SCOTTISH NEEDS ASSESSMENT PROGRAMME

NEEDS ASSESSMENT IN PRIMARY CARE:

A ROUGH GUIDE

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Foreword

Needs assessment tends to be a term which rolls off the tongue - a title like Clinical Effectiveness. Clearly it is an important part of modern primary care. But how many practices can put hand on heart and say that they undertake needs assessment in any structured or meaningful way.

As practices in Scotland join to form co-operatives and Health Boards look for advice in the development of Health Improvement Programmes, it will be increasingly important that we can demonstrate the prioritised needs for our patients.

I am hopeful that this publication may fill some of the current knowledge gaps many of us have in relation to this topic.

Dr Colin M Hunter
Chairman, Scottish Council
Royal College of General Practitioners

The assessment of health needs at both an individual and community level is fundamental to the role of health visitors. The Scottish Health Visitor's Association (SHVA) within UNISON therefore welcomes not only this Guide but also the representation of the SHVA on the SNAP Primary Care Network.

Needs assessment within a practice population will inform service delivery for target groups, while, collectively, primary health care teams within localities can shape health improvement plans.

The recognition that time and resources require to be allocated to needs assessment is crucial. Health visitors are in a key position to be involved in this area. They already work with other agencies and act as advocates for their clients and by virtue of their skills would contribute greatly to the success of needs assessment.

Whatever the chosen approach to needs assessment, the exercise itself has the potential to develop team working and the information provided will be a major tool in identifying how we seek to improve the health of individuals and their communities.

Isabel Caskie
Scottish Health Visitors Association

Preface

Needs assessment is fundamental to local commissioning of services and to effective practice planning. This document is designed to help local and individual primary health care teams, primary care trusts and healthcare co-operatives practise health needs assessment. It draws on the research and experience of members of the SNAP Primary Care Network, a group of practitioners in Primary Care and Public Health.

I am particularly grateful to Dr. Margaret Douglas who has contributed greatly to the development of this pilot edition and to the SNAP Secretariat for their help with the preparation of the document.

The Primary Care Network would welcome any feedback, comments and amendments to improve the document and its utility in supporting Primary Health Care Teams.

Dr Julie Cavanagh
Chair SNAP Primary Care Network

The Scottish Needs Assessment Programme was initially established as a professional forum to assist public health doctors and their employing Health Boards in the development of their knowledge of different types of health needs, and to share peer reviewed, quality-assured processes and products for needs assessment. The SNAP Primary Care Network was charged with responsibility for extending this approach to include primary health care teams.

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EXECUTIVE SUMMARY

Needs assessment helps you and your patients. It finds the essential information you need to plan services and interventions to address local health problems.

This 'rough guide' takes a practical approach to needs assessment for practices and locality teams. It is important to be clear at the start what you want out of a needs assessment. Different practices and localities will have different aims in undertaking it. This guide helps you to decide what your aims are, and gives a step by step approach for each of the 7 aims below.

Possible aims of a needs assessment

1. To describe the 'comprehensive' picture of what is already known about needs to identify priorities for further detailed work.
2. To explore identified priorities in depth to inform planning of service provision.
3. To encourage an evidence-based approach in providing effective clinical care to meet needs.
4. To encourage community involvement in health planning.
5. To explore and act on wider determinants of health and encourage liaison with other agencies.
6. To investigate and advocate for needs of vulnerable groups.
7. To ensure that the primary care team makes the best possible use of the resources it has available.

- Pages 5 to 9 describe why needs assessment can benefit you and your patients, and the 10 guiding principles of needs assessment.
- Pages 10 to 13 take you through the initial decisions you need to take to ensure your needs assessment finds the information you want and help you choose your approach.
- Pages 14 to 29 detail step by step guides for each of the 7 approaches.
- Pages 30 to 41 provide reference material on data sources and tools you might use and where to get more information and help.

WHY BOTHER WITH NEEDS ASSESSMENT?

Needs assessment is the process of measuring health needs in the population so that health services can respond to them. This is a document to help you get started on health needs assessment in small populations, for example GP practice populations, localities and small community groups.

Needs assessment will benefit you and your patients. How can it do this? By:

- ***improving the health of your patients***

  The aim of needs assessment is to identify changes which will lead to improvements in the health of your population.

- ***helping to make best use of money, services and people who can help***

  Needs assessment helps you to prioritise the changes you can make to improve health, and how best to target new resources, including those outside the NHS.

- ***taking a problem solving approach***

  In needs assessment your starting point is 'need' rather than services. This helps you to take a wider view of problems and available resources.

- ***involving the community in planning services***

  Needs assessment can help you find out the concerns and priorities of local people, and use this information in planning change. If the public is on your side, they may be able to help you to achieve the solutions.

- ***increasing understanding of local health problems***

  Needs assessment gives you a better understanding of local health problems and how they are perceived by local people and other agencies.

- ***demonstrating the reasons for your decisions about health care***

  Needs assessment helps you to show where you are using resources to best effect to address local health problems. It helps you to make an evidence based case for resources to meet the identified needs. This allows you to be accountable to your local community, and to funding agencies, e.g. the Health Board.

