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Use of Economic Evidence in the Design of Health Improvement Programmes (HImPs)

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April 2002

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ACKNOWLEDGEMENTS

The authors would like to thank all HImP leaders involved in our project, in particular those individuals who participated in our telephone survey. Additionally, we would like to thank the Department of Health funded team at Centre for Health Economics, the University of York including, Diane Dawson, Maria Goddard, Russell Mannion, Helen Parkinson and Pete Smith for their contributions to this report. Also, we would like to thank Sally Bell-Syer, who helped in the extraction of information from the 26 HImPs, and Sue Baughan, Bernard Crump and Brian Ferguson, who provided useful feedback on the design of our postal survey. Finally, we are grateful to two anonymous referees for their constructive comments. Any errors are, of course, solely the responsibility of the authors.

Executive Summary

Introduction

1. In recent years considerable efforts have been made to increase the evidence base for decision making within the NHS. Under the NHS R&D Programme a sizeable percentage of NHS resources have been spent on research, one of the largest programmes of research being in the field of health technology assessment.
2. However, whilst the generation of more research evidence is important, mechanisms still need to be developed to increase its use in NHS decision making. The NHS White Paper of 1997 (paragraph 7.5) pointed out that "there are unjustifiable variations in the application of evidence on clinical and cost-effectiveness".
3. The concept of the Health Improvement Programme (HImP) was first introduced in "The New NHS. Modern: Dependable" (NHS Executive, 1997). This white paper gave the lead responsibility to health authorities to provide a framework for health and social care provision through multi-agency partnership and in collaboration with the public. One of the main aims of the HImP is to produce action plans based on evidence to address local and national priorities. HImPs cover a three year long cycle and are revised annually. The second phase HImPs ran from April 2000 to April 2003 and these are the focus of this project.
4. To date, a small number of reviews of HImPs have been conducted (Abbott et al, 2000, Arora et at 1999 & 2000, Carruthers et al, 1999) but there has been limited exploration of the role of evidence in relation to the HImP, and no specific effort has been made to examine whether the HImP has proved to be a useful vehicle in arranging provision of care to improve the health of the population, given resource constraints. This report explores the evidence base of these second phase HImPs with particular reference to the contribution of economic evidence.

Methods

5. In order to examine the use of evidence in the design of HImPs, a three-stage project was undertaken. First, a survey of all English health authorities was conducted to elicit HImP leaders' views on the use of evidence in the design of their own HImP. Second, 10 individuals involved in the HImP and who worked for different health authorities were interviewed to explore their views on the HImP, the role of evidence and the impact of the HImP. Third, a random sample of 25% of all 2000-2003 HImP documents from the health authorities in England were reviewed in order to investigate whether the health care priorities chosen reflect government objectives and whether there was any evidence of the use of economic evidence in the production of the HImP documents.

Findings

6. The main findings were that, first, HImPs are seen as having multiple objectives. Whereas the improvement of health is viewed as the prime

objective, other important objectives are to reduce health inequalities and to develop partnerships.

7. Second, the notion of evidence is interpreted broadly. Namely, data drawn from classical research studies and published in the literature, do not encompass the range of inputs to the design of a HImP. Many of the inputs relate to national guidance and local professional opinion, which in turn might be based on data from research studies.
8. Third, basic concepts of economics are well understood, if not always applied. This is partly because the level of access to economic analyses and economics expertise was low. Even where economic studies did exist, it was not clear how they could be interpreted and used.
9. Fourth, local constraints greatly influence the development of HImPs. These constraints include time limitations, lack of certain expertise and the need for political acceptability. These often restricted the extent of the search for, interpretation and use of economic evidence.
10. Finally, most importantly, national guidance from National Service Frameworks (NSFs) and the National Institute for Clinical Excellence (NICE) is very influential in the design of HImPs. Given the constraints at the local level, national guidance was assumed to have a sound evidence base and was usually followed, although sometimes adapted in the light of local circumstances. Therefore, the use of national guidance may be the best route to improving the evidence base of HImPs.

Research and policy implications

11. The results of this research lend considerable support to a number of research and policy implications, many of which are already underway. The main implications are: (i) the evidence base of national guidance should be maintained, if not strengthened; (ii) efforts should continue to generate, synthesise and disseminate evidence on a national level; (iii) quantifiable targets (for health improvement) and the role for evidence in priority setting need to be stressed; (iv) the local role in assembling evidence needs to be clearly defined and adequately resourced; (v) efforts to educate health care professionals in evidence-based medicine and economics should be maintained, or strengthened; (vi) more research should be undertaken into the cost-effectiveness of broader socio-economic interventions to improve health.
12. Finally, the research and policy implications of this study also need to be reviewed in the light of the recently announced organisational changes in the NHS, especially the creation of strategic health authorities and the developing role of PCGs/Ts. In particular, it will be important to ensure that PCGs/Ts have the resources and expertise to gather, synthesise and interpret evidence, including economic evidence.

1. Introduction

In recent years considerable efforts have been made to increase the evidence base for decision making within the NHS. Under the NHS R&D Programme a sizeable percentage of NHS resources have been spent on research, one of the largest programmes of research being in the field of health technology assessment. In addition, institutions such as the NHS Centre for Reviews and Dissemination, the Cochrane Collaboration and the National Coordinating Centre for Health Technology Assessment have greatly contributed to the communication of research findings to the NHS.

The NHS white paper of 1997 (para 7.5) pointed out that "there are unjustifiable variations in the application of evidence on clinical and cost-effectiveness" (NHS Executive, 1997). This view is echoed by several surveys of NHS decision-makers (Crump et al, 2000, Drummond et al, 1997; Duthie et al, 1999) which showed a generally low uptake of available economic evidence and identified a number of barriers to its use.

At the national level, the advent of the National Institute of Clinical Excellence (NICE) (DH, 1999) provides a vehicle by which clinical and cost-effectiveness evidence can be used in decisions about the use of health care interventions, either through technology appraisal or clinical guidelines development. However, at the local level, within the NHS, it is less clear how appropriate evidence (in particular economic evidence) can be brought to bear on NHS decisions.

Under the existing structure, many of the decisions about the use of health care interventions will increasingly be taken by Primary Care Groups (PCGs) and Primary Care Trusts (PCTs). However, most of these will be too small to have a capacity to collect, assimilate and apply evidence. The health authorities' main mechanism for coordinating health care provision, in partnership with PCGs/PCTs, NHS Trusts and other agencies is the Health Improvement Programme (HImP).

Therefore, the objective of the research was to study HImPs in order to investigate the extent to which evidence, in particular economic evidence, had been used in their development.

2. Policy Background

The HImP was introduced in the White Paper, "The New NHS. Modern: Dependable" and was described as "an action programme led by the health authority to improve the health and healthcare locally" (NHS Executive, 1997). There were 3 main aims of the HImP: (i) to provide a framework for health and social care through inter-agency collaboration; (ii) to produce action plans based on evidence to address local and national priorities and; (iii) to make a programme that involved and was accessible to the public. Crucially, the government moved away from health care as a priority to a new focus on the

wider agenda of health and this involves a degree of integration between health and social services (Griffiths, 1998). The new approach to provision of care provides many opportunities and challenges and the success of such ambitions will be seen in the extent to which they can be operationalised in practice and the extent to which health does indeed improve.

The HImP was organised as a partnership between each health authority and their associated NHS Trusts, PCGs[1] and other primary care professionals, local authorities and a number of other local interests including voluntary agencies. Every year, each health authority in England is expected to produce a HImP document covering a three year time period and the current, third phase of the HImP runs from 2001-2004[2]. One important principle underlying the new structure has been a "drive to efficiency … so that every pound in the NHS is spent to maximise the care for patients" (NHS Executive, 1997). Guidance on HImPs was also provided in "Saving Lives: Our Healthier Nation" and in this report it was stated that measures should be been taken to "show that the action proposed is based on evidence of what is known to work" (para. 10.18) (NHS Executive, 1999).

As part of the HImP, the plan was to bring multiple agencies together through joint ventures such as planning and priority setting via the Joint Investment Programme and the Primary Care Group Investment Programmes. Also it was envisaged that the HImP would be closely linked to resource allocation and the NHS's annual Service and Financial Framework (SaFF).

The national policy framework was based on three main sources, the national priorities guidance (1999), Saving Lives: Our Healthier Nation (NHS Executive, 1999), and the National Service Frameworks (NSFs). As part of the white paper "Saving Lives", four priority areas for action were identified, including heart disease and stroke, cancer, accidents and mental health with national targets set for each.

The NSFs were described in "A First Class Service" as a method of "setting standards that will achieve greater consistency in the availability and quality of services for a range of major care areas and disease groups" (NHS Executive, 1998). Through the NSFs, national standards on specific areas of service or disease areas were set up in order to reduce unacceptable variations in care and treatment patterns within the NHS in England and Wales (NHS Executive, 1998). The second NSF covered coronary heart disease (CHD) (NHS Executive, 1998) and the Calman-Hine report provided a similar form of direction for cancer services (Calman-Hine, 1995).

Another element of the document "A First Class Service" was to give special responsibility to the National Institute of Clinical Excellence (NICE), to develop a coherent programme of activity including guidance on clinical and cost-

[1] At the first phase of the HImP (1999-2002) only PCGs existed but now many PCGs have become PCTs.
[2] This report focuses on the second phase of HImPs for the period 2000-2003.

effectiveness (NHS Executive, 1998). Its' role was to assess existing and new interventions for their clinical and cost-effectiveness and to provide patients, health professionals and the public with authoritative, robust and reliable guidance on current "best practice". Therefore its potential contribution to service delivery is explored in this report in relation to the HImP.

Filtering down from the Government, intelligence systems have been set up to organise the evidence base, particularly at the national level through initiatives such as "Information for Health: An Information Strategy for the Modern NHS 1998-2005" (Burns, 1998). One of the purposes of this information strategy was to "ensure the availability of accurate information for managers and planners to support local Health Improvement Programmes". Public Health Observatories were launched in 2000 and were set up as "a resource for enquiry - searching for and compiling information and datasets on the nation's health and distilling from them the knowledge to guide its improvement" (http://www.pho.org.uk/). It is anticipated that such information sources have contributed to the production of phase three HImPs (Hansell et al, 2000).

3. Review of the Literature

Unsurprisingly, little evaluation of HImPs has been undertaken to date, as HImPs are still very much in their infancy. However, some early assessments have been made. The conclusion in the report "Improving HImPs: The early lessons", which concentrated on the first phase of HImPs, was that HImPs have "proved to be more around the structures and processes of change, and less about outcomes of health improvement" (Carruthers et al, 1999). First phase HImPs were produced over a period of three months so this result is to be expected, but over the long term HImPs need to deliver on health improvement if the initiative is to maintain its credibility.

A similar project was undertaken by The King's Fund in which an investigation of the lessons to be learnt from the first year of HImPs was undertaken (Arora et al, 1999). A survey of a selection of London-based health authorities, local authorities and PCGs/Ts was conducted to find out about their perceptions of HImPs. One of the main themes that emerged was that resources need to be directed towards appropriate activities and that measures to evaluate progress are needed. The report highlighted the importance of setting targets based on evidence and it emphasised the role of well-researched performance indicators to link aspirations to practice.

