Scottish Needs Assessment Programme
SNAP

Needs Assessment: A Range of Approaches

The purpose of the NHS in Scotland is
to promote good health
to diagnose and treat those who are ill and
to provide health care for those with continuing needs
irrespective of the individual's ability to pay, in partnership with people and with other organisations, and within the resources that the country makes available
Framework for Action: Scottish Office (1991)

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February 1993

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Preface

The Scottish Needs Assessment Programme [SNAP] was launched in January 1992 by the Scottish Forum for Public Health Medicine. The prime purpose behind its establishment was to share both data and workload to allow rapid progress with the massive needs assessment programme required by all health boards. This short guide is intended to set out the background to SNAP, discuss a range of approaches to needs assessment, and present some current examples of needs assessment projects in Scotland.

SNAP started as a self-help group within the specialty of public health medicine with the aims of encouraging good communication among those involved in health needs assessment, avoiding duplication of effort, developing common and valid methodologies, and initially providing public health medicine input to the now disbanded multidisciplinary learning networks for purchasers at health board level. It is now clear that there is a need for national reports to review the evidence and potential for change in general terms and which can be easily adapted to local numbers and resources. Moreover, the differences in the National Health Service in Scotland and England are such that the English reports, although extremely useful, require to be put in a Scottish context for Scottish use. SNAP's aim within this setting is to ensure that the forward national programme of needs assessments has multidisciplinary input and commitment from all levels of purchasers. SNAP has now been awarded a grant from the Chief Scientist Office for 1993-94, the purpose of which is to develop and evaluate methodology for needs assessment. To this end, the priorities and timetable for needs assessment work will be discussed with the newly established SNAP Project Advisory Group and agreed with the Joint Working Group on Purchasing.

Currently there are seven SNAP networks - six are topic centred and cover Acute Services, Care in the Community, Communicable Diseases/Environmental Health, Health Promotion, Women's Health and Child Health. The seventh is an Information Advisory Group which acts as a clearing house for information primarily from ISD to ensure consistency and comparability across all health boards. The Scottish Public Health Data set is the essential core of this information.

There is no single best method of assessing health needs. Different issues and questions require different methods and approaches, and degrees of detail. For example, there are at least two levels of needs assessment reports which health boards require. First, they require reports to inform short-term purchasing decisions, using information which is readily available but often incomplete. Secondly, they require reports to inform strategic questions about the true needs and potential to increase health gain for specific local populations. The latter will usually take longer, require more precise information collection, and be built into a planned programme of development work. The examples in the booklet have been selected by the SNAP participants to reflect the range of frameworks currently in use - epidemiological, economic, corporate, or consumer-based - although most use a mixture of methods of data collection. More importantly at this stage, they have all been judged by common consent to have used valid and reliable methodology within the constraints of time and data. All needs assessment reports will require regular updating, revision and

expansion of sections. There are of course many other current and ongoing projects. A needs assessment review can also be judged "good" if it provides useful information for the purchasing decisions that the health board has to make and, ultimately, helps the board to increase its health gains. Thus, nationally, it is not enough simply to maintain registers of topics which have been reviewed by different health boards. There is now an urgent need to move on to a critical evaluation of methodology in terms of efficiency of data collection and collation and, crucially, in terms of usefulness or effectiveness in answering the kinds of purchasing questions which Boards should be asking. The examples given here are a first step in that direction and therefore contain a comment on the reason for selection of the topic and the action which has arisen as a result of the review, although it is too early to say whether any has led to an increase in health gains.

The examples are not intended to be in any sense prescriptive. Like so much else in medicine, reality in needs assessment is never as straightforward and elegant as it may seem when stated as theory. It is also constantly changing and will continue to do so as methods become clearer and there is more experience of the purchasing process and the nature of contracts and, ultimately, more outcome information against which the success of activities can be measured.

Over the next six months, SNAP's priorities are to establish a resource library of all needs assessment reports currently available, set up links with the Birmingham network[1] and appropriate projects south of the border, and work closely with the seven existing SNAP networks to establish forward programmes of work and generally facilitate in their smooth running. The programme will run at two levels. It will function at national level, where there will be links with the Joint Purchasing Group in providing information and research support to meet the health needs of the nation. Secondly, it will function at a local level, where the health needs assessment will be adjusted to meet the health needs of the local people. There will, however, require to be links between local and national networks to avoid duplication of effort, encourage dissemination of information and develop common methodological strategies.

Other priorities for 1993 are to improve communication with a programme of reports, the production of a newsletter, and a series of SNAP Symposia on relevant aspects of the needs assessment process.

For the moment, we hope the present guide will make an initial contribution to the developing process of needs assessment, particularly in a Scottish context, with the ultimate aim of refining the purchasing of health care and thereby improving the public health.

Elizabeth M Russell
Chairman
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1 The Needs Assessment Network
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1 Introduction to Needs Assessment [1]

Introduction

Under the new management arrangements for the National Health Service, health boards are responsible for assessing the population's health status and health care needs. They must then procure the requisite range of health services to meet these needs through the contracting process. The formal statement of health care needs, the Needs Assessment, forms the basis of the boards' Local Health Strategies which in turn sets out Board's proposals for meeting the identified needs of their population. The next step in the progression is to translate the Local Health Strategies into tangible service provision through the contracting process.

Principles

The guiding principle of Needs Assessment is to achieve the greatest good for the greatest number of the population.