- ***helping you to take some control over an unpredictable future***

  Needs assessment helps you to stand back from the pressures of your everyday life, and take a measured approach to developing what *should* happen.

GUIDING PRINCIPLES OF NEEDS ASSESSMENT

Before getting started, there are a few guiding principles to remember, whatever your needs assessment is about. These are described in outline below.

1. **You should be clear about your aims** from the start in order to choose an appropriate approach. This gives the best chance of achieving what you want! There are lots of things you might want to achieve through needs assessment. Some of the most common aims are listed in Box 1. It is possible that you may have more then one aim: for example you may want to find out about unmet needs in your population and also strengthen the PHCT or locality team.

2. **There are many different concepts of 'need'** and no one definition is the 'right' one. It is important to be aware of which needs you are recognising in your needs assessment, and whether there are others that you will not be intending to address. Needs assessment is as much about art as science.

3. **Different information sources and methods of investigation tell you about different aspects of 'need'**. Needs assessment using a compilation of different sources/methods helps you to build up a picture of need. Each source/method gives you one piece of the jigsaw. Assembling a number of pieces does not show the whole picture, but you don't always need all the pieces to see the essence of the picture. Therefore you will want to concentrate on gathering *enough* information to see the picture, rather than on collecting all available information.

4. **The way you do needs assessment is important**, because some methods allow you to start to work on the solution to a problem while you are assessing it, for example by involving the people who are going to have to make changes in describing or understanding the underlying need. Other methods tell you a lot about a problem, but don't help to solve it.

5. **The needs assessment should be owned by the people who will have to implement the actions**. This is essentially following the management principle that to make something happen, it is essential that the people involved accept the need for change.

6. **Health needs assessment should be used within the appropriate planning system**. For example if you want to use it to influence practice services, it has to fit within a practice development planning process. If you want to influence social work services, it will have to fit within the local authority decision making system.

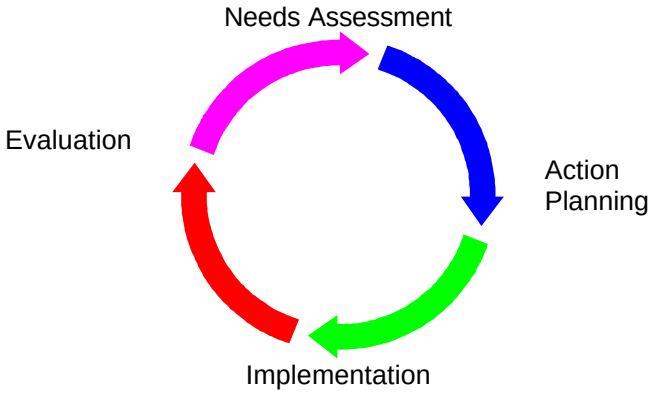
7. **There are negotiations leading up to a needs assessment and actions that have to be taken afterwards if you really want to achieve change**. Use your preliminary negotiations to determine what sort of evidence of 'neediness' you will have to demonstrate to convince decision makers that there is a need; take action after a needs assessment to make sure that it is followed through to a conclusion.

8. **Health needs assessment is a systematic way of looking at need**. First you have to define and understand "needs", using evidence where possible to describe and prioritise the needs; then you must identify and choose solutions through an explicit method. Finally you produce an action plan to meet the needs you have identified with the solutions you have chosen. This allows you to introduce openness and accountability into your decision-making through the use of needs assessment.

9. **Health needs assessment is a part of a cyclical process**. Patterns of need change over time, and if you take action to address the needs you have identified, you should evaluate how well the needs have been addressed. This will bring you back to assessing the needs that have not been met by your action (**Figure 1**).

10. **Health needs assessment is not an end in itself**. It is simply a means of using information to help you plan the future.

Figure 1: <u>The needs assessment and planning cycle</u>



BOX 1

Possible aims of a needs assessment

1. To describe the 'comprehensive' picture of what is already known about needs to identify priorities for further detailed work.
2. To explore identified priorities in depth to inform planning of service provision.
3. To encourage an evidence-based approach in providing effective clinical care to meet needs.
4. To encourage community involvement in health planning.
5. To explore and act on wider determinants of health and encourage liaison with other agencies.
6. To investigate and advocate for needs of vulnerable groups.
7. To ensure that the primary care team makes the best possible use of the resources it has available.

GETTING STARTED WITH THE ROUGH GUIDE

This document guides you through the decisions and steps in needs assessment. Stage 1 tells you how to get started, and Stage 2 helps you to choose the approach to address your specific reason for needs assessment. Stage 3 gives a 'step by step' guide to the different approaches.

Within each approach, a variety of methods and tools could be used. Some of these are briefly described in the sections on 'Routine data sources' and 'Techniques and tools'.

The bibliography gives a guide to useful further reading and refers to articles used in the production of this document.

STAGE ONE : INITIAL CONSIDERATIONS

To get started on a needs assessment you have to make a few preliminary decisions. These decisions are critical to the success of your needs assessment, so take some time over this initial stage and you will reap benefits.

DECISION 1 : Who is going to do the needs assessment ?

