the control group (342 out of 688) were given ‘practical relevant advice regarding cardiovascular risk factors’ at an initial interview with a health visitor. Four monthly reviews including ‘appropriate health education’ took place for two years thereafter.

*Data:* interview by research worker with no previous involvement with patients, gathering data on restrictions on everyday activities, frequency of physical exercise, smoking habit (validated biochemically), blood pressure, body mass index, dietary habit and serum total cholesterol concentration at entry to trial and after two years.

*Results:*
- 317 (out of 342) in the intervention group and 300 (346) in the control group completed the trial, slightly less than the number estimated by the authors to be required to show significant differences at the 5% level;
- slight but non-significant reductions occurred in both control and intervention groups in blood pressure, cholesterol levels and body mass index. No significant difference between the groups in smoking habit, blood pressure, cholesterol concentration or body mass index;
- intervention group reported fewer restrictions on everyday activities, a healthier diet, and more regular exercise.

*Discussion:*
- no information is given on patients lost to follow up or on the non-responders at the initial consent stage. There were, however, no significant differences between the control and intervention groups at entry to the trial;
- the authors concluded that although there was no difference in ‘objective’ cardiovascular risk factors, the intervention did lead to improved quality of life relative to the control group;
- reporting bias amongst patients may have led to an overstatement of the improvements in diet, exercise and freedom from restrictions on everyday life - no validation of self-reported data took place;
- no link was found between diet changes and changes in cholesterol concentrations which is consistent with the overstatement of dietary changes. The measurement of dietary change was crude - self-reported frequency of eating different types of food - giving no indication of the intake of different food types;
- to the extent that reported changes reflect *perceived* changes in factors related to quality of life, they may constitute changes of value to patients. This illustrates the potential limitations of a narrowly biomedical model of health promotion.

Client group: 12,472 men and their partners identified by household.

Setting/agent: primary care based practice nurse. Pairs of practices in each of 13 towns randomly allocated to intervention and comparison groups.

Intervention: nurse-led programme, family centred approach. Families were screened in an initial interview, offered lifestyle advice and follow-up monitoring of risk factors for a year, frequency of which was determined by decile of the distribution of risk for CHD determined using Dundee risk score based on initial screen. Those with history of CHD and chest pain on exercise were automatically placed in the top decile of risk. Comparison group was identified at beginning of study, but not screened until one year follow-up.

Data: at one year the pairs of practices were compared for (a) differences in total coronary risk score (Dundee risk score) and (b) differences in cigarette/smoking, weight, blood pressure, and random blood cholesterol and glucose concentrations.

Results:

- Response rate 73% after adjusting for ghost families no longer traceable from data on practice lists.
- Contact maintained with 88% of men, 85% of women.
- Cigarette smoking 4% lower, although results biased by higher rates of smoking prevalence in the non-attendees in the intervention groups.
- Weight reduced on average by 1kg.
- Blood pressure reduced by 7mm Hg (systolic) and 3mm Hg (diastolic) although half of the reduction may reflect acclimatisation to having blood pressure measured in the intervention group.
- Cholesterol reduced by 0.1mmol/l on average.
- Dundee risk score reduced by 16% (7% attributable to blood pressure, 5% to smoking and 4% to cholesterol concentration).
- Estimated reduction in coronary heart disease risk if risk factor reductions maintained long-term of 12%.

Discussion:

Despite the intensity of the intervention, risk factor modification was moderate. Extension of the programme would require considerable resources (four full time nurses per practice with a list size of 1000 men aged 40-59 and their partners over 18 months). In practice, prohibitive cost means interventions, such as banded health promotion payments for GP’s, are likely to be less intensive and correspondingly less effective than intervention evaluated in this study.

**Client group:** 681 (339 in the intervention group, 342 controls) adults aged 30-59 years with at least two cardiovascular risk factors in addition to moderately high lipid concentrations.

**Setting/agent:** primary care (health centre) based health care professional (participating doctor or nurse) trained in health promotion.