Another important point made by Arora et al was that the HImP involves changing responsibilities among the workforce involved in the HImP (Arora et al, 2000). For instance, the PCGs/Ts are taking on board some commissioning of health services whereas this has traditionally been the reserve of the health authorities. A consequence of this is that local authorities will be working quite closely with the PCGs/Ts, whereas to date they have worked more closely with health authorities. Hudson makes the point that little research has been conducted into what effective inter-agency co-operation is or how it is best managed (Hudson, 1998). If collaborative efforts are mandatory and set in a

top-down fashion, then those involved in HImPs might not need to recourse to the evidence directly. On the other hand, if some elements of partnership are to be devolved to the local level, then presumably evidence to inform local decision making is important.

Until very recently, with advances such as the Public Health Observatory, the research and information base at the local level has been less well developed than that of the national level. However, additional information systems are needed to support PCGs/Ts in implementing better care for patients (Kilner et al, 1999). Potentially organisations such as PCGs/Ts are able to identify patient groups and therefore are in a key position to realise the long-term goal of improving health, however defined (Hunter et al, 2000).

4. Methods

4.1 Project design overview

In order to assess the use of evidence (in particular, economic evidence) in the design of HImPs a three stage research project was undertaken. First, a postal questionnaire was sent to each of the 102 Health Authorities within England in order to gain insight into HImP leaders' thoughts and actions relating to the use of evidence in the design of HImPs[3]. A 67% response rate was achieved. Second, a convenience sample of 10 individuals, who indicated in the questionnaire that they would be willing to participate in a semi-structured telephone survey, were contacted. The telephone interviews were used to obtain more detailed information on respondents' thoughts on HImPs and the role of evidence, and also to explore themes emerging from preliminary analysis of the postal survey data. Third, a random sample of 26 (25%) of the 2000 - 2003 HImP documents were collected and a standard set of information was extracted[4] from each of them. The aim of the last stage of research was to explore the contribution of evidence to the written documents and to see what evidence was cited within the text.

Table 1: Project design

Evidence source	Sample size n (%)
Responses from 102 health authorities in England	68 (67%)
Interviews with HImP co-ordinators	10 (10%)
HImP Reports (102 in total)	26 (25%)

For the purposes of this study, two types of evidence were distinguished. One type of evidence may be categorised as internal/experiential evidence, based on professional opinion and tacit knowledge. The second type of evidence may be termed external/empirical evidence, that is evidence based on research from primary and/or secondary studies, such as guidelines or published studies (Brechin et al, 2000). By defining evidence in this way, the aim was to show the

[3] See appendix 9.1 for the postal survey.
[4] See appendix 9.2.

variety of evidence available. However, in practice it is recognised that the distinction between internal and external evidence might be blurred since it is likely, for example, that clinical decision making be informed by both the internal and external evidence base.

4.2 Postal survey on the role of evidence in the design of HImPs

A 12 page postal questionnaire was designed containing a total of 23 questions with 17 closed-ended questions and six open-ended questions (see appendix 9.1). As part of the research into the role of evidence in the design of HImPs, three main issues were investigated. First, HImP leaders views on the rationale behind the HImP were explored; second, any attempt to include evidence in practice were investigated; third respondent's expectations about the future direction of HImPs were elicited. Initially the questionnaire was piloted on four individuals working within different health authorities and four researchers within Centre for Health Economics.

The questionnaire was sent to the HImP leader of every health authority, as identified through Binley's database (Binleys, 2000). In the introduction to the questionnaire HImP leaders were encouraged to consult any colleagues who were closely involved in the production of the HImP. A fortnight after the questionnaire was sent out a second, duplicate, questionnaire was sent to those health authorities from whom no response had been received.

In the part of the questionnaire dealing in more detail with the acquisition and use of evidence, HImP leads were asked to make a choice between providing feedback on either the CHD or the cancer programme within their HImP. CHD and cancer programmes were chosen because they were nationally mandated targets for health improvements (NHS Executive, 1999). Also, there is a considerable body of medical and economic evidence in both disease areas so we hoped to find positive results for the use of evidence.

4.3 Telephone interviews of HImP leaders

To explore the role of evidence in the design of HImPs more comprehensively, we conducted semi-structured telephone interviews of 10 HImP leaders. The HImP leaders chosen for interview were selected for two main reasons: either (i) because they raised interesting issues in their responses to the open-ended questions in the postal questionnaire or (ii) because their responses raised issues about the use of economic evidence that we wished to explore. The telephone interviews lasted approximately half an hour each and every interviewee was asked about their job background, their training background and then about the rationale behind some of their responses. One of the researchers involved in this project took notes throughout the series of interviews and these were transcribed for review.

4.4 Review of HImP documents

Health authorities are obliged to produce a yearly HImP report that covers a three year period and which is available within the public domain. A random sample of 26 (25%) HImPs were obtained, either by downloading them from the website (http://www.oliveweb.clara.net/n-fset-ha.htm), or by calling the health authorities direct. Thirteen HImPs were reviewed for evidence on cancer interventions and 13 HImPs were reviewed for evidence on Coronary Heart Disease (CHD).

To extract a standard set of information from each of the 26 HImPs, a pro-forma was constructed (appendix 9.2). This pro-forma contained eight questions, including what disease areas covered in the HImP, references to any specific government guidance, reference to the external evidence, use of economic terms and notification of any quantifiable targets set. Two researchers independently reviewed six of the HImPs and their results were compared to ensure consistent review. Following this, one of the researchers reviewed the remaining 20 HImPs.

5. Results

5.1 Information on evidence collected from the postal survey

5.1.1 Overview

Of the 102 postal questionnaires sent out, 68 were returned giving a response rate of 67%. The response rate was relatively uniform by geographical area and the response rate was similar to that achieved in a number of other postal questionnaires sent to health care decision-makers (Gosden et al 2000; Mason et al 1999). Whilst the questionnaires were sent directly to HImP leaders, anyone who had participated in the design of the HImP was encouraged to participate in its completion. The majority of respondents worked in Public Health Departments. Other respondents worked in a variety of departments including business management, health promotion, strategy, planning and/or corporate affairs departments. Individuals working at different levels of management answered the questionnaire, including Directors of Public Health, HImP leads and Co-ordinators and Public Health Specialists, among others. Most respondents were medically trained and the remaining respondents were trained in a range of other disciplines including statistics, operational research, management studies, science and accountancy. Four respondents explicitly mentioned that they had some training in economics/health economics. Questionnaire results are provided below.

5.1.2 The objectives of HImPs

Potentially there are a number of objectives of HImPs. The questionnaire gave respondents a number of possible objectives to rank in importance. The list was derived mainly from the aims stated in the White Paper establishing HImPs.

The most obvious objective of the HImP is to improve health. However, it was interesting to assess what respondents thought the rationale behind the HImP was in practice. All respondents thought health improvement was either 'very important' (94%) or 'quite important' (6%). Considerable importance was also attached to the HImP as a means to reduce inequalities in health and to encourage partnership in the provision of care, with 87% and 82% of respondents saying these two objectives were 'very important'.

Besides the objectives specified in the questionnaire, a number of respondents made additional suggestions and most of these were process-focused objectives. For instance, respondents mentioned partnership in the definition of priorities and target setting, initiating Primary Care Trusts (PCTs) and making them responsible for health improvement, raising awareness of the contribution of different organisations to the health agenda, and integrating financial planning with health policy objectives.

Based on the results summarised in Table 2 below, it can be seen that all the objectives stated in the questionnaire were considered to be 'very important' by over a quarter (27%) of the sample of respondents and one possible implication of this is that a number of the objectives may compete for prime importance.

Table 2: In your view, within your HImP what are the objectives of HImPs? How important are the following?

Objectives of the HImP	Very important	Quite important	Limited importance	Not important	Missing data
To improve health	64 (94%)	4 (6%)	-	-	-
To reduce health inequality	59 (87%)	8 (12%)	1 (2%)	-	-
To encourage partnership in the provision of care	56 (82%)	11 (16%)	1 (2%)	-	-
To identify local priorities in health care provision	47 (69%)	18 (27%)	3 (4%)	-	-
To provide a performance management framework	26 (38%)	32 (47%)	8 (12%)	2 (3%)	-
To focus on efficient provision of care	20 (29%)	39 (57%)	8 (12%)	1 (2%)	-
To organise and co-ordinate health care provision	18 (27%)	38 (56%)	8 (12%)	3 (4%)	1 (2%)
Other	14 (21%)	-	-	-	-

NB – some % add up to more than 100% due to rounding

5.1.3 The prime objective of the authority's HImPs

Out of the list of objectives above, respondents were asked to indicate what they believed to be the prime objective of the HImP. Unsurprisingly, the majority of respondents (47%) argued that the prime objective of the HImP was to improve health (see Table 3). However, substantial numbers of respondents thought that the reduction of health inequality (16%), or the use of the HImP as a means to identify local priorities in health care provision (15%), had the greatest importance.

Table 3: In your view what was the prime objective of the HImP that you were involved in?

Objectives of the HImP	Frequency	Percent
To improve health	32	47%
To reduce health inequality	11	16%
To identify local priorities in health care provision	10	15%
To encourage partnership in the provision of care	7	10%
To provide a performance management framework	3	4%
To organise and co-ordinate health care provision	1	2%
To focus on efficient provision of care	-	-
Missing data	4	6%

One respondent commented that the HImP is the only policy for which the combined objectives of improving health, reducing health inequality and identifying local priorities in health care provision are prime. In practice, these objectives might sometimes diverge, in which case trade-offs may need to be made between them.

One respondent suggested that partnership is important within HImPs and therefore local government and multi-district bodies need to make decisions that are concordant with one another. A few other respondents mentioned a more fundamental point; namely, the need to define what health is and whether, for example, the HImP approach was based on a broad socio-economic model of health or a narrower, medically driven model. The two types of approaches could result in entirely different strategies being adopted.

The fact that HImPs were considered to have multiple objectives, with improving health the prime objective, is hardly surprising. Perhaps more surprising is the low ranking given to the efficient provision of health care, given the emphasis being placed on this by the Department of Health.

5.1.4 Staff involvement in the production of the HImP

Respondents were asked which groups of people were consulted in the production of their HImP and the results show that the scope of the consultation exercise was very broad. Besides consulting other health authority staff, all respondents said that the NHS Trusts and the PCG/Ts were consulted. For those health authorities that were a Health Action Zone (HAZ), board members from the HAZ were consulted in relation to the HImP. The following percentages of respondents said that these local authority departments were involved in the production of their HImP: social services (99%), housing (88%), education (88%) and transport (71%). Within the local authority, other groups that provided input into the production of the HImP included health policy managers, the local medical committee, economic development units, the police force, the fire service, local schools and sports centres.

In addition to local authority involvement, 93% of respondents said that the community health council was consulted. Also, 88% consulted voluntary bodies and 71% consulted the local population. Other organisations and groups of

people involved in the consultation process included: the independent sector (e.g. nursing homes, local businesses), charitable concerns, race action groups, universities, MPs and carers. One respondent mentioned that, for the first phase of the HImP, numerous agencies were consulted but that now they mainly focused on consultations with the local authorities and the PCG/Ts. It is therefore likely that the consultation process will change over time.

5.1.5 The overall quality of the evidence base of the HImP

As part of the questionnaire HImP leaders were asked if, in general, the evidence base for the HImP met their expectations. Most respondents said that they were 'quite satisfied' about the evidence base of the HImP but a sizeable proportion (29%) said that they were 'not very satisfied' with the evidence base. Overall the reaction of respondents was quite mixed and so it seems there is much work to be done to provide the evidence that HImP leaders would like.

Table 4: Overall, would you say the internal/external evidence base of the 2000-2003 HImP met your expectations?