Most of the approaches lend themselves to work by an individual or a group. Working on needs assessment as a group can have major advantages, and is the recommended approach for a number of reasons. Firstly, group members who work in the community will have valuable knowledge of local needs and services. Also, if the group includes the people who will have to implement any changes suggested as a result of the assessment, it encourages ownership of the results and implications by them. Thus plans arising from the needs assessment are likely to work. Finally, working on a needs assessment can aid teambuilding.

Choosing a Needs Assessment Group

You need to identify an individual who will lead the needs assessment process. This could be someone who already holds a leadership position or who has expertise in managing projects, but should certainly be someone who is keen on the project.

You also need project group members who :

- work in the practice, practice area or locality;
- have a particular knowledge, skill, or expertise to contribute;
- can represent local people and/or decision makers.

In different situations, the individuals who need to be involved will vary. Try to get the group together that you think is most appropriate for your local situation; then, when you have decided on your approach, check that your group has the right mix of representation and skills to do the needs assessment.

DECISION 2 : What is the scope of the needs assessment ?

Get the group together to decide what “needs” you are going to consider. Use the questions below to help with your decision.

- Are you considering needs of a practice/locality population or a geographical area?

- Are you considering needs for overall health improvement or focusing on health care services?

- If focusing on health care services, does this include primary care, secondary care, statutory sector services, voluntary services, formal or informal carers?

- If considering broader influences on health, are you going to focus on interventions that prevent disease or things that promote positive well-being?

- Do you want to focus on interventions within statutory and voluntary services or include interventions that people might do for themselves?

DECISION 3 : What resources will be needed for the needs assessment, and where will they come from ?

To undertake needs assessment requires time, information and the skills to use it, expertise relevant to the approach you choose, but above all you need enthusiasm!

The amount of time you need will depend on the size of the project you wish to do, so many people prefer to start with a small project. However, the amount of enthusiasm you will have for a project will be determined by how important you believe it is, and how likely you are to achieve your goal. When you have decided what you want to do, try to estimate how much time you will need and what other resources. This will help you to decide if the likely outcome is worth the effort!

Getting access to resources to help with your needs assessment will itself require some negotiation with your colleagues and others, e.g. Health Board officers who may be able to help with research funds and by giving practical help and information.

DECISION 4 : When should the needs assessment work be done?

Your needs assessment will be aiming to influence a decision or process, so your project must be timed to produce the necessary results at the right time. First you must identify the decision or process you wish to influence, and when it will take place. Your absolute deadline must allow plenty of time for decision makers to consider your results.

Work backwards from your deadline to produce a project management timetable. A typical project management timetable would schedule the following stages:

- project planning
- information gathering
- analysis
- initial report production
- consultation on results
- final report production

Now that you have made all your initial decisions, you are ready to work with your group to choose an approach to needs assessment.

STAGE TWO : CHOOSING AN APPROACH

First decide which of the reasons in Box 1 (page 9) is most important to you. This will direct an appropriate approach to performing the needs assessment.

1. **To describe a 'comprehensive' picture of what is already known about need to identify priorities for further detailed work.**

   This would involve looking at data already available (routine data) to chart the size and shape of the population and the most common causes of mortality, morbidity and use of health services. This is referred to in this document as a **'global information-based needs assessment'.**

2. **To explore identified problem areas in depth to inform planning of service provision.**

   Once you know what the areas of concern are in your population, you need to explore them in depth. This will involve collecting together data on the problem, generally and in your own population, and information on interventions which may be effective. This is detailed below as a **'focused needs assessment'.**

3. **To encourage an evidence-based approach in providing effective clinical care to meet needs.**

   If your aim is to improve the effectiveness of clinical care, you may want to take an evidence-based guideline and determine whether it addresses an important area of need in your practice. You can then estimate the number of patients whose management will be altered and the resources that will be required. This is described below under the heading **'guideline based needs assessment'.**

4. **To encourage community involvement in health planning.**

   If your interest is in involving the local community in determining the problems to be addressed and contributing to the solutions, it is necessary to engage local people in the whole process. You could invite community representatives to read results of global or focused needs assessments but it is usually preferable to get people to describe problems and solutions in their own terms. Therefore the recommended approach is a **'community development approach'** described below.

5. **To explore and act on wider determinants of health and encourage liaison with other agencies.**

   This implies that your interest is in health not just health services. You will need to take a broad perspective on 'health' and what influences people's health or well-being locally. It will involve working with other agencies to look at, for example, environmental hazards, housing quality and lifestyles. This entails a **'healthy alliances approach'**.

6. To investigate and advocate for needs of vulnerable groups.

In this case your interest is principally in helping a group of people who find it difficult to make their own case for help or services. Your approach will have to use available routine information, collect more detailed information where necessary, and organise the vulnerable group to use the information in defining their own problems and solutions. This combines elements of other approaches and is referred to as an **'advocacy approach'**.