It is important to be clear that the most important determinants of health lie outwith the remit of the National Health Service - for example, housing, education and deprivation. Needs assessments for health services cannot therefore be focused simply on the optimisation of health outcomes but must also consider the best use of services by a range of criteria. In practice, it is more realistic to talk in terms of assessment of health care requirements, than of health needs. Alternative means of achieving a stated outcome in line with board policy - for example, a shift from hospital to community or towards prevention - can of course be examined. Needs Assessment, however, is still a fairly crude tool, and it would seem unwise to indulge in radical changes to existing service provision: marginal changes in areas of major concern are more likely in the short term although, of course, consideration of options for radical change must not be excluded.

For health service purposes the generally accepted definition of need is the capacity to benefit. It should be remembered that need is a relative concept. Given that resources are finite, all need cannot be met, and some rationing of resources is inevitable. The setting of the necessary priorities is the responsibility of health boards, and should be approached openly and explicitly. In so doing, boards will have to consider the interests of populations versus individuals, and priorities between - and indeed also within - clinical specialities. This is the process which must be informed by available information about benefits and resources collated into an accessible format.

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1 The introductory section of this chapter is based on a discussion of health needs assessment in the Second Annual Report of the Chief Administrative Medical Officer and Director of Public Health of Dumfries and Galloway Health Board (January 1992).

Possible approaches

Five main approaches lend themselves to this inexact science: epidemiological, economic, comparative, consultative, pragmatic.

In reality, an approach based purely on one of the above would be inadequate, and a practical solution is usually based to a varying degree on all five avenues. Some of the difficulties associated with the various approaches can summarised as follows.

Epidemiological approach

In principle, the detailed study of causation of a disease entity and possible interventions should permit the development of a model representing the incidence, prevalence, and mortality associated with the disease. Such a model could theoretically predict the health service resource requirements and outcomes of a given policy. In practice, not enough is known about the natural history of many diseases, and the effects of intervention, to permit such a purist approach. In addition, the accurate measurement of mortality, let alone morbidity, poses great problems. The laws of probability also limit the precision with which outcomes can be predicted by modelling. Nonetheless, to ensure a focus on outcomes and health, the thinking of epidemiology is the basis of all needs assessment, and the current challenge is to know what is the essential information and how it can be most efficiently obtained or approximated.

Economic approach

Experts in the field of health economics are now much sought after but remain scarce. When they can be found, they require large periods of time and considerable resources to conduct their research.

The basis of the approach is to compare in concrete terms the costs and benefits of a range of possible options. This examination should include costs and benefits, not only to the provider of a service, but also those applying to the customer: this is seldom attempted to any comprehensive degree in service-related work.

Different circumstances demand different health economics approaches. For overall planning of resource allocation, the cost-benefit analysis (CBA) is the method of choice. In a CBA, the costs and benefits are expressed in comparable units - usually in monetary terms. The fundamental difficulty with this approach is the need to ascribe monetary values to changes in health state. In addition, formal CBA is exceedingly expensive because of its complexity.

For the optimising of a specific process, a cost-effective analysis (CEA) may be employed. If the outcomes of different approaches are identical, then it is relatively simple to compare the inputs (ie, the resources required) to the various alternative approaches. The inherent problems of CEA is the ability to guarantee that outcomes are truly comparable.

A variation on the CEA approach is the cost-utility analysis (CUA), in which the outcomes are expressed in quality-adjusted life years (QALYs). A QALY is a measure of time of survival which is adjusted by weighting factors intended to represent the quality of life at different stages of health. In practice, the weightings employed tend to be highly subjective, and may well fail to represent the actual opinions of the client group to which they are being applied. Furthermore, these problems escalate if any attempt is made to apply the QALY methodology to individuals, as opposed to populations.

There is a tendency for health economics approaches to demonstrate options rather than solutions, and this tends to increase rather than decrease uncertainty.

As previously discussed, many factors relevant to health are outwith the remit of the NHS: a true health economics approach should perhaps include global decisions at Gross Domestic Product level (Macroeconomics) - for example, national decisions on the relative expenditure between defence, social services, housing, education, and health.

Comparative approach
There is a natural tendency to compare the local situation with that of other boards or with the national situation. Statistical methods exist to allow for known differences between population (standardisation), and thus to permit more valid comparisons to be made between areas. Nonetheless, much nationally collated data is notoriously unreliable, and classifications (for example, of types of institution) may be misleading. The mean or average value of a parameter has no particular prestige: indeed, there is a danger that a local service which is better than most is in danger of undergoing a levelling process as a result of uncritical comparison with national norms. Markedly different conclusions may also be reached by different choices of norm or standard. Nevertheless this approach is often unavoidable if purchasing decisions are to be helped in the short term.

Consultative approach
This involves seeking the opinions of customers and professionals alike, and is less easy to apply than might at first be apparent. If customers are to be surveyed, it has to be accepted that population surveys are difficult and expensive to carry out in a valid manner. Some aspects to consider are sampling frame, sample size, selection of samples, prediction of statistical power of the study, the means of surveying, the rigorous exclusion of bias, data preparation and processing, cost, length of time required, and so on.

Difficulty will be experienced in obtaining informed opinion from the population on aspects of services of which they have no experience. If views are sought by proxy - for example, by surveying GPs instead of patients - a special study would be needed to ensure that such proxy measurements were a valid reflection of the interests of the patients. Another issue is the integration of inevitably partisan views; it is important that these are addressed at the outset and weighed against any available evidence of benefit and the overriding criterion of the public health gain.

Pragmatic approach
Areas of service provision which are insufficient, inappropriate, or, sometimes, over-abundant, are often obvious without further investigation. This is clearly, a selective, rather than a systematic, approach, and therefore subject to failure. However, local knowledge and experience is a *sine qua non* for all investigative Needs Assessment and Health Planning activity and in this context, pragmatism has a valuable part to play in highlighting areas for priority and action.