	Frequency	Percent
Completely satisfied	5	7%
Quite satisfied	39	57%
Not very satisfied	20	29%
Not at all satisfied	1	2%
Missing data	3	4%

The respondents who said they were 'quite satisfied' rather than 'completely satisfied' argued that there is always room for improvement in the evidence base, so this answer could reflect high expectations on the part of some respondents. Reasons respondents gave for stating that they were 'completely satisfied' were that the HImP is a good balance of widely accepted external evidence combined with the experience of local people and organisations (internal evidence). Such respondents added that they liked the partnership idea behind the HImP and said that the inter-agency consultation process required to design the HImP in itself encouraged collaboration. One respondent mentioned that because, in their health authority, they had met the national targets, their HImP was a success. Again this point shows that the answer to this question very much depends on HImP leaders expectations.

A number of themes emerged from those respondents who were 'quite satisfied' with the use of evidence in their HImP. An over-riding message was that the HImP process and health needs assessment were in early stages of development and that there was a learning curve to be climbed in implementing central priorities whilst trying to match local needs. Generally, respondents found that priorities issued as "must dos" from central government were well researched and based on empirical, external evidence. Or at least, this is what respondents stated they had assumed. While central government directives were considered to have a positive impact in most cases, one respondent issued a word of caution saying that "must dos" from the centre could push

local priorities further down the list, so there needs to be flexibility within the approach to ensure an appropriate balance. In terms of setting priorities at the local level, the evidence tended to be based on local good ideas and discussions.

In theory respondents saw the use of evidence as a good thing and many believed that evidence was being translated into practice. However, a few respondents pointed out that the decision-making process is multi-faceted and so factors such as the political acceptability of the programme and professional reasoning make important contributions within the decision making framework too. Therefore, while external evidence may be available it might not always be used. However, some respondents stated that they thought the HImP was an intrinsically good idea for enhancing the use of research. One respondent said that through the HImP "a comprehensive network had been set up to develop an intelligence source that was 'close' to priority groups".

One commentator argued that evidence was sometimes used to support current arrangements of health and social care provision even if there were no quality indicators of the research. A few respondents did say that they judged the quality of evidence and found it to be variable. Therefore, their general satisfaction did sometimes mask dissatisfaction over particular areas of the evidence base. One respondent argued that there is a strong clinical base of evidence, as compared with the evidence base on "broad picture" issues such as social inclusion and health (in)equalities. Another added that there was "Quite a bit of evidence to support investment/disinvestment of clinical interventions (and) not enough around effective implementation strategies and effective organisation of care".

5.1.6 The role of economic evidence in the design of HImPs

The use of economic evidence in the design of the HImP was of particular interest in this project. Overall the response to this question was positive, with the majority of respondents (58%) saying that they believed that economic evidence should influence the design of HImPs 'quite a bit' and with 24% of respondents saying 'yes, very much so'.

Table 5: Do you think that economic evidence (relating to issues such as costs or cost-effectiveness) should influence the design of HImPs?

	Frequency	Percent
Yes, very much so	16	24%
Yes, quite a bit	40	58%
Only marginally	10	15%
No	-	-
Missing data	2	3%

Respondents who were fully in favour of the use of economic evidence in the design of HImPs were clear that economics can be used as a decision aid for choosing cost-effective interventions. A number of respondents stated that

economics is useful for assessing how to obtain the most health gain from the limited resources available. However, the concern was expressed that where resources were limited, the issue of explicit rationing was problematic. Some comments made about the use of economic evidence within the HImP are provided in the boxes below.

> *"The HImP is the basis for key investment decisions, for allocating scarce resources against competing demands both effectively and cost-effectively."*

> *"The more cost-effective use of resources achieved will result in greater potential to meet health needs."*

> *"Plans should be both feasible in cost terms and lead to effective services (both clinically and cost-effective). However, I think we still have a long way to go before we can demonstrate clearly the cost implications of one services development on other services. For instance it is often asserted that the development of preventative health services will achieve cost savings elsewhere, but I am aware of very little evidence of how these are actually achieved, or, perhaps even more important, recuperated."*

For the 15% of respondents who were only 'marginally convinced' of the contribution of economic evidence to the design of HImPs, the concerns raised were primarily practical ones. For instance, the absence of local economic evidence was mentioned. In principle, most respondents thought that economic evidence was a good thing. However, the most immediate goal, at this early stage of HImP development, was to set up the HImPs and to ensure effective joint working. The suggestion was that economic evidence will have a stronger role to play in the future. A few of the respondents who expressed some reservations about the use of economic evidence did not appear to have a full understanding of economics. For instance they equated economics with finance or they defined economics in terms of costs alone. A number of respondents said that besides cost-effectiveness arguments, other outcomes of provision, such as social equity and political acceptability of programmes, were also important.

Some HImP leaders mentioned that there was a lack of clear and easily implementable recommendations from economic studies. Also it was said that some aspects of the economic evidence were limited. For instance, little information was available on the costs and benefits of the multi-agency partnerships that HImPs build upon. One HImP leader argued that the impact of historical precedent was a stronger influence on the status quo than the evidence supporting the revision of existing organisational arrangements. It is likely that any type of evidence will take some time to incorporate within the HImP, particularly in the light of a culture change from healthcare to a more integrated approach to health and social care provision.

Table 6: For the HImP that you were involved in, how important were the following sources of external empirical evidence in deciding what Coronary Heart Disease or Cancer services to provide?

Type of evidence	Very important	Quite important	Limited importance	Not important	Did not use	Missing data
National Service Framework guidelines	53 (78%)	7 (10%)	-	1 (2%)	4 (6%)	3 (4%)
Government publications e.g. commissioning of colorectal cancer services guidance	27 (40%)	19 (28%)	10 (15%)	-	5 (7%)	7 (10%)
NICE guidance	25 (37%)	19 (28%)	13 (19%)	1 (2%)	1 (2%)	3 (4%)
Clinical guidelines e.g. choice of ACE inhibitors in the primary care management of adults with symptomatic heart failure	24 (35%)	26 (38%)	13 (19%)	1 (2%)	1 (2%)	3 (4%)
Guidance from professional associations e.g. Royal College of Surgeons	11 (16%)	29 (43%)	19 (28%)	1 (2%)	5 (7%)	3 (4%)
Secondary sources (e.g. Effective Health Care Bulletins)	10 (15%)	34 (50%)	17 (25%)	1 (2%)	5 (7%)	1 (2%)
Published cost-effectiveness analyses e.g. screening for hypertension	10 (15%)	25 (35%)	20 (29%)	5 (7%)	7 (10%)	2 (3%)
General published literature (e.g. journal articles)	9 (13%)	24 (35%)	27 (40%)	2 (3%)	6 (9%)	-
Work commissioned to academic researchers	5 (7%)	10 (15%)	18 (26%)	6 (9%)	27 (40%)	2 (3%)
Work commissioned to management consultants	-	6 (9%)	15 (22%)	8 (12%)	37 (54%)	2 (3%)

5.1.7 The use of external evidence sources in the Cancer or CHD sections of the HimP

Respondents were asked what sources they had used to obtain external evidence. The large majority of respondents (78%) considered the National Service Framework guidelines to be 'very important'. Government publications, National Institute of Clinical Excellence (NICE) guidance and clinical guidelines were also reported to be 'very important' by 40%, 37% and 35% of respondents respectively. Guidance from professional associations, secondary sources of information, published cost-effectiveness analyses and general published literature were considered to be 'very important' by 16%, 15%, 15% and 13% of respondents respectively. Work directly commissioned to academic researchers was considered very important for 7% of respondents and management consultants were not considered to be a very important source of empirical evidence by any of the respondents. Other sources of evidence suggested by respondents included updates from the National Heart Team, regional groups such as an oncology forum, Annual Public Health reports and the Cochrane Library and Medline.

5.1.8 Importance of different internal evidence sources

As seen in Table 7 below, 93% of respondents thought that clinical opinion was either 'very important' or 'quite important' and 78% of respondents thought that the opinion of health care managers was 'very important' in deciding how to provide services to meet the priorities identified. Public opinion and patient advocacy groups were said to be 'very important' by only 12% and 9% of respondents respectively. However they were thought to be 'quite important' by 44% and 41% of respondents respectively. One respondent said that the NSF priorities were the key sources of evidence and, since they left very little scope for choice, that this particular question was difficult to answer.

Table 7: For the HImP programme that you have chosen to focus on, how important were the following sources of <u>internal</u> evidence in deciding what <u>Coronary Heart Disease / Cancer</u> services to provide to meet the priorities identified?

Internal evidence:	Very important	Quite important	Limited importance	Least important	Missing data
Clinical opinion	31 (46%)	32 (47%)	3 (4%)	1 (2%)	1 (2%)
Health care managers opinion	17 (25%)	36 (53%)	12 (18%)	1 (2%)	2 (3%)
Public opinion	8 (12%)	30 (44%)	23 (34%)	5 (7%)	2 (3%)
Academic researchers opinion	6 (9%)	18 (27%)	26 (38%)	14 (21%)	4 (6%)
Patient advocacy groups	6 (9%)	28 (41%)	26 (38%)	5 (7%)	3 (4%)

5.1.9 Balance between internal and external evidence

Table 8: Would you say that the balance of evidence to decide upon interventions was mainly internal or external?

Type of evidence	Frequency	Percent
All internal evidence	-	-
More internal evidence than external evidence	15	22%
More external evidence than internal evidence	45	66%
All external evidence	3	4%
Missing data	5	7%

The responses to this question clearly illustrate there is a balance between the use of internal and external evidence, with more emphasis on the latter. This is consistent with the emphasis placed on NSFs and government publications in 5.1.7.

5.1.10 Information collectors for the HImP

Table 9: Who was given the job of finding information?

Information collectors	Frequency	Percent
Clinician/s	39	57%
HImP leader	36	53%
Information officer	34	50%
Researcher/s	19	28%
Administration staff	15	22%

Besides clinicians, a large number of questionnaire respondents (i.e. the HImP leaders), (53%) said that they had the job of finding information for the HImP. This suggests that these individuals were therefore particularly well placed to answer our questionnaire. Half of the respondents said that an information officer was also responsible for information collection and this is encouraging, as presumably they would have good literature search skills.

A few other individuals or groups of people contributing to the information collection effort were mentioned by the respondents. These included Public Health Department colleagues, managers of specific service areas, staff from all health authority directorates and multi-agency groups.

5.1.11 Resources for the development of the HImP

Forty-six percent of respondents thought that the number of epidemiologists available to collect information was ‘satisfactory’, 44% thought that the level of clinical expert resources available were ‘satisfactory’ and 37% of respondents thought that the number of information officers available was ‘satisfactory’. In contrast, 47% of respondents thought that there were ‘insufficient’ health economics resources and 37% of respondents thought that there were ‘insufficient’ financial resources available.

Table 10: Did you find there was "satisfactory", "limited" or "insufficient" supply of resources for the design of HImPs for the following resource examples?

Resource type	Satisfactory	Limited	Insufficient	Missing data
Epidemiologist	31 (46%)	21 (31%)	11 (16%)	5 (7%)
Clinical expert	30 (44%)	24 (35%)	8 (12%)	6 (8%)
Information officer	25 (37%)	24 (35%)	14 (21%)	5 (7%)
Financial resources	12 (18%)	26 (38%)	25 (37%)	5 (7%)
Health services researchers	11 (16%)	28 (41%)	19 (28%)	10 (15%)
Health economist	2 (3%)	26 (38%)	32 (47%)	8 (12%)

5.1.12 Use of different types of economic evidence

Twenty-four percent of respondents said that advice from such bodies as NICE was 'very useful' in the production of the HImP. The majority of respondents (52%) neither used information gathered from conferences where economic evidence was being discussed, or used evidence collected during discussions or advice from economists (62%).