7. To ensure that the primary care team makes the best possible use of the resources available.

There will always be many areas of health need and the choice of interventions to address need is increasing. It is important to achieve the most benefit possible within the resources available by targeting the efforts of the primary care team in specific areas. These priorities will be set on the basis of a comparison of the costs and benefits of a range of possibilities. The framework for tackling this type of issue is referred to below as an **'economic approach'.**

Combining and adapting approaches to different aims

This document suggests several approaches to meet the aims commonly expressed by primary care teams. Of course, there are other reasons to undertake needs assessment, and you can adapt these suggestions to your own circumstances. You can combine different data sources and methods to address different questions. However, whatever your aim, the guiding principles apply and should be considered before you embark on the needs assessment.

STAGE THREE : STEP BY STEP GUIDES

a. A GLOBAL INFORMATION BASED NEEDS ASSESSMENT

This is a method that collects together many different sources of readily available data to produce a picture of 'need' or health related problems in an area. Possible refinements would be to use a questionnaire based survey to augment the data, or to map the data gathered to produce a visual representation of relative need. This is performed without prior assumptions of where the areas of need lie. The data can then be used to identify potential areas of unmet need and define priority areas for further more detailed work.

Limitations

It is impossible to define and measure all 'needs' in any population. The main limitation of this method is that it measures only what is measurable. There is a risk that large amounts of data are gathered but no one knows what it actually means. It is a good idea to know what you want out of the data before you start to collect it. This means you must know what you mean by 'need'! There is also always a problem in trying to interpret small numbers of cases, which may vary widely over time. This makes comparisons of rates of disease between small populations very difficult. If you find an apparently high rate of one condition in your population, it would be wise to consult somebody with epidemiological expertise before drawing any conclusions.

How to do it

Step 1 Define the population you are looking at and the questions you want to ask about them, e.g. for the practice population, what are the main health care needs? Use the questions in box 2 overleaf as a guide to the sorts of questions you might want to consider.

Step 2 Identify a named person to do the work.

Step 3 Establish which of the readily available data sources will help you answer your questions. Pages 30 - 33 describe readily available data sources.

Step 4 Collect data. Try to get data on your own practice/locality and other local practices/localities in the Health Board area for comparison.

Step 5 Look at the data and try to interpret it to answer the questions you have set. Remember that the data is unlikely to answer all your questions and is likely to generate more questions than answers.

Step 6 Produce a list of the questions that you have managed to answer and the questions you have not answered.

Step 7 Share the findings with the primary health care team (PHCT) or locality group. Their local knowledge will help you understand the findings and may help answer some of the questions you cannot answer from the data alone.

Step 8 With the group define priority health needs for further investigation. You could use a recognised technique for identifying priorities, such as nominal group or ranking matrix (see 'Techniques and Tools, page 34).

Step 9 Design a further work programme to study priorities in sufficient depth to understand what actions should be taken to address them. Your work programme is likely to involve a focused needs assessment of priorities or one of the other types of needs assessment described.

BOX 2

Some questions about local health problems to consider

- What are the top causes of death?
- What are the top causes of hospital admission?
- What health problems cause the highest workload for PHCT members?
- What health problems are ***not*** presented to the PHCT?
- What health problems are more common here than elsewhere?
- Which groups of people do not access health services?

b. A FOCUSED NEEDS ASSESSMENT

The basic approach to focused needs assessment is to identify a specific area of potential need and to investigate it in depth. The focus could be a specific disease or condition, a client group or a service. Focused needs assessment uses both routine data and information specially collected. It is often used to study identified priorities.

Limitations

Once you have defined a focus for your needs assessment, it implies that this is the area of greatest need, but there may be other related needs not covered by your investigation. It also usually uses a medical definition of 'need' e.g. need for a clinical intervention, and is almost invariably professionally focused. It works best where there is a lot of evidence of effectiveness. It is important not to be too ambitious in scope, as the aim is to focus as closely as possible on areas where you can improve health.

How to do it

Step 1 Define in detail the condition/service/patient group to consider in your needs assessment. If considering a condition, this means establishing a case definition, e.g. chest pain would include MI and angina but not heart failure. If investigating a service this means determining the scope of the service e.g. community nursing encompasses all the roles undertaken by District Nurses, Health Visitors and Practice Nurses but not hospital liaison nurses. If investigating a patient group this means defining the group's characteristics, e.g. the elderly might include all people over 70 years.

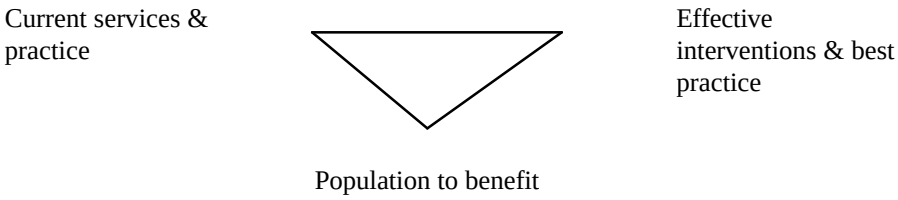
Step 2 Use the triangle in figure 2 and the tables following to identify the questions to answer.

Step 3 Choose information sources to help you address each part of the triangle. This is likely to include reviewing the literature, using routine data and published survey data, and possibly performing a survey.

Step 4 Having gathered this information, compare current services with best practice to focus more closely on areas where you can improve health or health care. This tells you qualitative need for change in local services.