Where now?
It is clear that this changed role of health boards, away from planning and managing services towards identifying the health and health care requirements of a resident population and purchasing the relevant services from separate providers, presents a unique opportunity to address the challenges of assessing needs, setting priorities, allocating resources and evaluating outcome and quality.

These tasks have to be tackled practically *and* from a multidisciplinary point of view. Public health medicine can provide the necessary epidemiological and evaluative skills but these must be integrated with the work of other disciplines within health boards - notably, the non-medical planners and financial and information officers - and with other relevant professional groups. The whole process of needs assessment requires good communication and coordination and sharing of methodology and data. It is also important to recognise the importance of local assessment for local needs.

Figure 1 represents a framework for needs assessment which distinguishes between *health needs* and *health care needs.* Health needs are the basic requirements for good health in a population and may include items such as good nutrition, employment, adequate housing, legal protection, a safe environment, education and access to social and health care services. Thus health care itself is only one of the many factors which influence the health of a population.

The health board, as the purchaser for the *health* of its population, must play a leading role in fostering alliances with other agencies to identify and, so far as is possible, satisfy the *health needs* of that population. The prime statutory task of the health board, however, is to purchase *health care* for its population appropriate to its needs and in such a way as to maximise health gains.

The relationship between the need, demand and supply of health care services has already been exhaustively explored. As Figure 2 illustrates, the relationship is complex with many influences and overlaps, and one of the main tasks of needs assessment must be to make the three factors more congruent. As mentioned above, it is also vital to accept that the resources available for health care are finite and that there can be unmet and unrecognised need as well as inappropriate demand and supply.

The national and local health strategy is the basis for setting priorities for the allocation *or* redistribution of resources. Even if we adopt the simple practical definition of needs as the ability to benefit in some way from health care, it is clear that needs assessment presents a very complex task and that a reliable method of

identifying the priority health issues must be found. One useful method is to identify conditions which score highly on the following characteristics:

have high prevalence and incidence
lead to heavy use of service resources
are capable of responding to treatment or amenable to prevention
result in a high number of life years lost
have strong impact on quality of life
require SHARPEN priority services.
reflect the targets of *Scotland's Health - A Challenge to Us All*

In the short term, needs assessment must provide a quick but credible analysis of health care provision to identify priority areas where purchasers should and could make changes. Assessing needs, however, is part of a cyclical process in which new information from monitoring and research will constantly update and change the assessment. Therefore the initial opportunistic approach should acknowledge that subsequent more rigorous and extensive data collection is essential as the process develops.

In the past, health planning has tended to be incremental and has concentrated only on developments. There is a need now to get back to zero-based planning. This may identify current procedures being carried out which are of little or no benefit. Changes or reductions in services tend not to be popular but are essential if resources are to be used more effectively. In the long term, therefore, needs assessment should move, by means of a programme of applied epidemiology, medical audit, monitoring, consumer surveys and development and coordination of information systems, to the provision of a well founded strategy and plan for local and national health service provision. This will recognise an optimal overlap between need, demand and supply.