Table 11: Did you find the following types of <u>economic</u> evidence useful?

Types of economic evidence	Very useful	Quite useful	Limited use	Not useful	Did not use	Missing data
Discussion and advice from economists	-	6 (9%)	11 (16%)	6 (9%)	42 (62%)	3 (4%)
Cost-effectiveness analysis information published as reports or in journals	5 (7%)	22 (32%)	23 (34%)	4 (6%)	11 (16%)	3 (4%)
Reviews of cost-effectiveness in health care e.g. Effective Health Care Bulletin	10 (15%)	30 (44%)	17 (25%)	2 (3%)	6 (9%)	3 (4%)
Advice from such bodies as NICE	16 (24%)	23 (34%)	15 (22%)	2 (3%)	9 (13%)	3 (4%)
Conferences where economic evidence is discussed	1 (2%)	8 (12%)	17 (25%)	6 (9%)	35 (52%)	1 (2%)

Other types of economic evidence that respondents found useful included some population-based models developed by the London School of Hygiene and Tropical Medicine, local sensitivity analyses on service models, and the results of Programme Budgeting / Marginal Analysis (PBMA) exercises.

5.1.13 Use of different methods for collecting evidence

More respondents (35%) made 'considerable use' of literature searches than any other method of collecting evidence. Overall, questionnaires were the least popular method used for collecting evidence, with 40% of respondents saying they did not use this technique.

Table 12: What was the method used for collecting evidence in the design of HImPs?

	Considerable use	Some use	Little use	Not used	Missing data
Literature searches	24 (35%)	27 (40%)	4 (6%)	9 (13%)	4 (6%)
Internet	18 (27%)	27 (40%)	7 (10%)	12 (18%)	4 (6%)
Focus groups	13 (19%)	23 (34%)	10 (15%)	17 (25%)	5 (7%)
Interviews	11 (16%)	18 (27%)	16 (24%)	17 (25%)	6 (9%)
Questionnaires	3 (4%)	14 (21%)	18 (27%)	27 (40%)	6 (9%)

A number of respondents said that much of the evidence was collected at the DH and then disseminated to the NHS. In addition to the collection methods stated above, local networks, consultation groups, stakeholder meetings and local authority meetings were also used for gathering evidence. A few HImP leaders have produced pro-formas for service providers to complete when bidding for contracts, and typically these ask for evidence in support of the service developments being proposed.

5.1.14 Use of economic evaluation studies

Forty-one percent of respondents (n=28) stated that they were aware of economic evaluations for CHD or cancer interventions. More respondents knew of CHD economic evaluations than cancer ones. Of the 47 HImP leaders who chose to focus on CHD, 47% said that they were aware of economic evaluations on interventions associated with CHD. Eighteen respondents chose to focus on the cancer HImP and, of these, 33% said that they were aware of economic evaluations on interventions associated with cancer.

Table 13: Are you aware of any economic evaluations (e.g. cost-effectiveness studies) on either Coronary Heart Disease or Cancer that were used in the production of the HImP that you have chosen to focus on?

Cancer/CHD	Percent
Cancer	33%
CHD	47%
Missing data	2%

If respondents answered in the affirmative, they were asked to provide references to verify their answer. Scientific journals that were stated to provide useful sources of economic evidence included British Medical Journal (BMJ), Effective Health Care Bulletins, HEART, Bandolier, PharmacoEconomics, the Lancet, Thorax and prescribing journals. Actual studies mentioned included costs and benefits of cholesterol lowering strategies, such as the use of statins in CHD.

Examples of studies undertaken by respondents themselves included those on equity of access to Coronary Artery Bypass Grafting (CABGs) and use of lipid lowering agents. Two respondents said that they had commissioned research,

including a study on the cost-effectiveness of statins using the World Bank Disability-Adjusted Life Year (DALY) approach.

References made to reports and working papers included Clinical Outcomes Guidance (COG guidance, 1998), DEC reports, Health Technology Assessments (HTA) (e.g. 1998, Vol. 2, No. 10), NHS Centre for Reviews and Dissemination Effective Health Care Bulletin (e.g. Feb 1998, Vol. 4, No.1), National Institute of Clinical Excellence (NICE) reports, local drug information services and the white paper, “Smoking Kills: A White Paper on Tobacco” (NHS Executive, 1998). Some respondents mentioned specific reports based on work in their own local authorities, for example a local report on Taxanes for Ovarian Cancer and a city-wide initiative for reducing cardiovascular disease.

Four respondents named databases that had been searched for the evidence and these included the Cochrane library, Medline, OHE HEED and some websites such as that of NICE (http://www.nice.org.uk/nice-web).

5.1.15 Deciding on priorities for action

As mentioned earlier, in order to investigate how HImP leaders decided upon priorities for action within their HImPs, we chose two disease areas, CHD and cancer. There is an NSF available for CHD and a similar document on cancer services (the Calman-Hine report). Within our questionnaire 27% of respondents chose to report on their cancer HImP and 69% chose to focus on their CHD HImP. The remainder either provided information on both or failed to respond to the question. The examples of cancer and CHD service priorities were chosen based on national targets.

For those respondents who chose to focus on cancer, 24% of respondents included increasing management of cancer care by specialist multidisciplinary teams as a priority. Just over a quarter of respondents (28%) indicated that their health authority was beginning, or intensifying smoking cessation and discouragement efforts. Fifteen percent of respondents said that within their HImP a priority was cancer surgery to surgeons who demonstrate good results and 18% of respondents said that a priority was to establish dedicated diagnostic/assessment services for gynaecological cancer with cancer units.

Table 14: Examples of cancer service priorities

Cancer	Frequency	Percent
Increasing management of cancer care by specialist multidisciplinary teams	16	24%
Beginning (or intensifying smoking cessation and discouragement efforts	19	28%
Concentrating cancer surgery to surgeons who demonstrate good results	10	15%
Establishment of dedicated diagnostic/assessment services for gynaecological cancer within cancer units	12	18%

As shown in Table 15, of those respondents who chose to focus on CHD, 49% of respondents said that increasing efforts to treat those with blood pressure were being made within their HImP; 72% of respondents said that they were beginning (or intensifying) smoking cessation and discouragement efforts; 54% promoting healthy eating lifestyle; and 41% said that they were undertaking efforts to reduce obesity in their health authority.

Table 15: Examples of CHD service priorities

CHD	Frequency	Percent
Increasing efforts to treat those (especially the elderly) with high blood pressure	33	49%
Beginning (or intensifying) smoking cessation and discouragement efforts	49	72%
Promoting healthy eating lifestyle	37	54%
Efforts to reduce obesity	28	41%

5.1.16 Specific sources of evidence in deciding on priorities in cancer or CHD

HImP leaders were asked if there were any specific sources of evidence that they used to decide on priorities for CHD/cancer. At the national level, the NSF was frequently quoted as a source to decide on priorities. Regional and national policies and directives were generally expressed to be useful. A number of reports provided from central Government were also cited, including COG guidance, cancer accreditation services and the Calman-Hine report. The Acheson report, which supplies information on both cancer and CHD risk factors, and smoking cessation reports were also cited. Other evidence mentioned as useful included Cochrane Reviews and other published systematic reviews. Local sources of evidence included recommendations of regional cancer working groups, local information such as that on revascularisation rates, and public health reports. One respondent stated that they had used information on the relative cost-effectiveness/utility of various health care interventions.

5.1.17 Main barriers to using evidence in the design of HImPs

In collecting information on the use of evidence it is important to explore perceived barriers to the use of evidence. Between 25% and 50% of the respondents stated that there was some truth in the following statements: that relevant evidence is not available; that the evidence is available but makes some untenable assumptions and therefore is not easy to apply in practice; that the evidence is available but is either not accessible nor understandable; that to some extent evidence is available but no consensus could be reached on whether to use it or not; that there was not enough time to look for evidence; and that there was too much information available.

Comments added by respondents included the belief that economic evidence does not take full account of the difficulties involved in the reconfiguration of

complex services and that politics and public relations were important elements driving decisions.

Table 16: What do you think the main barriers to using evidence in HImP design are?

	True	Quite true	Slightly true	Not true	Missing data
There is not enough time to look for evidence.	13 (19%)	20 (29%)	18 (27%)	9 (13%)	8 (12%)
Relevant evidence is not available	6 (9%)	21 (31%)	18 (27%)	16 (24%)	7 (10%)
Too much information is available	5 (7%)	9 (13%)	23 (34%)	19 (28%)	12 (18%)
Evidence is available but consensus on whether to use it could not be reached	5 (7%)	21 (31%)	13 (19%)	19 (28%)	10 (15%)
Evidence is available but is not understandable / accessible	1 (2%)	14 (21%)	21 (31%)	19 (28%)	13 (19%)
Evidence is available but it makes untenable assumptions	-	14 (21%)	25 (37%)	16 (24%)	13 (19%)

A few barriers were thought to constrain the use of the evidence base. For instance, the speed at which the production of the HImP had to take place sometimes prevented thorough research being undertaken. Also there was not always the staff or the expertise needed to explore the research literature on different options for care. One respondent reported that the lack of resources was not the only problem. Rather, substantial routine data were collected but could not be utilised fully as they were not linked to addresses and therefore could not be used to generate a picture of the health of the local community. Another respondent stated that they would like more evidence that helped them link available resources to health priorities and to have the tools available to link actions taken locally with improvements in the health status of the local population.

5.1.18 Suggestions for improving the evidence base when choosing between different interventions for either CHD or cancer

Besides the use of evidence mentioned in Table 17 below, respondents made several other suggestions for improving the evidence base. These were (i) results from audits, (ii) patient experience, (iii) burden of disease and modelling the impact, including resource implications, (iv) systematic reviews and (v) timely access to local authority and mortality data.

Table 17: What kind of evidence do you think would help to improve the decision making process when faced with a choice between different interventions for either Coronary Heart Disease or Cancer?

	Very important	Quite important	Limited importance	Least importance	Missing data
Government direction e.g. NSFs	37 (54%)	19 (28%)	4 (6%)	-	8 (12%)
NICE guidance	39 (57%)	21 (31%)	3 (4%)	-	5 (7%)
Published evidence (e.g. journal articles)	25 (37%)	29 (43%)	9 (13%)	-	5 (7%)
Clinical opinion	23 (34%)	38 (56%)	2 (3%)	-	5 (7%)
Public opinion/focus groups	8 (12%)	33 (49%)	21 (31%)	-	6 (8%)
Management opinion	4 (6%)	30 (44%)	25 (37%)	1 (2%)	8 (12%)

5.1.19 Suggestions for improving the evidence base overall

Respondents were given the chance to suggest any improvements to the type of information available to improve the HImP. Information provided through the NSFs was welcomed and a few respondents mentioned that they would like more information produced by the government. One of the chief concerns was that there is inadequate information available at the systems level; that is, across the multiple health and social care providers. Respondents mentioned the lack of studies on the comparative cost-effectiveness of different models of care across the whole health sector. Some respondents said that cost-effectiveness information was available in some cases, but that economic evidence relating to the implementation of services was rarely available, particularly information on the impact of organisation of care across the multiple agencies involved in provision.

Two other types of information relating to organisational aspects of service provision were called for; namely, disinvestment criteria across all agencies and cost information on work-force planning. A number of HImP leaders suggested that information linking national priorities for interventions to the local level, through local needs assessment for instance, was needed.