Step 5 Use estimates of population to benefit to determine volume required for best practice services: this gives you quantitative need for change.

Figure 2: A framework for focused needs assessment



A focused needs assessment for a disease or condition

Population to benefit	Estimate number of patients in the population with chest pain. Sources might include hospital admissions, practice records, prescriptions for anti-anginal drugs, prevalence estimates applied to local population.
Effective interventions	Define best practice in management of the condition e.g. investigation of presenting complaints, criteria for onward referral, appropriate therapy in primary and secondary care. Sources include peer reviewed literature, guidelines and views of local specialists in the field.
Current services	Profile the services currently available both in terms of the quantity and distribution of services available for the management of the condition, and in terms of the quality of clinical management. Sources of information for the quantitative profile are your own local knowledge, service specifications within health care service agreements, trust and practice profiles, hospital activity data. Sources for qualitative data are clinical management protocols, patient satisfaction surveys, and clinical audit reports.

A focused needs assessment for a client group

Population to benefit	Estimate the number and relevant characteristics of the population under study. In the elderly, the relevant characteristics include the age and sex distribution, and the nature and levels of their major health problems and other factors influencing their problems and the response to them. Sources of information will be census populations and related projections, practice age sex registers, disease registers, local and national surveys and published literature.
Effective interventions	Define best practice in management of the health problems identified e.g. screening, prevention and clinical management in primary and secondary care, and social care interventions. Sources include peer reviewed literature, guidelines and views of other agencies e.g. social work.
Current services	Profile the services currently available in terms of the quantity, distribution and quality of health and social services available. Remember to include voluntary and private sector services and the views of local people and organisations e.g. Age Concern. Sources of information for the quantitative profile are your own local knowledge, residential and nursing home registration authorities. Sources for qualitative data are inspection, audit and monitoring reports and information on local hospital services.

A focused needs assessment for a service

Population to benefit	Define the catchment population for the service. For district nursing, this might be all people living in a geographical area, or all patients on a general practitioner list. Identify the health problems managed by the service. Estimate the numbers of people with these problems in the catchment population. Sources of information will be service policies, census populations and related projections, practice age sex registers, disease registers, local and national surveys and published literature
Effective interventions	Define best practice in management of the health problems managed by the service. Sources include peer reviewed literature, guidelines and views of service based professionals
Current services	Profile the services currently available in terms of the quantity, distribution and quality. Sources of information for the quantitative profile are your own local knowledge, local service specifications. Sources for qualitative data are inspection, audit and monitoring reports, and views of service users.

BOX 3

Estimating the number of patients with a condition

- use routine data if available
- apply survey data on the proportion of the population affected to the population in your practice/locality
- perform a survey of case notes or consultations to identify number of patient**s presenting with the condition**

c. A GUIDELINE BASED NEEDS ASSESSMENT

Needs assessment can help a practice or locality to estimate all the changes that will be required to implement a guideline. This may include an estimate of the number of patients whose management will be affected if the guideline is implemented. A baseline audit of current practice is an important part of this needs assessment, both to see how far current management is at variance with the guideline and to allow future audit of change following its implementation.

Limitations

If the starting point for a needs assessment is a guideline, the guideline must address an important area of need for the population. It assumes that the guideline is correct, given current knowledge. The guideline may also not be appropriate for local circumstances.

How to do it

Step 1 Choose a guideline that you think, if implemented, will improve the health of your patients (see box 4, overleaf).

Step 2 Define the patients who would benefit from clinical management following the guideline. You may find it helpful to refer to some of the source evidence used to prepare the guideline.

Step 3 From the guideline, select a number of indicators which will tell you how well the guideline is being implemented.

Step 4 Use the indicators to conduct a baseline audit of current practice. This will help assess how much change in practice is needed for implementation of this guideline, and tells you which areas you will have to focus on to change practice. It will also form a baseline for future evaluation.

Step 5 Estimate how many patients in your practice/locality the guideline would apply to (see box 3, page 14).

Step 6 Using the estimated number of patients the guideline will apply to, identify the resources required to implement the guideline, e.g. staff time, equipment, drugs.

Step 7 Identify any other changes required for the guideline to be implemented. An interview or questionnaire survey of key staff will help to do this.

Step 8 Draw up an action plan based on the areas of change you need to focus on, the resources required and the other changes required to implement this guideline.

Step 9 Implement the action plan.

BOX 4

Choosing a guideline

- the guideline addresses an important health problem in your population
- better clinical practice in this area is likely to lead to health gain
- the guideline meets SIGN criteria for validity

d. A COMMUNITY DEVELOPMENT APPROACH

This approach is about getting local people to participate in needs assessment. This helps you to find out what they think their needs are, and the priorities they have. Finding out the priorities, as the community sees them, is a good first step towards working with the community to address its problems. Qualitative methods are most useful for this.

In this kind of needs assessment the process used to collect data is as important as the data obtained.