Scottish Needs Assessment Programme

Conceptual Framework For Needs Assessment

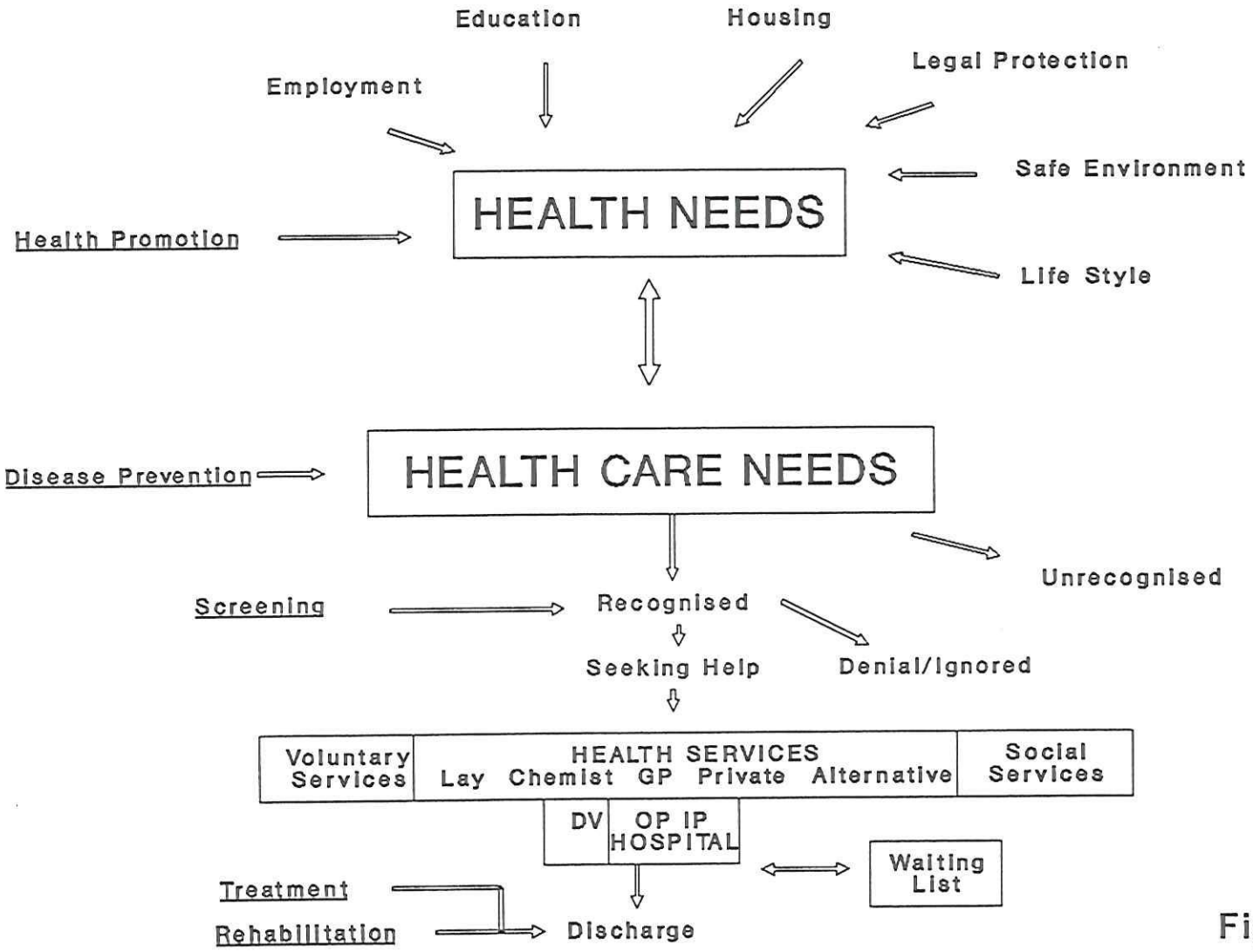
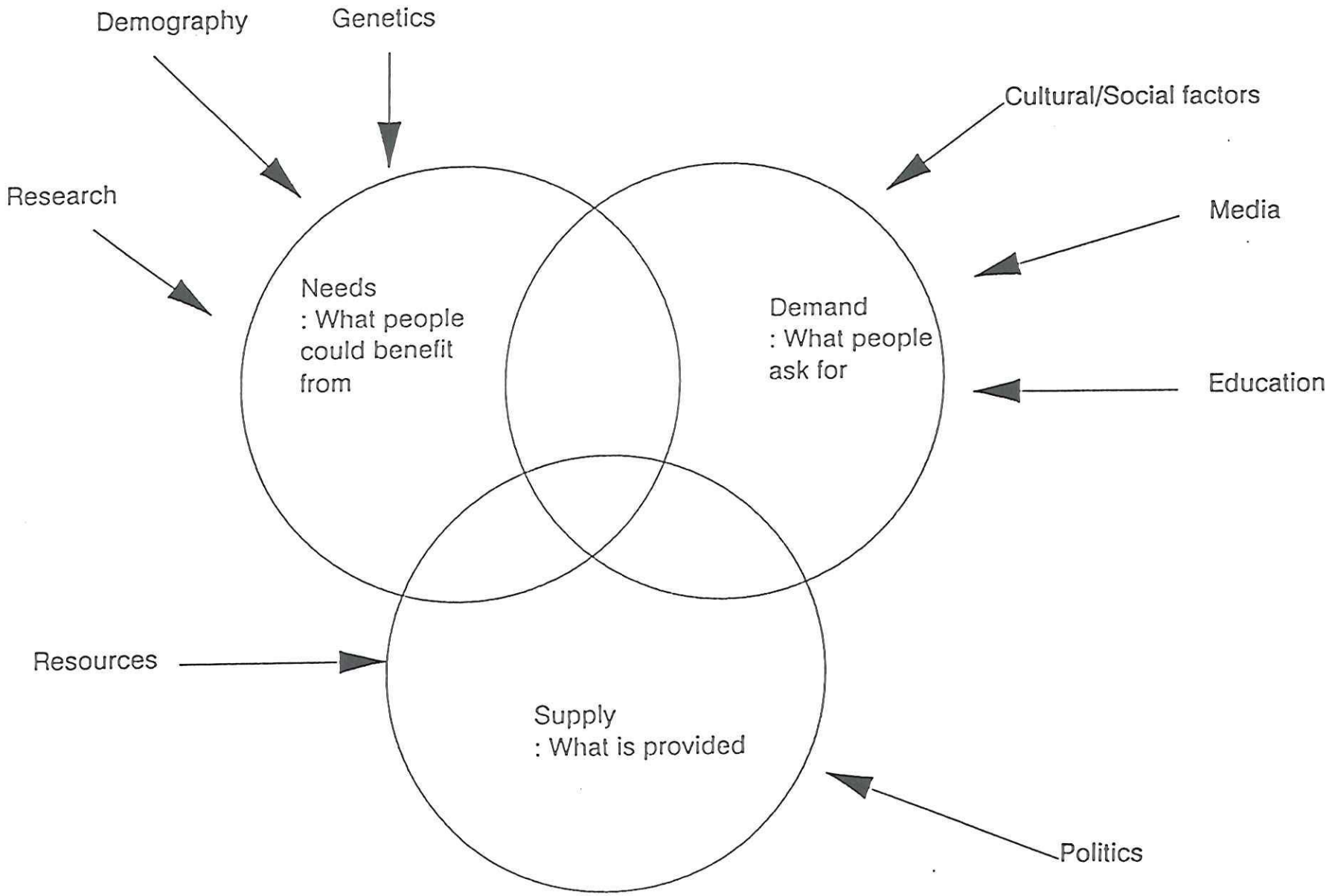


Figure 1

Figure 2

'Need', 'Supply' and 'Demand' : Influences and overlaps



ISU/LHB 3 April 1992

Just as there is not one method to be used in the needs assessment, so there is no agreed definition of what the needs assessment process should encompass. The term has been used to cover purely epidemiological descriptions on the one hand and the whole purchasing process on the other. Here, needs assessment and priority setting have so far been discussed as if they are two separate stages in a process which informs rational purchasing. In practice, it makes sense to meld the two into one activity, and this we would suggest is the most useful content of the needs assessment process. It avoids potential duplication of work, ensures that the expertise from one activity is carried over into the second, and helps focus work on what must be the necessary outcome of the activity - *usable* information within the decision-making context of any one health board and purchasing system. Thus the minimum content of a needs assessment report contains three essential elements: (i) identified areas where change might increase heath gain; (ii) evaluation of these options for change using techniques and information as robust as can produce usable recommendations in the given time (initial priority setting); (iii) final recommendations for possible action with reasons, timescale and requirements for monitoring quality and health gains. The last of these three elements implies an extension of coverage beyond that of most needs assessment reports to date, and requires close integration of the needs assessment process with that of general purchasing decision-making.