At the local level, more and better quality financial and epidemiological information was called for. The local action plans for a number of HImPs were linked to PCGs/Ts and therefore there was a call for more primary care based research. Specific types of information which respondents would like to obtain more of included Quality Adjusted Life Year (QALY) and Disability Adjusted Life Year (DALY) information associated with interventions.

A number of respondents were concerned that within studies inadequate consideration was given to the effect of interventions on the distribution of provision. For instance, they felt that while interventions may be cost-effective they wanted information on the equity issues associated with using such interventions. There was a call for more external evidence on inequalities and how to judge priorities in relation to inequality. Also, information on target setting and the use of indicators to reduce health inequality and the resource requirements was requested. Other types of external evidence, for which more information was requested, included health promotion and community development. One respondent said that more attention needs to be paid to valuing the benefits of programmes over the long term. It was suggested that the benefits of many prevention activities would only be felt over a long time period. Concentrating on activities that impact on health in the short term could lead back to a medical-based model of provision rather than a socio-economic one.

Focusing on the delivery of HImPs, it was mentioned that staff commitment to the process was the priority and once that was achieved there would be improved use of the evidence. Additionally, HImP leaders wanted more information on how to implement programmes in a cost-effective manner. For instance, the evidence for some healthy lifestyle initiatives are well recognised, such as smoking cessation and increased exercise. However, it was reported that no analyses exist concerning how best to implement such programmes.

In general, concise, summarised information is needed as HImP leaders said that they were too busy making decisions to explore all the evidence. Also, some individuals involved in producing the HImP do not have a background in medicine or science and therefore might have difficulty in appraising some types of evidence.

5.1.20 The role of economic evidence in the future design of HImPs

Respondents were asked about the contribution that they think that economic evaluation will make in the future design of HImPs. On balance, most respondents (59%) were optimistic about the use of such evidence while 19% of respondents thought it would play a limited, minimal, or even negligible role in the HImP design. Twenty-two percent of respondents either did not answer or said that they did not know if economic evidence would be part of the future evidence base of HImPs. The respondents who were confident about the role that economic evaluation might play in the future design of HImPs, were clear about the strengths of economic evaluation, as summarised in the quote below.

> *Economic evaluation should play a greater role so that we can be open and explicit about the choices that have to be made within limited resource envelopes.*

A suggestion made by a few respondents was to increase the use of economic evidence by improving the link between this information and targeted central funding. Service and Financial Frameworks (SaFFs) were thought to be a good

budgetary tool to link HImP objectives to practice. Respondents were keen to add that an appropriate supply of labour is needed to implement the recommendations in practice.

Reasons given for reservations about the role of economic evidence in the future design of HImPs were mainly related to practical considerations, such as data limitations and the fact that HImPs have not long been established. Limited resources, including human resources and funding constraints, were given as reasons why economic evidence might not be utilised as much as it could be. No concerns were voiced about economic evaluation methodology itself.

A few HImP leaders mentioned that clinicians and politicians put the emphasis on health rather than money, and therefore felt that there was some resistance to cost-effectiveness information. Concerns were voiced about the political acceptability of some programmes and the resources required to undertake appropriate cost-effectiveness research. However, many respondents recognised that there was a difference between being cost-effective and merely cost cutting.

In interpreting the responses to the questions about the usefulness of economic evidence (here and in Table 11), it should be recognised that respondents might be overly positive, knowing that health economists were conducting the survey. However, many of the comments about the usefulness, or lack of use of economic evidence, were fairly forthright, which suggests that respondents were not overly inhibited by the researchers' affiliation.

5.1.21 Additional comments

At the end of the questionnaire a section was left blank so that respondents could add any further comments if they wished. A few respondents felt that there was more scope for evidence in disease areas other than cancer or CHD, as much evidence was already available for these two diseases. In the other sections of the HImP, such as children and young people, it was argued that there was less research evidence available, that national targets were less directive, and therefore potentially there was more scope to gather information locally.

Another point made was that the HImP is a summary document pooling many separate plans. Therefore, there may be no evidence incorporated within them explicitly, although implicitly guidance and Government information such as the NSFs are based on research evidence. One respondent said that targeted evidence-based central funding would be useful and this sentiment was expressed by many other HImP leaders throughout the questionnaire. As one HImP leader stated, "HImPs are increasingly structured in line with NSFs and the directives from the new task forces. As long as the 'must dos' from the centre match with good evidence and cost-effectiveness, then this speeds up the process of putting evidence into practice."

The partnership culture, which is key to HImPs, was described as "insufficiently developed to enable partnership agencies to feel secure in pooling resources, especially as they have other competing and non-health related priorities". Other tensions to overcome included the difficulties in undertaking the consultation exercise and taking account of available research, given the time-scale in which the HImP document has to be produced.

5.2 Findings based on telephone interviews of 10 HImP leaders

5.2.1 Overview

Twenty-seven (40%) of questionnaire respondents said that they would be willing to participate in a semi-structured telephone interview and of those a sample of ten respondents were chosen; that is, 37% of those who agreed to an interview. Two main criteria were used to choose the HImP leaders for the telephone interviews: (i) that they provided considerable feedback in the open-ended section of the postal questionnaire and/or; (ii) because they raised some economic evaluation issues in the postal questionnaire that we were interested to explore further. The respondents interviewed included those from a broad range of health authorities including rural communities, metropolitan regions, health authorities with HAZ, and those with an above average socio-economic rating.

The majority of questions put to each HImP representative were based on their responses to the postal questionnaire and the aim was to obtain more detailed answers to responses of particular interest. Additionally, at the time that the telephone interviews were undertaken, some preliminary analysis of the postal questionnaire results were available and this allowed the interviewees to explore some emerging themes in more depth.

Based on the postal questionnaire results, six main themes were investigated:

- the interviewee's understanding of the meaning of health improvement and methods to achieve it;
- the definition of evidence used in the study and where evidence might be used;
- the complexities involved with decision-making;
- the role of economics evidence in the development of the HImP;
- the role of the inter-agency relationships;
- the public's involvement in the HImP.

All the HImP leaders interviewed were enthusiastic about their HImP and the answers provided were helpful in providing explanations about the work that had been undertaken to produce the current HImPs. Some respondents also gave suggestions about how the HImP might look in the future and the amendments and changes that could be made to improve the HImP. From the answers given it was clear that most HImPs are still in the early stages of development and that, to date, changes in care provision made as a result of the HImPs tended to be at the margin. However, the interviewees anticipated

that, over time, service re-configuration would be undertaken to re-orientate provision, with the aim of maximising health improvement.

5.2.2 Defining and achieving health improvement

From the postal survey results it was clear that respondents thought that health improvement is an important objective of the HImP. In the interviews the concept of health, its determinants and health improvement were explored. It was found that the definition varied across respondents and overall no clear understanding was achieved of what the terms mean.

A few respondents mentioned that within the NHS there is pressure to deliver on health and yet the HImP is designed to be more encompassing, including wider socio-economic objectives relating to health. It was suggested that the NSFs that underpin some of the national health improvement objectives tend to be medically driven and that the goals set are primarily driven by short-term concerns. In contrast, it was argued that the socio-economic approach to the provision of care tends to take place and have an impact on health over a longer time frame. Therefore, there might be some overall tensions in those objectives that have been set. One interviewee mentioned that the HImP is a dynamic policy and that its introduction has provided a positive impetus for change and the right organisational framework for health improvement. Longitudinal analysis over a number of years will be important in ascertaining whether the HImP is a successful vehicle for improving health.

While there have been a number of changes in health policy and administration over time, the maxim of financial control and keeping to budget remains constant. Linking evidence to quantifiable targets appears the most powerful approach for driving home targets for health improvement. The impetus to deliver and demonstrate tangible outcomes was strong, as was the call for accessible evidence to back up action plans.

5.2.3 Targeting evidence

A few clear messages emerged with respect to the evidence base underlying HImPs. First, evidence takes time to uncover and incorporate within the HImP process, so the evidence base of the HImP is expected to improve over time. It was suggested by some interviewees that at present much evidence has been used in a re-active way to support current practice, rather than a pro-active way to establish best practice. It is not clear what is the most appropriate use of evidence. Due to the short time horizon over which those involved in the HImP had to produce the document, the most immediate task was to present evidence to support what it was possible to achieve and not necessarily what was best value for money. Of course, over the longer term the objective is to make a difference to the health of the community, based on the available evidence.

Interviewees were keen to demonstrate value for money when drawing up the HImP, but for many it was never the expectation that the HImP would be

systematically rooted in evidence. Instead the HImP was seen as a composite of information, including a multitude of action plans relating to service provision. For the agencies collaborating in the HImP, common objectives are needed to give it direction. The HImP provides an incentive for partnership and the interviewees thought that its introduction has created an impetus for change that has been met with much good will.

A second issue, that was raised several times, concerned the nature of evidence and the way in which it was disseminated. Evidence needs to be clear and understandable to people who have different professional backgrounds. Most interviewees argued that the current evidence base tends to be medically driven. For instance, the NSFs are rooted in medical evidence and were central to producing the HImP. It was argued that less evidence was available on issues relating to the broader agenda of health care, such as environmental determinants of health. Economic evidence was thought to be beneficial, though the information is not as accessible as it needs to be to make the maximum impact.

A third theme was that HImP producers take a fairly heterogenous approach to the use of evidence in the production of their HImP. While there were a number of "must dos" issued centrally as statutory requirements, that all HImP producers acted upon, the degree to which local evidence was used in a bottom-up approach varied considerably. On the one hand there was a high degree of centralisation, either with the HImP boards playing a key role in the direction of the HImP, or evidence from the central bodies issuing national targets leading the direction of the HImP. Alternatively, at the other end of the spectrum, action plans were designed based on a considerable degree of community consultation, either with the PCGs/Ts or with the public.

Some interviewees mentioned that the guidance from NICE is a potentially valuable instrument for bringing good economic evidence to bear, although at the time of producing the second HImP little NICE guidance was available. It was felt that the work of bodies such as NICE will help to reduce duplication of research effort, by collating and synthesising information centrally and then disseminating the information in a top-down fashion. However, one respondent pointed out that there are three pronouncements made by NICE: definitively yes, or definitely no, or provide an intervention only under certain conditions. Announcements have so far tended to be in the latter, grey area, the consequence being that more decisions are devolved to the local level. Another interviewee said that any pronouncements to provide interventions made by NICE became "must dos" immediately and yet the resources needed to enact such decisions are not necessarily available. To date there has been a high degree of media interest in the pronouncements made and this makes it even more difficult to ration care. The suggestion was that earmarked funds be made available to enable health care providers to meet any sanction that was given to provide a service. Since this research was undertaken, the government has announced that NICE guidance is to become mandatory, although there is still no intention to provide earmarked funding. Nevertheless, the NHS is currently experiencing a real growth in the level of resources.

5.2.4 Some complexities associated with decision making

Several interviewees drew attention to the complexity of decision making. One point highlighted was the need to make a distinction between preferences at the level of the individual, which were seen as primarily quality focused, as compared to a more quantity-focused agenda at the collective level. One cancer HImP lead pointed to the emotive nature of cancer illness and that this compounds the difficulty of making rational decisions. Referring to cancer patients, the interviewee said that on an individual basis, day to day needs are expressed by cancer patients, for instance the demand for quality-focused services such as complementary medicine. However, when expressing their views in the presence of clinicians, patients tended to defer to professionals and their arguments tended to shift towards a focus on the quantity of services provided, based on the idea that more was better for the good of the community as a whole. To overcome the potential problem of the under representation on user reviews, some cancer HImP leads have set up workshops for patients and voluntary organisations to help them to identify their needs, to empower them and to organise a remit to improve the services received. The aim is to encourage such groups to formalise their agenda for action so that issues of concern may be given a higher profile and therefore have the potential to be translated into practice. It was stressed that consultations with the public can be quite costly, particularly in terms of time, so that it was important to consider this when organising such activities.