**Intervention:** ‘intensive health care advice’ consisting of six group health education sessions in addition to the brief advice and a small pamphlet given to patients in the control group during doctor’s visit. Allocation to the two groups was prospective and random. Intervention included videos on specific risk factors, practical instruction in buying and preparing food, information on local exercise facilities and completion of forms on diet and lifestyle. Sessions took place over a 15-18 month period. Five sessions lasted 90 minutes. One, the fourth session, lasted all day.

**Data/Assumptions:**

- percentage reductions in total cholesterol concentration;
- differences between the two groups for cardiovascular risk (Framingham).

**Results:**

- 78% of enrollees attended all six sessions;
- slightly larger reductions in cholesterol concentration, Framingham risk score and individual risk factors in the intervention group but the differences were only significant for fat consumption, fibre intake and a lifestyle score (based on a seven-point scoring system assessing appetite, energy, quality of sleep, general well-being and happiness).

**Discussion:**

- the study is not an evaluation of health promotion per se, but an evaluation of the use of intensive health promotion using standard promotional materials practice/health centre-based resources only *over and above* standard advice from the doctor at routine visits i.e. the results suggest the *additional* benefit of intensive advice by practice staff not tailored closely to individuals’ circumstances is slight. This illustrates the points made in the introduction about the need to focus on marginal changes and precisely defined comparators;
- like the study by Cupples and McKnight, apparent changes in perceived well-being (and some risk factors) were not matched by changes in more ‘objective’ measures of risk, which raises the question of what are the relevant measures of outcome for health promotion.
Imperial Cancer Research Fund OXCHECK Study Group, Effectiveness of health checks conducted by nurses in primary care: final results of the OXCHECK study, BMJ, 1995, 310: 1099-1104.

Client group: 4121 men and women aged 35-64.

Setting/agent: five urban general practices in Bedfordshire. Patients given health checks from nurse trained in health promotion - instructed in importance of identification and follow up of patients with multiple risk factors using a 'patient-centred communication model'.

Intervention: 2776 randomised into treatment group to receive initial health check in 1989/90 - 2205 (82.2%) attended. Attendees randomised further, 1100 to receive annual rechecks up until 1992/3, 1105 to receive one recheck in 1992/3. 2783 randomised into control group to receive initial health check in 1992/3. 1916 (81.3%) attended.

Practice nurses performed health checks according to a standard protocol which took 45-60 minutes. Follow up visits of 10-20 minutes were offered according to a structured protocol for each risk factor.

Data:

- serum total cholesterol concentration;
- body mass index;
- smoking prevalence with biochemical validation of cessation;
- blood pressure;
- self-reported dietary, exercise and alcohol habits.

Results:

Significant differences between control and intervention groups in:

- mean serum total cholesterol concentration (3.1% lower);
- percentage of subjects with cholesterol concentration over 8 mmol/l (5.3% to 2.4% in intervention group);
- systolic and diastolic blood pressure (both 1.9%);
- body mass index (1.4%).

There was no significant difference in:

- numbers with very high diastolic blood pressure or body mass index;
- prevalence of smoking or excessive alcohol use.

Annual rechecks were no more effective than the single check at three years. Checks led to a significant increase in visits to the nurse according to the patients’ cardiovascular risk.
Discussion:

- the small differences in blood pressure may have arisen from accommodation to measurement;
- patients lost to follow up between the initial health check and the final check may still have changed their behaviour as a result of the checks. Their exclusion may have biased the results downwards;
- audit of the nurses’ programme indicated high quality clinical performance, suggesting changes might be less marked elsewhere if these standards were not matched elsewhere;
- diet probably explains the cholesterol changes as the number of prescriptions of lipid-lowering drugs were small. It also matches the results of studies elsewhere;
- moderate risk reductions of stroke and myocardial infarction are extrapolated from the results, although the limitations of such projections are stressed. No change in cancer incidence would be expected;
- limited benefits in relation to considerable costs lead the authors to quote Stott et al suggesting incentive payments to GPs for population health checks should be replaced with more sensitive and practical approaches to individuals’ to build on the natural advantages of primary care as a setting for health promotion.
APPENDIX 7

SUMMARY OF A NON-RANDOMISED STUDY OF HEALTH PROMOTION IN PRIMARY CARE


Summary of Abstract

Client group: adult men aged 28-60 in five-partner rural general practice in mid-Wales.