Type and scale of reviews

One of the most variable factors so far is the scale and focus of needs assessment reports. Some boards and authorities have started with a comprehensive or "top down" assessment of all health problems and potential needs, with a view to creating a systematic programme of topic needs assessments which fits their likely decision-making timescale. Others have started with topics which seem quite far removed from population-based needs assessments, but which contain problems in which there may be an opportunity for increased health gain - either directly or indirectly through resource saving. The kinds of contrasting foci which are likely to emerge include the following:

Comprehensive	Specific
Systematic	Pragmatic
Planned	Opportunistic
Strategic	Operational
Client group or condition	Service

Multiprogramme	Single programme
Large	Small
Long-term	Quick
Research-based	Consensus

Many of these terms are overlapping or complementary. The main distinctions can be described under the headings Strategic or Operational, Patient or Service-based, and Multiprogramme or Single Programme.

Strategic or operational

Local Health Strategies must be built on needs assessment if they are to be other than statements of philosophy and principle. In due course, as strategy becomes more precise, there will be an interaction such that the Strategy also highlights the issues to be addressed by needs assessments. However, at the contracting level real operational choices are emerging - for example, whether to contract for more day surgery and, if so, how much more. These too require needs assessment information if they are to be made on the basis of potential increase in health gains.

Patient or service-based

At first glance, it seems essential that if population health gains are to be identified the needs assessment must centre on people not services. However, problems and opportunities for change are more likely to present themselves in service rather than patient terms unless the views of patients are deliberately sought in a planned review. In practice, starting with the service does not automatically mean that the people affected are overlooked. Moreover, it is sometimes possible to focus on the service because the link between that and health gains is well known - for example, surgery for acute appendicitis. Thus the starting point need not be population-based, although a comprehensive review of all services would tend inevitably to frame choices away from the population's needs and towards the service needs and thus lose the focus on ultimate health gains.

Multiprogramme or single programme

This obviously depends on what a board means by a programme, and indeed by a contractor if the needs assessment framework is to be maintained through the purchasing process as far down as contract letting. In many ways the simplest system would be to decide the categorisation of contracts first and then structure the needs assessment to match. Whichever way the cake is cut, however, there will be people or services or both that are in another programme. What is currently missing and urgently needed, as everyone knows, is a financial framework, comparable to the

neglected programme budgeting approach, which allows resources and health gains to be aligned systematically. A further benefit of such a framework would be to avoid the need for a separate costing for each needs assessment review. Until something on these lines is available, the definition of programme should as far as possible match the categories of the Local Health Strategy which, in turn, are likely to reflect the SHARPEN and Framework For Action priority programmes.

Thus it is clear that there is no single right or wrong type and scope of a needs assessment review. The overriding criterion is that its recommendations can fit into the decision-making structures of health boards.

Combination of skills - the principle of multidisciplinarity

The principle of combining information from a range of services applies to whatever method of information collection and focus of decision-making is involved. The management disciplines - for example, finance, planning, contracting - will be necessary for all needs assessment and so will public health medicine. The participation from other professional groups will depend on the topic being examined. Needs assessment within priority services, for example, will usually include social work and community health staff. Topics such as coronary heart disease will require input from a number of health professionals ranging from cardiologists to health promotion officers. The involvement of individuals from voluntary, community and user groups should also be considered. Only by approaching needs assessment in a multidisciplinary, multiagency way can we achieve a true representation of the health needs of the population.

3 Some Practical Examples

As discussed in the previous section, there are a number of approaches to needs assessment and the method selected should be appropriate to the particular condition or patient groups involved and to local circumstances.

Registers of current needs assessment and related projects from the Acute Services and Health Promotion SNAP Groups have already been circulated to Board General Managers, Directors of Public Health, the Chief Medical Officer, the Chief Scientist, the Chief Executive and members of the Management Executive and a number of other interested organisations and individuals. Similar registers from the other groups are in varying stages of preparation. These registers are seen very much as a starting point in an attempt to build up a more refined portfolio of needs assessment projects and their evaluation. They will be updated regularly.

The examples presented here are intended only to illustrate some of the approaches in action. As noted in the preface, they have all been judged by SNAP participants to have used valid and reliable methodology within the practical constraints of time and data.

ELDERLY PEOPLE WITH DEMENTIA

Grampian Health Board

Reason for selection of topic

Pilot project
SHARPEN priority

Timescale

Three months

Focus

Economic appraisal of services for this care group

Methods/Data

Marginal analysis (cost-effectiveness analysis)

margins identified by discussing existing and potential services with carers and professionals
benefits - published literature
costs - health board financial data augmented by published cost data where necessary

Usefulness and problems with data

i Literature on benefits limited

ii Local cost data limited and in the wrong form - for example, average costs instead of marginal costs

iii Use of "imported" data for illustrative analysis very useful, but tendency by managers to assume that the results automatically apply locally

Recommendations

Illustrative examples showed that the Board should switch some resources from long-stay hospital care facilities to flexible community care packages: the Board should use marginal analysis wherever possible to inform priority setting.