5.2.5 The role of economics

From the interviews it emerged that HImP leaders had used some economic frameworks in their approaches to decision making. Some HImP leaders had produced pro-formas to prioritise interventions for different disease areas and within these they included requests for economic evidence such as information on health gain and value for money. Some others had used SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. This is a management tool and does not necessarily include costs. However, it does consider the positive and negative aspects of providing care and facilitates a discussion of choice, much like economics. One HImP group had undertaken economic-type exercises to help decide on priorities. The HImP board had been presented with a fixed budget and were asked what services would be provided within budget, then the fixed budget was reduced. The aim of the exercise was to encourage decisions to be made under increasingly constrained conditions and to drive home the rationing problem. Similarly, one Health Authority had used Programme Budgeting Marginal Analysis to illustrate the distribution of expenditure on health care goods and services.

One interviewee indicated economics could be used to provide positive messages on resource allocation, as described in the box below. The same interviewee also called for more research on organisational and delivery aspects of care. Associated with this, it was argued that little evidence is available on the impact on other services of implementing the results of cost-

effectiveness analyses, or on the impact on other objectives of the HImP such as equity in health.

> *"There is a dearth of economic-based evidence – particularly the evidence base on disinvestment. Disinvestment is seen as a negative thing – whereas in economic terms it is a positive thing as the resources are then re-allocated to more beneficial use."*

A few interviewees mentioned the importance of resource mapping and the need to link it to health needs information as well as the likely demand for services. One interviewee added that while there may be economic studies available, the consistency and generalisability of them was often lacking and there was a call for contextual analysis to be applied so that the evidence could be made relevant to a specific setting.

5.2.6 The role of the public in the HImP partnership

Since its inception, the inclusion of public opinion was held to be a key objective of the HImP process. Within the HImP partnership, a number of HImP leaders spent a great deal of time consulting with the public and with specific patient groups. It was emphasised that it is important to be aware of what involving the public means. Interviewees argued that while the Government wants to show members of the public that it is listening to their demands, at the individual level the patients do not always feel reassured. By engaging the public, more difficulties are made explicit and potentially more work is generated. Therefore, the incentive mechanism to consult the public needs to be carefully thought out.

HImP leaders from health authorities with varied geographical distributions of the population were interviewed. The heterogeneity of evidence underpinning HImPs may well reflect the fact that those involved in producing the HImP were keen to orient the document to the needs of the local community. In sparsely populated areas, access to care was stated as an important concern. In health authorities based in cities, a chief objective was the need to prioritise the priorities – particularly in areas including HAZs, where the level of poverty and ill health is highest and where the variation in health status within health authorities is greatest.

5.2.7 Summary

In summary, three main suggestions were made. First, HImPs need to embrace a broader model of care and clearer definitions of objectives would enhance this. Second, incentives which link evidence to practice would help to ensure "best HImP practice", however defined. Third, on a practical level, evidence needs to be more accessible and user friendly. For instance, economic evidence was thought to be very important but more is needed to inform the policy decisions that have to be taken. For instance, there needs to be more information on organisational and delivery aspects of provision. A number of interviewees argued that those involved in HImPs found it helpful

when evidence was collated and disseminated from the centre, as long as they were given the flexibility to adapt the information to allow for local interpretation.

5.3 Information collected from the HImP documents

5.3.1. Overview

A random sample of 26 (25%) HImP documents were obtained in order to review whether reference was made to the use of any evidence in the development of the HImP and if so, what type of evidence. The overall aim was to build up a picture of the kinds of priorities for delivery of care that were being proposed under the HImP umbrella and to gain an idea of the extent to which priorities and target setting were linked into the evidence base of the HImP.

Overall, very few HImP documents made any significant reference to the evidence. Reference to external evidence was particularly sparse. Most HImPs extended their brief beyond those disease areas that were statutory requirements and the number of priorities within each HImP varied from six to twenty, the average number being twelve. As illustrated in the table below, besides CHD, cancer and mental health care, other examples of HImP chapters include a focus on children and young people, drugs and substance misuse, people with learning and physical disabilities and chronic diseases.

Thirteen (50%) HImPs documents were reviewed for the use of cancer evidence and 13 (50%) HImP documents were reviewed for CHD evidence. Of the 13 HImPs documents reviewed for CHD evidence, at the national level 12 (92%) referred to the NSF on CHD, three (23%) referred to the national priorities guidance for CHD, two (15%) referred to a review on invasive and tertiary cardiac services, two (15%) referred to the “Tobacco Kills” White Paper and one (8%) HImP referred to the stroke strategy or the exercise strategy.

Of the 13 HImP documents reviewed for cancer evidence, at the national level four (31%) mentioned the Calman-Hine Report and the Clinical Outcomes Guidance (COG), one (8%) mentioned the tobacco White Paper “Smoking Kills” and the circular HSC 1998/999 in relation to local strategies on smoking and three (23%) mentioned the “New NHS: Modern and Dependable” document.
Reference to published literature was made in six (46%) of the 13 HImP documents reviewed for cancer evidence. For the HImPs reviewed for cancer evidence, reference was made to the following published literature: government sources such as “Our Healthier Nation” for priority areas within the HImP, Modernising Health and Social Services for National Priorities Guidance and the NHS Executive document on colorectal cancer. Other types of evidence included the Calman-Hine report on cancer guidance, health action zones, the health survey for England smoking rates, standard mortality rates and the HEA Sun Awareness Campaign. For the studies reviewed for CHD evidence, the following documents were mentioned: Saving Lives: Our Healthier Nation, the NSF, census data and information from the British Cardiac Society.

Table 18: Disease areas covered in the HImPs

Disease, prevention or treatment area included as a chapter in the HImPs (% of HImPs covering area)	Number of times a disease, prevention or treatment area was included as a chapter in the HImPs
Heart disease (100%) Cancer (96%), Mental Health care (96%) Children and young people (89%) Accidents (84%) Old people (77%)	Over 20 times
Drugs and substance misuse (73%) People with learning disabilities (65%), Sexual health (65%) People with physical disabilities (54%) Access to services (46%) Inequalities (39%), Primary care, (39%), Dental care (39%)	Between 10 and 20 times
Carers (35%) Chronic disease (e.g. diabetes) (31%), Smoking (31%) Homelessness (27%), Crime (27%) Ethnicity (19%), Acute and community health (19%) Palliative care (12%) Continuing professional development (8%), Employment (8%), Perinatal mortality and maternal health (8%), Asthma (8%) Community disease control (4%), Refugees (4%), Education (4%), TB (4%), Health promotion & protection (4%), Renal & gut disorders (4%), Health and social services (4%), Intermediate care (4%)	Less than 10 times

References to local studies included local guidance on secondary prevention in CHD, clinical information systems in a cardiac unit and local audits and Public Health reports for both CHD and cancer. Some health authorities were acting upon Regional collection of evidence, for instance the “Health of Londoners Project”. However, for a number of HImPs no reference was made to such evidence at all.

The introduction of the HImP sets the context for what is to follow. In 34% of cases (nine HImPs) no mention of economic terms were made in the introduction. Terms that may have some economics connotations included: financial frameworks for HImPs, the use of Health Economy boards at the decision making level, Primary Care Investment Plans and Joint Care Investment Plans, the presence of limited funds, SaFFs to link HImPs priorities and planning cycles. Only two documents mentioned cost-effectiveness explicitly. Besides this “careful management of overall NHS resources” was mentioned as was the need for “balancing costs and outcomes and achieving best value”.

For the HImPs where the use of CHD economic evidence was being explored, one document mentioned cost-effectiveness evidence to reduce smoking prevalence, one mentioned local priorities for capital development, one cost and one affordability. Nine (70%) of HImPs documents reviewed for CHD evidence did not use any economic-related terms.

For the HImPs where we looked at the economic evidence for cancer, 10 (77%) did not refer to any economic evidence at all, one mentioned modernisation funds for the development of patient care pathways, one resources and one financial frameworks.

Evidence from national targets was mentioned in seven (54%) of the HImP documents reviewed for CHD evidence. All of these mentioned the national target relating to a decrease in death rates from CHD/stroke in under 75 year olds by 20% or more by 2010.

References were made to the following cancer national target evidence: four (31%) mentioned increasing cervical cancer screening to an average of 80% by 2002 and one (8%) mentioned a decrease in smoking.

Local targets for cancer that were mentioned included; three (23%) relating to local gynaecology services development of patient care pathways, two (15%) relating to the London plan, two (15%) relating to coloscopy programme. For the HImPs reviewed for cancer, all mentioned cancer waiting time targets.

6. Discussion

The aim of this project was to investigate the role of evidence in the design of HImPs, particularly economic evidence. There have been a few research projects on HImPs, but none have looked specifically at the contribution of evidence or the use of economics. For each of the surveys conducted as part of this research, it was clear that HImP leaders think that evidence is an essential ingredient to underpin service delivery decisions.

It must be recognised that surveys have inherent weaknesses, in that respondents may give the answers they feel they should give, rather than answers reflecting reality. Therefore, an analysis of HImP documents was undertaken.

Within most HImP documents some references were made to national targets, especially those provided through the National Service Framework (NSF). The NSF will have been based on evidence from numerous uncited sources. The large majority of survey respondents argued that the NSF provides useful guidance to formulate service delivery, assuming some flexibility of implementation at the local level. Beyond this, the references to evidence in the HImP documents was sparse, although it might not have been the intention of those writing the documents to cite the evidence in detail.

Bearing these limitations in mind, the main conclusions of this research are as follows:

(i) HImPs are seen as having multiple objectives

Whereas the improvement of the health of the population is viewed as the prime objective of HImPs, other important objectives are to reduce health

inequalities and to develop partnerships, such as encouraging joint working arrangements. For many, the *process* of developing HImPs was as important as the outcome, particularly since HImPs are in their infancy. Therefore, we might expect to see a trend towards more measurable targets and the more explicit use of evidence in the future.

Many respondents, particularly those from a public health background, saw the process of developing HImPs as a way of stressing the broader socio-economic determinants of health, as opposed to the 'medical model' of health and health care. However, some of their efforts to stress broader socio-economic interventions to improve health were thwarted by the relative lack of evidence on costs and effects for such interventions.

(ii) The notion of evidence is interpreted broadly

It is clear from the research that traditional notions of evidence, namely data drawn from classical research studies and published in the literature, do not encompass the range of inputs to the design of a HImP. Many of the inputs relate to national guidance and local professional opinion, which in turn might be based on data from research studies. Therefore, it is important to have a broad definition of what constitutes evidence. The distinction used here, between internal and external evidence, proved useful in exploring respondents' views on the use of evidence in developing HImPs.

(iii) Basic concepts of economics are well-understood if not always applied

Most respondents fully understood the basic notions of economics and the need to make tough choices when faced with a budget constraint. However, the level of access to economic analyses and economics expertise was low. Therefore, even where economic studies did exist, it was not clear how they could be interpreted and used.
More importantly, given the various constraints operating locally (see below), most respondents found it difficult to operationalise economic concepts in decision making, even if they wished to do so. There were, however, some notable exceptions to this (discussed below).