Limitations

This approach should ideally be part of a process of community development with commitment from all parties at the outset. It works best in self-defined communities. The priority problems identified may not accord with those of professionals and results may be greeted with scepticism. It identifies what the problems are but does not usually quantify the number of people affected. It should be recognised that if qualitative methods are used, it requires special training and skills both to collect and interpret data. They are also labour intensive and time consuming.

How to do it

Step 1 Identify the community for the needs assessment.

Step 2 Decide on the team who will collect the data. This would usually include local residents, as well as professionals such as members of the PHCT or locality team, social workers etc. Try to achieve a balance between professionals and non-professionals. Using professionals increases credibility with other professionals but using local residents maximises community participation.

Step 3 With the team, decide on the broad questions to be addressed: e.g. what are the determinants of health and ill health in this community. The information pyramid for rapid **appraisal (page 31**) is one way to guide the questions you might want to ask.

Step 4 Decide whom to collect the information from. Try to include a cross section of people within the community. You could use 'key informants', who are individuals with knowledge of the community because of their job or social position. Alternatively, you could use a representative sample of local people. There are skills and techniques to selecting a sample from a population (see useful references for help on this).

Step 5 Decide on the methods to use to answer your questions. Usually more than one method will be required to get balanced answers to your questions. Remember to choose methods that will involve collecting data by asking local people. Qualitative research methods like observation, in-depth interviews, and pictorial methods like flow charts will be most suitable for this. This guide

gives a brief outline of some qualitative methods but unless you are experienced in them, you should seek expert advice and help.

Step 6 Collect the data using chosen methods and produce a preliminary analysis of findings.

Step 7 With the team, compare problems, needs, and priorities identified by different methods to find those which occur most commonly or are thought to be most important.

Step 8 Feed back results to community members to see if they agree with your interpretations and decide the priority actions to take. A ranking matrix or nominal group discussion (page 32) can help to set priorities. A community meeting is often used to do this.

Step 9 Together with team members and local people who have participated, implement agreed actions.

e. A 'HEALTHY ALLIANCES' APPROACH

The key point for a 'Healthy Alliances' approach is that your focus is on health, rather than on sickness. It is widely recognised that the determinants of health are much wider than simply health services, and involves many diverse influences such as physical, social and economic environments, occupation and employment, and lifestyle patterns. To get at information relating to these influences you will have to look outside the National Health Service information systems. It is also likely that any action to be taken will involve agencies outwith the National Health Service, for example, local authorities, police, environmental protection agencies, and local employers.

Limitations

When a number of diverse agencies try to work together there are often barriers to overcome, for example cultures of different agencies are often very distinct and planning processes may be radically different. Progress tends to be slow which is particularly frustrating for health professionals who are often used to making quick decisions! Health is not necessarily the top priority for other organisations, so it may be difficult to stimulate the action that you believe to be necessary.

How to do it

Step 1 Identify your community.

Step 2 Identify all the organisations involved in your community, particularly in those areas that will most influence health. It is important to think widely and a brainstorming approach might be useful. Some possible organisations to consider are shown in box 5 (page 20).

Step 3 This is the most challenging step of all. Get representatives of all the organisations you have identified together in a meeting.

Step 4 At your meeting with the representatives, identify their concerns about the health of the local community and its major determinants. You could use an agenda based discussion or nominal group to do this.

Step 5 Prioritise the health concerns identified. A nominal group or ranking matrix can help here.

Step 6 For each priority health issue, help the group to investigate. This is likely to include reviewing relevant literature, using routine data e.g. census, road accident reports and consulting local people and professionals.

Step 7 For each issue, identify the actions that would address the determinants you have identified. This should be jointly agreed with the group.

Step 8 With the group, implement the actions required.

Step 9 With the group, continue to monitor and evaluate determinants and actions taken.

BOX 5

Some organisations to consider in a healthy alliance

Organisation	Some possible contributions to health
social work	care and support of vulnerable groups health education role
schools	health education supportive environment, e.g. healthy food in canteen, access to sports facilities promote self esteem
community education	health education support and advocacy for vulnerable groups
local enterprise company	health promoting workplace policies health and safety practices
local businesses	adequate staff remuneration health promoting workplace policies health and safety practices equitable access to healthy food in shops
local authority planners	equity in access to facilities
local transport companies	equitable access to food shops, sports facilities etc equitable access to health care road safety
public utilities e.g. water	safe water supplies equitable access to water and power
environmental health	safe environment
public health medicine	understanding of determinants of health
local health services	health care health promoting policies for staff and patients e.g. smoke free zones, canteen food
housing	adequate provision equitable access to good quality housing
private healthcare providers, e.g. nursing homes	health care health promoting policies for staff and patients
caterers	equitable access to healthy food e.g. in workplaces
police	road safety crime drugs and alcohol

f. AN ADVOCACY APPROACH

The principle of the advocacy approach is to help vulnerable groups to define their own needs and represent those needs in a way that influences decisions. It is particularly useful for vulnerable groups such as homeless people, travellers, people with disabilities and ethnic minority groups who may be missed by other approaches to needs assessment.

Limitations

Focusing on groups of people who are already vulnerable may be stigmatising. It is important to remember that people within a group have diverse needs and may not define themselves solely by their membership of one particular group. It is also often difficult to reach these groups.