Setting/agent: well-person clinics run by practice nurses.

Intervention: initial invitation to structured interview including explanation of aims of health promotion programme, examination and enquiry regarding risk factors, and explanation of the principles of a healthy lifestyle. Letters sent to patients with high initial cholesterol concentration. Information sheets distributed at follow up visits. All patients invited for review at which similar process to original interview was used.

Data: analysis of serum cholesterol concentration and blood pressure in addition to changes in diet, exercise, smoking and drinking assessed by questionnaire. Data collected over three to five years.

Results:
- cholesterol concentrations and systolic blood pressure increased; diastolic blood pressure remained unchanged;
- professed dietary change, age and number of visits all had significant effects on final cholesterol concentration.

Discussion:
- clinics were not effective in reducing mean cholesterol concentration or blood pressure despite evidence in terms of risk factors that the message regarding risk had been successfully transmitted;
- some success was achieved in older patients and in a sub-group of patients who received more active intervention in response to a definite problem;
- absence of a control group, imprecise definition of intervention and reliance on self reported behavioural change makes results hard to interpret;
- care required in interpretation - it is not health promotion in general practice per se which has been evaluated, but a particular intervention;
- some rather shaky evidence in support of targeting health promotion on those with identified problem.
APPENDIX 8

PRIORITIES FOR THE FUTURE

What would you consider important to develop in health promotion in primary care for your population over the next five years?

Health Board 1

Breastfeeding
Young people's health, including sexual health
Stress management
Accident prevention
General health <5s e.g. immunisation, feeding, exercise
Smoking - women in low income, young people
Mental health
Exercise - unemployed males
Skills training - peer helping e.g. young people
alcohol and addictions

Health Board 2

Teamwork
Behaviour change
Smoking cessation - pregnancy
Health Promotion foundation course
Physical activity
Sexual health
Mental health
Reducing risks of cancer
Men's health
Teenage pregnancy
Breastfeeding
Alzheimer's
Dental health
Accident prevention
Health eating
Smoking - young women
Mental health

Health Board 3

Exercise
Mental Health
Teamwork
Communication & Motivation skills
Diet
| Health Board 4 | Strategic approach  
Smoking  
Role of extended primary care team  
Young people friendly services  
Lifestyle factors  
Alcohol |
|----------------|--------------------------------------------------|
| Health Board 5 | Workplace health within primary care  
Sexual health  
Promoting community participation  
Addressing the needs of carers  
Promoting self care among the public  
Dental health  
Mental health  
Role of pharmacists  
No smoking advice  
Sensible alcohol consumption  
Substance abuse  
Healthy eating  
Stress management |
| Health Board 6 | Practice needs assessment  
Training needs assessment  
Involving community workers in primary care work  
Well coordinated training for GPs and primary care workers  
Student health services  
GPs prescribing health promotion interventions  
Antenatal care  
Drugs/HIV harm limitation  
Accidents prevention |
| Health Board 7 | Purchasing of health promotion from providers  
Community care  
Locality purchasing  
Local regeneration alliances |
Health Board 8
Integration of health promotion
Health of the Nation targets to daily activities
Priority for health promotion appropriately financed
Educate contracting process
Primary health care team to see health promotion in widest sense
Shift from quasi-medical intervention/screening to wider role
Focus on a few issues and do them well
Diet
Exercise
Alcohol
Smoking

Health Board 9
Development of effective multi-agency forums
Community/locality health needs assessments
Importance of health promotion
Exercise
Diet

Health Board 10
Mental health
Physical activity
Nutrition
Breastfeeding
Child safety
Accident prevention
Smoking
Behaviour change
Parenting and child development
Child safety
Food and health
Sexual health

Health Board 11
Sexual health
Exercise
Smoking cessation
Health Board 12

- Health promoting pharmacies
- GP training
- Increase role of Health Visitor in community development
- National and local targets
- Education and training of primary health care team
- Primary health care team link with health alliances
- Health promotion initiatives outwith existing banding system
- Developing role of pharmacists and dentists
- Stress/anxiety management
- Lifestyle
- Home accidents
- Health shop
- National and local targets
- Public venue events
- Advertising safe sex, drugs, smoking
- Non alcohol pubs