(iv) Local constraints greatly influence the development of HImPs

Most respondents commented on the speed at which their HImP had to be developed and that time limitations precluded extensive searches for evidence. In addition, several key resources were not available, or in a limited supply, at the local level. This made it impossible to search for, synthesise and interpret evidence, particularly economic evidence. Economic evidence had the additional problem that it might not transfer easily from one setting to another and therefore it needed to be interpreted in the light of the local context.

Political acceptability is also an important criterion in judging health care interventions at the local level. Therefore, external evidence is inevitably merged with local professional and public opinion when deciding upon priorities.

(v) National guidance is very influential in the design of HImPs

It was clear from the responses that most health authorities took very seriously the guidance embodied in the NSFs and (more recently) pronouncements from NICE. Respondents assumed that the evidence base of such guidance was sound, although the guidance itself may not always have utmost relevance, given local circumstances. In particular, health authorities wanted more advice on how to implement NICE guidance locally.

Given the current constraints, in time and expertise, at the local level, central initiatives are therefore critical to the HImP process. These include not only the issuing of guidance through NICE and the NSFs, but also initiatives in the generation, synthesis and dissemination of evidence through the Health Technology Assessment (HTA) programme, the Cochrane Collaboration and bodies such as the NHS Centre for Reviews and Dissemination.

A number of these issues are discussed in more detail below and then, in Section 7, a number of research and policy implications are identified.

6.1 The role of internal and external evidence

While more demands for additional external evidence were made, in practice HImPs tend to be based both on internal and external evidence. The latter tends to be less well documented and less explicit. In terms of external evidence, while many HImP leaders were keen to use more local data, it appears that there needs to be some restructuring of data collection to allow more fruitful analysis to be undertaken. Information systems are needed to link local health care needs with national targets and guidance (Kilner et al, 1999). While existing evidence is typically limited, solutions tend to be pragmatic, making the best use of the available evidence. As Davey Smith et al (2000) argue, an “important question (needs to be asked) about what sort of data provide appropriate evidence for particular types of decisions”, and they see a potential “mismatch between evidence and policy”. Instead of focusing on how policy informs evidence, Macintyre et al (2001) approached the issue from the opposite direction, by exploring how evidence can be used to inform health policy. In practice, there needs to be an interactive relationship between researchers and funders with researchers and policy experts informing each other. There is also a need to generalise results beyond the confines of the research programmes on which they are based. Also, most research tends to focus on individual level determinants of health (e.g. medical interventions) rather than population level determinants and, as Davey Smith et al argue, the determinants of each may differ (Davey Smith et al, 2000).

6.2 Use of economic evidence and best practice

Generally speaking, most health authorities made some use of economic evaluation evidence within the HImP, and the large majority of questionnaire respondents said that economics had a valuable contribution to make when applied to health care delivery. There was also some infrequent use of sophisticated forms of economic evaluation, using outcomes such as QALYs or DALYs as a measure of the "relative efficiency of health gain potential within and across each of the sectors".

Other examples of the influence of economic thought included the use of Programme Budgeting and Marginal Analysis (PBMA) and the use of pro-formas designed to encourage the systematic use of evidence. Examples of the type of information required in one HImP priorities matrix included demonstration of value for money, for example cost per QALY values or a given cost per life year gained. Within their HImP another health authority suggested a number of criteria on which to assess the relative priority of proposed NHS developments and these included a finance section containing the following questions:

- What are the revenue costs and / or savings?
- How is it proposed to finance any net revenue cost?
- What are the capital and / or non-recurrent costs and how is it proposed to account for them?

Additionally a section on efficiency was included:
- Have the costs and benefits of the status quo been considered?
- What is the added value, in terms of cost per new outcome?
- Have other options been considered?

Only in a small minority of cases did HImP leaders state that they thought economics had only limited use in the design of HImPs and, of these, a number said that they had not used economic evidence due to poor availability of local data and external evidence. Most respondents who said that the use of economic evidence was limited also said that they would have used the information: (i) had it been available and; (ii) if the expertise to interpret study findings was available.

7. Research and Policy Implications

The results of this research lend considerable support to a number of research and policy initiatives that are already underway, such as the development of various forms of national guidance and the dissemination of evidence-based practice. They also suggest some others. The main implications are as follows:

(i) The evidence base of national guidance should be maintained, if not strengthened

Given local constraints on time and resources, those developing HImPs are only too willing to embrace national guidance. Therefore, this represents the major vehicle for improving the evidence base of local decisions. It is important, therefore, that the evidence base of NSFs and NICE guidance remains strong and that this evidence base includes economic evidence.

(ii) Efforts should continue to generate, synthesise and disseminate evidence on a national level

Only on rare occasions will there be opportunities to undertake a comprehensive review of the evidence at the local level. Therefore, the considerable efforts already made to generate, synthesise and disseminate evidence through the NHS R&D programme are critical to improving the evidence base of local decisions. Those developing HImPs were particularly appreciative of readily accessible reviews of cost-effectiveness evidence and were less likely to consult academic journals.

The synthesis and dissemination of economic evidence presents some particular challenges, as local factors might influence whether a particular intervention is cost effective. Thus, the interpretation of economic evidence from another setting can pose difficulties. Therefore, more effort should be placed on understanding how local factors influence cost-effectiveness and the ways in which local decision makers can better interpret economic study results in their own circumstances.

(iii) Quantifiable targets (for health improvement) and the role of evidence in priority setting need to be stressed

Many respondents acknowledged that, as the learning curve in producing HImPs was climbed, there would be less emphasis on process issues and more on outcomes. They also felt that evidence would be used more explicitly. The HImPs differed greatly in terms of their emphasis on quantifiable targets and mechanisms to consider evidence in a formalised manner. Some of the more promising local initiatives, such as the use of proformas or cost-benefit matrices, should be studied further in order to ascertain whether they could be more widely adopted.

When progress has been made in setting national targets for health outcomes within the context of the performance assessment framework, HImPs may be an appropriate vehicle for monitoring local progress in advancing national targets.

(iv) The local role in assembling evidence needs to be clearly defined and adequately resourced

Whilst most of the teams developing HImPs relied on national guidance, such guidance clearly needs to be interpreted in the light of local circumstances. Therefore, a clearer specification is required of the local demographic, epidemiological and financial information necessary to produce the HImP. Several of the HImP leaders welcomed initiatives such as Public Health

Observatories, which they felt would greatly assist them. However, the responses to the questions about resources to produce the HImP indicated some were in short supply, in particular economics expertise.

(v) Efforts to educate health care professionals in evidence-based medicine and economics should be maintained, or strengthened

It was clear from the surveys that local professional opinion, especially clinical opinion, is central to the production of the HImP and the development of priorities. This emphasis will remain, even if the efforts outlined above to strengthen the evidence-base of national guidance and to disseminate evidence, are made.

Therefore, it is important that, through educational programmes, clinicians have an adequate appreciation of the principles of evidence-based medicine and economics. This will maximise the possibility that their opinions, when given, will embody these principles.

(vi) More research should be undertaken into the cost-effectiveness of broader socio-economic interventions to improve health

Several respondents talked about the tension between the 'socio-economic' and 'medical' models of health and the fact that, in assigning priorities, medical interventions had precedence due to their superior evidence base. Therefore, more attention should be placed on evaluating some of the broader, inter-agency interventions that are identified as part of the HImP process.

(vii) The research and policy implications of this study also need to be reviewed in the light of the recent organisational changes in the NHS, in particular the creation of strategic health authorities and the developing role of PCG/Ts

The new strategic health authorities will cover large populations and will therefore not be the place where local plans are developed. Thus the task of producing HImPs, or some variant on these, will fall to the PCG/Ts.

The major issue raised by these organisational changes, in relation to this study, is whether PCG/Ts will have the level of resource and expertise to gather, synthesise and interpret evidence. In particular, what skills are they likely to have in public health or economics? This study showed that such resources were often in limited supply, or absent, in health authorities.

As the organisational changes progress, some of these issues may be addressed. In the meantime, however, PCG/Ts are likely to be even more reliant on the national guidance than were the health authorities in our survey. This suggests that many of the policy implications identified above have even more relevance, given the organisational changes that are taking place.

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9. Appendices

9.1: Questionnaire on the use of evidence in the design of HImPs

THE HEALTH IMPROVEMENT PROGRAMME
What is the role of evidence in the design of HImPs?

Funding body: Department of Health

Survey conducted by: Centre for Health Economics, University of York
Research team: Mike Drummond, Dave Smith and Helen Weatherly

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ABOUT THIS QUESTIONNAIRE

QUESTIONNAIRE RATIONALE

The Centre for Health Economics at York University is undertaking research funded by the Department of Health, on the role of evidence in the design of HImPs. In particular, we are interested the use of economic (ie. cost-effectiveness evidence). To this end, a copy of this questionnaire has been sent to each Health Authority in England. As a key output of our research a report will be produced which we will send to you later this year. We hope that this report will be of interest to you, as we aim to present a picture of the evidence base of HImPs for all Health Authorities in England.

FOCUS OF QUESTIONNAIRE

We are particularly interested in two disease areas within the HImP, namely **coronary heart disease** and **cancer**, and we will ask you to choose one and to focus on it for some of your answers. If necessary, feel free to consult one or more colleagues who were closely involved in the production of the HImP in the given disease area.

OUR DEFINITIONS OF EVIDENCE

The main aim of this questionnaire is to explore what evidence ought to be used and what evidence is used in the design of HImPs. For the purposes of this survey we take the word evidence to mean "any information available for guiding action". We make a distinction between evidence which is **internal** or **experiential**, that is based on professional opinion and tacit knowledge, as compared with **external** or **empirical** knowledge which is based on research from primary and/or secondary studies e.g. guidelines or published studies.

CONFIDENTIALITY

The questionnaires that are returned to us will be treated in complete confidence and only the research team at the University of York (see Page 1 for the researchers involved) will have access to your response. No explicit reference to your Health Authority will be made in the report unless your permission is sought in advance.

WHAT TO DO NOW

We would be grateful if you could complete this questionnaire and return it to us in the freepost envelope provided. To enable us to write a report for autumn it would be helpful if you returned your completed questionnaire within the next fortnight, that is by Friday 6th of October 2000**. Thank you.**

Your name.....

Your job title.....

Academic and professional qualifications (please include short courses on e.g. health economics.....
.....

.....

Q.1 In your view, within your HImP what are the objectives of HImPs? How important are the following? *(Please tick one box in each row)*

	(i) *Very important*	***(ii)*** *Quite important*	***(iii)*** *Limited importance*	***(iv)*** *Not important*
1a To improve health	❑	❑	❑	❑
1b To encourage partnership in the provision of care	❑	❑	❑	❑
1c To reduce health inequality	❑	❑	❑	❑
1d To focus on efficient provision of care	❑	❑	❑	❑
1e To identify local priorities in health care provision	❑	❑	❑	❑
1f To organise and co-ordinate health care provision	❑	❑	❑	❑
1g To provide a performance management framework	❑	❑	❑	❑
1h Other *(Please specify)*	❑	❑	❑	

Q.2 In your view what was the *prime* objective of the HImP that you were involved in? *(Please tick one of the boxes below. You will note that the objectives mentioned here are a repeat of the objectives in Q.1 above. The aim of this question is to decide what is the most important objective.)*

2a To improve health	❑	**2b** To encourage partnership in the provision of care	❑
2c To reduce health inequality	❑	**2d** To focus on efficient provision of care	❑
2e To identify local priorities in health care provision	❑	**2f** To organise health care provision	❑
2g To provide a performance management framework	❑	**2h** Other.....……	

Q.3 Apart from Health Authority Staff, who was consulted in the production of the HImP that you are involved in? *(Please tick the appropriate box/es)*

Local Authority Departments:

❑ **3a** Housing ❑ **3b** Education

❑ **3c** Transport ❑ **3d** Social Services

❑ **3e** NHS Trusts ❑ **3f** Primary Care Groups/Trusts

❑ **3g** Community Health Councils ❑ **3h** Voluntary bodies

❑ **3i** Local people ❑ **3j**Other *(Please specify)*.....