How to do it

Step 1 Define the group or groups whose needs you want to identify. It is important to recognise that your categories of people may not accord with how people view themselves. For example, it would be inappropriate to include all ethnic minorities as a single group.

Step 2 Find a way to engage with the group, for example by working with people already involved with them, or through group leaders if they are identifiable. For example to engage with adolescents, you could work through a local youth project.

Step 3 Identify members of the group to consult. Work with them to define the questions that are important for them. The questions in box 3 can be used as a guide.

Step 4 Investigate the issues raised using a focused needs assessment approach (page 11).

Step 5 Feed back the results to members of the group, and agree the priority areas to address and actions to be taken.

Step 6 Implement actions.

BOX 6

Questions about vulnerable groups to consider

- What are the main health problems for members of this group?
- What are the barriers that prevent members of the group accessing health services?
- What services are easy for them to access and why?

g. AN ECONOMICS APPROACH

Economic evaluation provides information about the relative cost-effectiveness of different interventions. This takes us beyond the narrow question 'Can't we do it more cheaply?' and tackles the more important (and complex!) issue of whether we are doing the most beneficial things in the first place. The economics approach is not an objective way of answering this question, but rather a framework for thinking through the issues.

Limitations

The exercise can require quite a lot of data. Some staff may find the questioning of current activities uncomfortable. The economic approach may identify solutions where the costs are felt in primary care and benefits elsewhere within the health service. Expect the exercise to generate as many questions as it answers.

How to do it

Step 1 Determine an issue where you think you could make better use of resources. This might be a broad issue (such as management of skin diseases) or specific (such as whether to adopt a new guideline). Try to specify the issue as precisely as possible - this makes it much easier to address.

Step 2 List all of the possible ways of addressing the issue, even if some of them seem to be beyond the capacity of the primary care team at present. This is the long list of options.

Step 3 From the long list, select 3-4 of the options for more detailed study. Select this short list so that you cover the range of ideas generated in the long list. One option might be the 'dream' solution, another might be a very pragmatic small-scale solution, while the third is a compromise between the other two. Always include the continuation of the current service as one of your options, since this will form the baseline for comparing against.

Step 4 Define the key features of the 'ideal' service or intervention to address your issue. Use these features as criteria on which to base a ranking matrix (see page 32 for a description of ranking matrices).

Step 5 Assemble whatever evidence you can about the performance of each of the options against each of these criteria. This might include a review of the literature or gathering practice activity data.

Step 6 With your needs assessment group, undertake a ranking matrix to score each option for each of the criteria.

Step 7 List all of the likely types of resource use that would be involved in each of the options, even if you do not think that you will be able to measure them all. Include things that do not involve

financial outlay (such as your time and patients' time). Remember to include travelling costs.

Step 8 Try to quantify the resource use for each of the options (including the current service). If you cannot be precise, make separate estimates for the 'best case' and 'worst case' for each option. Value the resource use so that it can be combined in terms of pounds sterling. Where the resource use has no easily observed price try and link it to things that do. For example, rather than say the time of voluntary workers has no value because they are unpaid, include an estimate that reflects the ***value*** of their input such as the hourly rate for a comparable paid worker. Remember to include the costs of replacing current services if they are to be continued in another way.

Step 9 Bring the costs and scores data together in a table, such as the following:

e.g.. treatment of minor anxiety/depression (all options include routine GP care, and cost of GP time is not included)	**Option A: routine GP care & anti-depressants**	**Option B: practice counsellor & anti-depressants**	**Option C: referral to a clinical psychologist**
Cost	£65	£265	£300
Total score, comprising	13	20	21
criterion 1: evidence of short term effectiveness	6	6	5
criterion 2: patient acceptability	4	9	8
criterion 3: potential long term benefit	3	5	8

(please note: this is an illustrative example only, costs and benefits will vary with local circumstances)

It can be helpful to present different scenarios taking account of the 'best case' / 'worst case estimates' to show what impact these might have on the data.

Step 10 Feedback to the key decision-makers for further discussion. Is the extra benefit of option C worth the extra cost? Decide on the preferred option and prepare an action plan for implementation.

BOX 7

Issues the economics approach might address

- Areas of care that use a lot of resources *e.g. What is the most efficient use of a practice nurse's time?*
- Areas where there are different interventions or approaches to care *e.g. Should the practice change prescribing to take account of a proposed guideline?*
- Common conditions *e.g. What is the most cost-effective way to manage low back pain?*
- Areas where significant capital investment is considered, *e.g. new buildings or expensive equipment*

ROUTINE DATA SOURCES: WHAT THEY DO AND DON'T TELL YOU

'Routine' data sources are those that are already collected. Because you cannot dictate the information gathered, they may not tell you exactly what you want to know but they are often useful and should be readily available. It is important to understand the uses and limitation of these data. The 'where to get help' section includes sources of help and advice to access and interpret routine data.

Census data

What this tells you

The census gives information on the demography of an area. This includes data on socio-economic factors and self reported limiting longstanding illness in each post-code sector. This helps generate a social profile and is often used to compare areas to help targeting of resources.