Actions arising from the report

Health economists from Aberdeen University working with Board officers to work out how costing data can be geared for such analyses; re-working of analyses with complete local data to test robustness of recommendations.

HIP AND KNEE REPLACEMENT

Snap Acute Services Network

[A full needs assessment report is now available]

Reason for selection of topic

Hip and knee replacements are cost-effective surgical procedures leading to real benefits to patients

The need for these operations is likely to change as a result of population trends

Good information on future needs should be available to help target resources (including waiting list initiatives) appropriately

Other relevant recent work

A DHA project report on the need for total hip and knee joint replacements was published in 1990. It identified major gaps in our information on both population prevalence of osteoarthritis of hip and knee and also the numbers of people in the community who are likely to benefit from surgery.

A study in Tayside based on routinely collected data showed operation rates substantially higher than those from England in the DHA project report. It was recognised that further work looking in detail at the current position throughout Scotland was needed.

Timescale

Six months for this initial comparative approach.

Aims and objectives

To assess the need for elective hip and knee replacement surgery in Scotland

Objectives:

i To analyse and compare the current level of hip and knee replacements in Scottish Health Boards

ii To examine trends in the provision of these procedures over the last 10 years

iii To estimate numbers currently waiting for surgery

iv To estimate future demands for surgery, taking into account demographic changes over the next 10 years and trends in operation rates

v To identify the additional information needed to carry out a full assessment of need - to include prevalence data in the general population

Data used

Data from SMRO, SMR1 and SMR3 for all Scottish Health Boards (from ISD)
Population projections
Information from 1981 census

Usefulness and problems with data

i SMR3 data (quarterly waiting list census) - There have been problems with the implementation of the national system. The availability of the relevant data has been delayed.

ii SMR1 - Minor coding problem - this was overcome eventually.

iii There are no recent studies on prevalence in the community of people likely to benefit from joint replacement.

iv Consumers, GPs and clinicians views have not been included at this stage. This will be an essential next step.

Recommendations

Issues for purchasing

i THR and TKR must be viewed in the wider context of policies for the prevention and management of the disabilities consequent upon arthritis.

ii Boards should take account of the views of their local providers and consumers in determining local needs for THR and TKR.

iii Boards must examine their own current age and sex specific operation rates, population projections and other risk factors to determine their future needs for both THR and TKR. The need for hip replacements will vary between Boards according to the proportion of farm workers and any other high risk groups in their population. At Scottish level, it is likely there will be a need for a small increase in the provision of THR over the next 15 years to take account of demographic changes. The need for revisions will increase and will be related to current and previous levels of activity.

iv There is a substantial unmet need for TKR and provision should be increased. Revisions will also increase in future. This will have major resource implications.

v The need for THR and TKR cannot be considered in isolation from the need for other orthopaedic services. Appropriate levels of provision of other less effective orthopaedic procedures must be assessed in the light of the resource implications of increased rates of joint replacements.

vi Accurate SMR3 data is essential to monitor numbers waiting and the waiting time for operations. This should be made available as a priority.

vii Purchasers should require medical audit in provider units to address revision rates, timing of revisions and complication rates. This would provide easily accessible national data within the next 1-2 years.

viii Guidelines/protocols should be drawn up for:

- a Outpatients referral for hip/knee osteoarthritis.
- b Appropriate criteria for primary joint replacement.
- c Appropriate criteria for revision.

This should be done locally involving clinicians and GPs and should be initiated by purchasers in contracts. A national audit of guidelines to ensure comparable criteria would be valuable.

ix Outcome measures (including pain relief and morbidity as well as re-admission rates and mortality) should be developed as a matter of priority and included in contracts.

Recommendations for Further Research

i A population study is urgently needed to determine the prevalence of disease which could benefit from hip or knee replacement. This should be set up as a matter of priority and should include both urban and rural Boards.

ii Research into the underlying causes of osteoarthritis is essential, with the long-term aim of primary prevention.

iii Improved data on revision rates and timing of revisions is needed. This will require record linkage studies and better routine data on operations (for example, specifying the side of operation - right or left).

iv Research is needed into the factors affecting loosening of prostheses - for example, surgical technique, low grade infection, age, sex, weight and so on.

v A full assessment of need for treatment (including THR) of fractured femurs in the elderly should be carried out. The underlying pathology and potential for prevention is quite different from the diseases requiring elective THR and TKR.

PERCEPTIONS OF HEALTH IN A DUNDEE COMMUNITY

Tayside Health Board

Reason for selection of topic

As part of pilot project for a community development approach to attempt to address inequalities in health in Mid-Craigie, a social priority area in Dundee.

Timescale

Six months (approximately) during 1989.

Focus

At the instigation of a Health Working Group in Mid-Craigie, it was agreed that a survey was needed to find out more information on people's perceptions about their health - for example, what was important to them, what improvements could they make, was this going to be easy/difficult to do? This survey would be valuable for the following reasons:

i It would help to raise awareness about health in the community.

ii It would be possible to use local people as interviewers which might stimulate their own interest in health issues and increase local involvement in the working group.

iii It would be used to increase community participation and empowerment in relation to future initiatives.

Aim

To collect information on how local people viewed their state of health and what they considered could and should be done to improve it.

Objectives

i To examine what importance people placed on health and how they perceived their risk of ill-health.

ii To assess what people considered they could do and what could be done by different agencies to improve their health and what were the difficulties in achieving this.

iii To assess the utilisation of preventive primary health care services.

iv To help raise local awareness and plan health promotion activities by involving residents in the research and using the results.