Q.4 Overall, would you say the internal/external evidence base of the 2000-2003 HImP that you are involved in met your expectations? (see P2 for our definitions on evidence) *(Please tick one box)*

4a Completely satisfied ❑ **4b** Quite satisfied ❑

4c Not very satisfied ❑ **4d** Not at all satisfied ❑

Q.5 Please can you tell us why you answered "completely satisfied", "Quite satisfied", "not very satisfied" or "not at all satisfied" in Q.4?

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Q.6 Do you think that economic evidence (relating to issues such as costs or cost-effectiveness) should influence the design of HImPs? *(Please tick one box)*

5a Yes, very much so ❑ **5b** Yes, quite a bit ❑

5c Only marginally ❑ **5d** No ❑

Q.7 Please can you tell us why you answered "yes, very much so", "yes, quite a bit", "only marginally" or "no" in Q.6?

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FOR THE REMAINDER OF THIS QUESTIONNAIRE PLEASE FOCUS ON EITHER CORONARY HEART DISEASE OR CANCER

Q.8 Please indicate a choice of:

EITHER **8a** Coronary Heart Disease ❑ OR **8b** Cancer ❑

Did you make your choice because *(please choose one):*

❑ **8c.** You have greater knowledge of the programme area in your HImP

❑ **8d.** The evidence base is relatively strong for the programme area concerned

❑ **8e**. Other reason

Please specify:……

❑ **8f:** No particular reason

Q.9 For the HImP that you were involved in, how important were the following sources of <u>external / empirical</u> evidence in deciding what <u>Coronary Heart Disease</u> or <u>Cancer</u> services to provide? *(Please tick one box in each row)*

	***(i)** Very important*	***(ii)** Quite important*	***(iii)** Limited importance*	***(iv)** Not important*	***(v)** Did not use*
9a National Service Framework guidelines	❑	❑	❑	❑	❑
9b NICE guidance	❑	❑	❑	❑	❑
9c Government publications e.g. guidance on the commissioning of cancer services for improving colorectal cancer	❑	❑	❑	❑	❑
9d Clinical guidelines e.g. choiceof ACE-inhibitors in the primary care management of adults withsymptomatic heart failure	❑	❑	❑	❑	❑
9e Guidance from professional associations e.g. the Royal College of Surgeons	❑	❑	❑	❑	❑
9f Secondary sources (e.g. effective Health Care Bulletins, Bandolier)	❑	❑	❑	❑	❑
9g Published cost-effectiveness analyses e.g. screening for hypertension	❑	❑	❑	❑	❑
9h Work commissioned to academic researchers	❑	❑	❑	❑	❑
9i Work commissioned to management consultants	❑	❑	❑	❑	❑
9j General published literature (e.g. journal articles	❑	❑	❑	❑	❑

9k Other *(Please specify)*.....

Q.10 For the HImP programme that you have chosen to focus on, how important were the following sources of internal evidence in deciding what Coronary Heart Disease / Cancer services to provide to meet the priorities identified? *(Please tick one box in each row)*

	(i) *Very important*	***(ii)*** *Quite important*	***(iii)*** *Limited importance*	***(iv)*** *Least important*
10a Clinical opinion	❑	❑	❑	❑
10b Health care managers opinion	❑	❑	❑	❑
10c Academic researchers opinion	❑	❑	❑	❑
10d Public/lay opinion	❑	❑	❑	❑
10e Patient advocacy groups	❑	❑	❑	❑

10f Other *(Please specify)*.....

Q.11 Generally speaking, we are interested to know about the type of evidence used to decide which health care interventions to focus on (for either Coronary Heart Disease or Cancer). Would you say the evidence was internal evidence OR external evidence (see P2 for our definitions on evidence) *(Please tick one box below only)*

11a All internal evidence	11b More internal than external evidence	11c More external than internal evidence	11d All external evidence
❑	❑	❑	❑

Q.12 Who was given the job of finding information? *(Please tick one box in each row)*

	(i) *Yes*	***(ii)*** *No*
12a Yourself	❑	❑
12b Information officer/s	❑	❑
12c Researcher/s	❑	❑
12d Clinician/s	❑	❑
12e Administration staff	❑	❑

12f Other *(Please specify)*.....
.....

Q.13 Did you find there was "satisfactory", "limited" or "insufficient" supply of resources for the design of HImPs for the following resource examples? *(Please tick one box in each row)*

Resource type	***(i) Satisfactory***	***(ii) Limited***	***(iii) Insufficient***
13a Financial resources	❑	❑	❑
13b Information officer/s	❑	❑	❑
13c Health economist/s	❑	❑	❑
13d Epidemiologist/s	❑	❑	❑
13e Clinical resource/s	❑	❑	❑
13f Health services researcher/s	❑	❑	❑

13g Other *(please specify)*.....

Q.14 Did you find the following types of <u>economic</u> evidence useful?
(Please tick one box in each row)

	(i) *Very useful*	***(ii)*** *Quite useful*	***(iii)*** *Limited use*	***(iv)*** *Not useful*	***(v)*** *Did not use*
14a Discussion and advice from economists	❑	❑	❑	❑	❑
14b Cost-effectiveness analysis information published as reports or in journals	❑	❑	❑	❑	❑
14c Reviews of cost-effectiveness in health care e.g. Effective Health Care Bulletin	❑	❑	❑	❑	❑
14d Advice from such bodies as NICE	❑	❑	❑	❑	❑
14e Conferences where economic evidence is discussed	❑	❑	❑	❑	❑

14f Other types of economic evidence *(Please specify)*.....

Q.15 What was the method used for collecting evidence in the design of HImPs? *(please tick one box in each row)*

Methods for collecting evidence	(i) Considerable use	(ii) Some use	(iii) Little us	(iv) Not used
15a Focus groups	❑	❑	❑	❑
15b Interviews	❑	❑	❑	❑
15c Questionnaires	❑	❑	❑	❑
15d Literature searches	❑	❑	❑	❑
15e Internet	❑	❑	❑	❑

15f Other *(Please specify)* .....

Q.16 Are you aware of any economic evaluations (e.g. cost-effectiveness studies) on either Coronary Heart Disease or Cancer that were used in the production of the HImP that you have chosen to focus on? *(Please tick one box as appropriate)*

16a Yes ❑ **OR** **16b** No ❑

Q.17 If you answered yes to Q.16 above, please provide references for the different sources of economic evaluation evidence listed below *(Please provide references as appropriate)*

Source of evidence	*Please provide an example/reference*
17a Scientific journals	…….....
17b A study you undertook yourself	…….....
17c A study you commissioned	…….....
17d Reports and working papers	…….....
17e On-line databases e.g. NHS EED	…….....
17f Databases e.g. OHE NEED	…….....
17g Internet	…….....
17h Conferences	…….....
17i Other *(Please specify)*	…….....

.....

Q.18 Did you decide on any of the following priority for action?

IF CANCER IS YOUR CHOSEN FOCUS: *(Please tick all that apply)*

18a Increasing management of cancer care by specialist multidisciplinary teams ❑

18b Beginning (or intensifying) smoking cessation and discouragement efforts ❑

18c Concentrating cancer surgery to surgeons who demonstrate good results ❑

18d Establishment of dedicated diagnostic/assessment services for gynaecological cancer within cancer units ❑

18e If none of the above apply, please provide your own example

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.....

IF CORONARY HEART DISEASE IS YOUR CHOSEN FOCUS: *(Please tick all that apply)*

18f Increasing efforts to treat those (especially the elderly) with high blood pressure ❑

18g Beginning (or intensifying) smoking cessation and discouragement efforts ❑

18h Promoting healthy eating lifestyle ❑

18i Efforts to reduce obesity ❑

18j If none of the above apply, please provide your own example

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Q.19 What specific sources of evidence did you use in deciding on priorities in Question 18?

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Q.20 What do you think the main barriers to using evidence in HImP design are? *(Please tick any appropriate boxes)*

	(i) *True*	***(ii)*** *Quite true*	***(iii)*** *Slightly true*	***(iv)*** *Not true*
20a Relevant evidence is not available	❑	❑	❑	❑
20b Evidence is available but it makes untenable assumptions	❑	❑	❑	❑
20c Evidence is available but is not understandable / accessible	❑	❑	❑	❑
20d Evidence is available but consensus on whether to use it could not be reached	❑	❑	❑	❑
20e There is not enough time to look for evidence.	❑	❑	❑	❑
20e Too much information is available	❑	❑	❑	❑

20f Other (Please specify)

.....

Q.21 What kind of evidence do you think would help to improve the decision making process when faced with a choice between different interventions for either <u>Coronary Heart Disease</u> or <u>Cancer</u>? *(Please tick one box in each row)*

	(i) *Very important*	***(ii)*** *Quite important*	***(iii)*** *Limited importance*	***(iv)*** *Least important*
21a NICE guidance	❑	❑	❑	❑
21b Government direction	❑	❑	❑	❑
21c Management opinion	❑	❑	❑	❑
21d Public opinion/focus groups	❑	❑	❑	❑
21e Clinical opinion	❑	❑	❑	❑
21f Published evidence (e.g. journal articles)	❑	❑	❑	❑
21g Other *(Please specify)*	❑	❑	❑	

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Q.22 What type of information is required in order to improve the design of HImPs?

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Q.23 What role do you think that economic evaluation will play in the future design of HImPs?

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If you have any further comments that you would like to make please provide them now

Please indicate if, in principle, you would consider being involved in a semi-structured interview on the role of evidence in the design of HImPs.
(please tick the appropriate box)

❑ Yes ❑ No

Thank you for your comments and the time taken to complete our questionnaire.

9.2 Pro-forma used to abstract information from the HImP documents

Cancer/CHD HImP Pro-forma

1. HImP Case Number ___

2. Disease Areas Covered in HImP (tick box of all that apply)

❑ Cancer ❑ Heart Disease ❑ Mental Health

❑ Accidents ❑ Older People ❑ People with Physical Disability

❑ People with Learning Disability ❑ Access to Services

❑ Children and Young People

Others:

……

……

……

……

3. References to Specific Government Guidance in Cancer / CHD. Quote specific sentences to give context to use of Guidance

……

……

……

……

4. Reference to external evidence in Cancer / CHD

Published literature:

……

……

……

……

Local studies:

……

……

……

……

5. In the introduction, quote sentences with mentions of the following (or similar meaning words/phrases):Scarcity of Resources; Value for money; Efficiency/Cost-effectiveness; Trade offs/Choice; Costed options

……

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……

6. In Cancer /CHD - Introduction, quote sentences with mentions of the following (or similar meaning words/phrases):Scarcity of Resources; Value for money; Efficiency/Cost-effectiveness; Trade-offs/Choice; Costed options
……
……
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……

7. Are quantifiable targets mentioned in Cancer /CHD? Give specific examples:
……
……
……
……

Are waiting time targets for cancer mentioned? (omitted for HImP documents where we looked at the CHD chapter)

8: Other general or specific items of interest for HImP project:
eg. Quotes of evidence consideration and use specifically
eg. Quotes on quantifiable targets.
……
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