Methods

A 20% sample of households in the locality was randomly selected (230 households). An interviewer administered questionnaire was used.

The head of the household was interviewed if possible - if not then an adult present in the household was used.

Questions centred on the following themes:

i Use of health services.

ii Views on the importance of good health and the factors which adversely affect it.

iii Perceptions of personal risk of medical conditions and of how to avoid them.

iv Perceptions of how to improve health, the difficulties in and the help required to achieve it.

v Views on the major health problems in Mid-Craigie and how to resolve them.

Usefulness and problems with the data

i The questionnaire was not tested for reliability or validity.

ii The interviewers were inexperienced (but had some training) and the quality of recording may have been variable.

iii The questionnaire included questions on a large number of factors - fewer issues would have been more manageable.

iv Involvement of people in a community in identifying their own needs and priorities for health and health-related services is vital, but few well-developed methods are available.

Conclusions

1 A health education approach which emphasises future risk of disease would be inappropriate in Mid-Craigie, as most people did not see themselves at risk from major causes of death or illness. This was particularly true of younger people and highlighted low levels of awareness of the risk of AIDS.

2 People perceived social and economic factors as having most impact on their health rather than individual lifestyle factors.

3 The lack of readily accessible chemist provision in Mid-Craigie was highlighted as being of particular importance.

4 Local authority services were seen as having the greatest impact on health especially housing, cleansing and environmental health. The role of the Health Service was seen to be limited, the most important aspect being the provision of more local services, particularly a chemist..

5 The survey did help to increase involvement of local people as part of the community development approach to this work. However, there should be increased emphasis on the selection, training and supervision of interviewers in any future similar projects.

6 The questionnaire itself generated a large amount of information because of the number of factors which were included. A narrower analysis focusing on fewer factors would be more manageable.

Outcomes

1 There has been increased interagency cooperation and involvement of local people and work is going on to tackle the issues identified.

2 A Health Issues Group was set up after the survey in 1990.

3 A chemist opened in Mid-Craigie in February 1992.

DISEASE OF THE EAR, NOSE AND THROAT

Forth Valley Health Board

Reasons for selection of project

Pilot project
Well-defined area
Recent consultant resignation

Timescale (actual)

Eight weeks

Focus

To develop a template for needs assessment which would review:

- Epidemiological trends
- Primary and community health services
- Support services such as audiology
- Hospital outpatients and inpatient services
- Health promotion issues and developments
- Joint planning issues
- Potentials for change
- Areas requiring further investigation
- Quality issues

Methods/Data

Simple description of important diseases of the ear, nose and throat.
Assessment of importance of individual diseases using local data, national morbidity survey, and published articles for primary care and for hospital services.

In depth assessment of trends in Forth Valley residents treated as inpatients at ICD9, OPCS4, and DRG level. Detailed tables provided for two groups:

1. Forth Valley residents treated in Forth Valley provider units
2. Forth Valley residents treated outwith Forth Valley

Analysis carried out on data held within the Health Board by local information staff with appropriate guidance.

Assessment of trends in tonsillectomy
Assessment of tertiary services
Assessment of local burden of deafness in children and elderly
Comments on developments in micro-surgery, and speaking valves
Quantification of the present level of auditory screening
Reference to the effect of the Hall report on frequency of audiometric screening

Views of professionals
Views of consumers.

Usefulness and problems with data

Primary Care
Lack of local morbidity data at primary health care level, and national data rather dated and difficult to convert to population based rates. However, still emphasises the burden of work in general practice. Unable at present to obtain national prescribing data relevant to ENT disease.

Hospital data
Up-to-date nationally based data difficult to obtain for comparative purposes.

Outpatient data limited purely to numbers.

SMR1 data adequate with good potential and good experience of local use, but lag time before validated data is obtained.

Use of data showing trends over five years is of value in reducing risk in prediction, and forms the basis of further work on which contracts may be based.

Combined use of ICD9, OPCS4, and DRG valuable, but unable at present to allocate notional costs to DRG groups.

Professional views
Would have benefited from views from more professionals and also professionals in specialist centres, but time limited in pilot.

General Practitioners' views were not sought for the same reason.

Important to draw an overview which may not necessarily reflect all professional views.

Consumer Views
These were not sought because of time factor, but would need to be targeted to client groups such as those with deafness, recent surgery, mothers of children being screened and so on.

Recommendations
Having noted that the consultant provided ENT service in Forth Valley provides a good quality service with minimal waiting times:

1 Continued action on smoking and health

2 Multi-disciplinary work on accident prevention

3 Continued emphasis on DPT and MMR immunisation (target 95%)

4 Continued screening for deafness both pre-school and school-specific figures given

5 Continue diagnostic audiometry, number of examination defined.

6 Continue hearing aid prescriptions and maintenance

7 Provide appropriate hospital services. Expected numbers of outpatients, inpatient admissions, proportion of emergency admissions, profile or operations defined in appendices.

To investigate further:

1 Present use of evoked response audiometry equipment

2 Potential for a specific clinic for congenitally deaf children

3 Present levels of audiometry screening of the elderly by GPs

4 More in depth examination of trends in tonsillectomy and adenoidectomy.

Actions arising from the report
No major changes

Framework being used for other services/specialties

Increased emphasis on quality of data

Data would have been used if cost and volume contracts had been used

GYNAECOLOGY SERVICES

Grampian Health Board

Reasons for selection of topic

Pilot Project
Opportunities for new therapies to increase health gain

Timescale (actual)

Five months

Focus

Review of

primary care and community services
secondary and tertiary level specialist services
pregnancy-related medical activities based around gynaecology wards and clinics - for example, termination of pregnancy
possibilities for health promotion

Methods/Data

i Demography - Registrar General (Scotland)

ii Description of epidemiology and clinical aspects of common gynaecological conditions - published articles and books

iii Description of therapeutic and preventive interventions - published articles and books

iv Analysis of actual or estimated service use; primary, secondary, tertiary, community services - SMR1 data (on disc); local family planning activity data; RCGP Third National Morbidity Survey

v Views of women, general practitioners, consultants - special survey; unstructured meetings.

Usefulness and Problems with Data

i Remarkably difficult to find up-to-date quantitative epidemiological data

ii Absence of literature on effectiveness of therapies

iii SMR1 data

inevitable subject to criticism that it measures demand, not need
difficult to ascertain level of, for example, coding errors, without a fair amount of work
specialty coding used to select data for analysis - could also have selected particular conditions irrespective of specialty coding

easy to translate into form suitable for simple statistical analyses on personal computer
once analysed gave new, useful insights into what actually happens

iv General practice data not directly available
Third National Morbidity Survey inevitably limited in terms of representatives and timeliness
G-PASS might be very useful in the future

v Consumer views
inevitably not a representative sample, although team still felt the views were valid
covered a wide spectrum of socioeconomic groups and, to lesser extent, geographical areas
quite clear that the survey responses were not limited to articulate middle class women.

vi GP views
only a small, non-random sample
useful, but need to find ways of doing this properly

vii Consultant views
despite the effort to listen to every consultant, they were unhappy because the eventual report did not represent their views without modification

Recommendations

i Board should ensure that providers ensure appropriate staff attitudes

ii No major change in purchasing activity

iii Review of activity patterns when facilities in Elgin come onstream in 1995

iv Development of joint clinical protocols

v Board needs to keep abreast of new technology

vi Board needs to consider purchasing a limited in-vitro fertilisation service

vii Board should review family planning services for young people

viii Board should find ways of promoting healthy sexual lifestyles among young people.

Actions so far

i Contracts reflect importance of staff attitudes

ii No major change to range of services purchased

iii Further work on family planning services for young people completed - now at service specification stage

iv Public health physicians and health promoting department collaborating with Education Department on ways of promoting healthy sexual lifestyles among secondary school children.

CORONARY HEART DISEASE - TWO APPROACHES

Argyll and Clyde Health Board

Reason for selection of topic
Major cause of death and disability within the Health Board and as, the condition is amenable to prevention as well as treatment interventions, it can be used as an example for the setting of other needs assessment.

Timescale
Eight months - longer than anticipated or desirable, mainly because of delays in obtaining relevant information at various stages.

Focus
Description of the epidemiology and associated risk factors. Review of existing services, with consideration given to anticipated developments in treatment, and the role of prevention. Economic considerations.

Methods/Data
Review of literature for both prevention and treatment. Definition and epidemiology of the disease, mainly using comparative data from Registrar General (Scotland).

SMR1 and Scottish Heart Health Study, and the Public Health Common Data Set. Consultation with professionals (hospital and community and general practitioners) - by means of informal meeting and questionnaires.

Use of linked hospital inpatient data.

Usefulness and Problems with Data

Lack of up-to-date comprehensive data relating to risk factors.

Doubts about the accuracy of cardiac surgery data.

The use of linked hospital data is potentially of great value, particularly in helping to clarify the epidemiology of coronary heart disease, but the interpretation of available information was difficult, and raised as many questions as answers.

Recommendations

Adoption of a health promotion strategy using a lifestyle approach.

Implementation of Smoking and Food and Health Policies.

Development of health promotion clinic protocols.

Contracts to include specifications for outpatient waiting times and cardiological investigations.

A Board policy to be developed regarding cholesterol screening and treatment.

An option appraisal to be carried out on the local provision of cardiac catheterisation.

Cardiac surgery provision and uptake to be monitored.

Training in cardio-pulmonary resuscitation to be instituted.

Treatment protocols to be developed.

Research and audit projects to be encouraged and their funding considered for future recommendations.

Actions so far
The document has been considered by the Purchasing Group and further information requested on the cost-benefits of health promotion measures.

Grampian Health Board

Reason for selection of topic
Pilot project
Major cause of death

Timescale
Five months

Focus
A description of the epidemiology of coronary heart disease in Grampian and an assessment of the effectiveness of various interventions.

Methods/Data

i Description of the impact of coronary heart disease in Grampian - Registrar General (Scotland): Grampian Lifestyle Survey; Scottish Heart Health Study; SMR1 data

ii Analysis of local hospital activity - SMR1 data ; local cardiologists' data

iii Appraisals of the potential of preventive and therapeutic interventions - published and unpublished literature

iv Views of consumers and professionals - special survey; unstructured meetings

Usefulness and Problems with Data

Most of the comments under the Gynaecology needs assessment heading apply. Easier to obtain up to date and locally relevant epidemiological data because of Scottish Heart Health Study and Grampian Lifestyle Survey.

Recommendations

i Board should increase financial support to health promotion initiatives

ii Development of joint clinical protocols

iii Possibility of expanded/enhanced paramedical rehabilitation services

iv Contracts should specify quality standards in relation to
- staff attitudes
- cardiopulmonary resuscitation skills among in provider staff

v Board should explore how CPR skills can be developed in the community

vi Board should commission further work on thrombolytic therapy and cholesterol screening.

Actions so far

The board is working with clinicians on the development of clinical protocols on lipid management and thrombolytic therapy.

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