Plus points

Census data are quantitative, reliable and can help understanding of the wide social context.

Problems

Census data give poor information on morbidity. The census is only performed every 10 years, the last one was in 1991; and so it is out of date. Data are available by post-code sector but these may not coincide with practice or locality populations.

Vital registration data (Mortality and Fertility)

What this tells you

Total numbers of births and deaths per year and causes of deaths are available by postcode.

Plus points

This information is up to data and reliable.

Problems

The small number of births and deaths in an area in any year means the data are readily skewed by a few unusual cases. The causes of death recorded on death certificates are often inaccurate. Again this information is available by postcode sector, not practice or locality population.

Hospital activity data

What this tells you

Information is available on admission rates and referral rates for each speciality, waiting times, admissions by diagnostic categories and operative procedures. In-patient diagnoses are coded using the International Classification of Diseases (ICD). You could look at the 'top ten' diagnoses or the total number of admissions with any specified diagnosis. These can be obtained for each practice or postcode, and used to compare with other areas or practices.

Plus points

These data are reliable, up to date, and available for individual practices.

Problems

Use of hospital services is influenced by factors other than morbidity, e.g. ease of access and the policies of local doctors. The small numbers in any year means it is skewed by unusual cases. Data are 'episode based' which means it does not differentiate one patient with many admissions and many patients with one admission each.

Hospital cost data

What this tells you

The average cost of a day, a day case or an out-patient clinic attendance in hospital by specialty. The cost of selected procedures, often simple elective surgery.

Plus points

Readily available from trust finance officers.

Problems

Different trusts allocate costs in different ways. The figure shown is an average across all patients using that facility. The costs include hospital overheads and thus do not reflect the resources that would be released if the person were not in hospital. Resource use after discharge and the value of patients' time is not included.

Practice data

What this tells you

Most practices hold a wealth of information, much on computer. This might include the demography of the practice population, consultation rates, proportions of the population screened and immunised, data on rates of risk factors such as smoking, repeat prescriptions, disease registers. Health visitors

hold information on child health surveillance findings and breast-feeding rates. Some practices code diagnoses for each patient seen and this gives useful information about morbidity. A survey of patient records or of consultations over a short length of time could be used to count patients seen with defined conditions. This can be used to compare with other practices or with the rates of common conditions expected from published surveys.

Plus points

These data are available for individual practices. Collecting and analysing it can encourage team-building.

Problems

The quality of practice data varies which limits comparison between practices. Small numbers of events in a practice each year makes it hard to interpret differences. It is time-consuming to collect data or survey notes. This only gives information about morbidity presented to the PHCT, which will probably under estimate morbidity in the community.

Published survey data

What this tells you

Published community surveys of morbidity give rates of conditions or risk factors found, often for each age/sex group. These can be applied to the practice or locality population to give an estimate of the 'expected' number of people with each condition or risk factor assessed. This can be used where no data on these conditions are available for the population or can be compared with the number of identified patients with a condition if it is thought that some are being missed.

Plus points

These data can give a good estimate of morbidity in the community and can show potential unmet need.

Problems

The survey population may differ from yours, so these data cannot tell you the true burden of morbidity in your population. The information also cannot be used as a baseline to evaluate any interventions.

Continuous Morbidity Recording (CMR) in General Practice

What this tells you

The CMR provides data from a representative sample of Scottish General Practices. These practices input Read coded diagnosis for all GP consultations. This gives estimates of the numbers of patients presenting with each diagnosis coded. This can be used to estimate prevalence or incidence of diseases and GP workload related to each condition.

Plus points

These data can give a good estimate of morbidity in the community and can show potential unmet need. They represent conditions seen in general practice, and the working diagnoses given. Incidence or prevalence rates can be obtained for different age groups, and applied to your own practice population to estimate likely morbidity.

Problems

Many patients in general practice have non-specific complaints, and GPs may vary in the diagnoses they give these patients. These data cannot tell you the true burden of morbidity in your population and cannot be used as a baseline to evaluate any interventions.

TECHNIQUES AND TOOLS

If you want information that is not routinely collected, you will need to use a research tool e.g. a survey, or qualitative methods like focus groups. These are often costly and require time and expertise, but allow you to gather information geared closely to your requirements. Other techniques, e.g. nominal groups and ranking matrices, help you to systematically prioritise identified health needs or possible actions. Some tools and techniques are described briefly below, with some benefits and limitations of each. This is not intended to be a comprehensive guide to using these methods: unless you are experienced in them, you should seek expert help and advice.

Quantitative Surveys

Quantitative postal or interview surveys count responses to the questions you have defined.

What this tells you

A survey can measure the number of people sampled who report defined conditions, report use of defined services, or who say they need defined services. Health status can be assessed using measures such as the SF-36.

Plus points

A well-conducted survey of a representative sample can give a reliable estimate of the true burden of morbidity in the population whose needs are being assessed. This quantitative information is useful to inform contract specification. Information about health status can be used to compare different groups or areas.

Problems

Surveys are time-consuming, expensive and costly. They can only answer pre-set questions so needs which have not been considered by the investigators in advance may be missed.

Focus groups

What these are

Focus groups are discussion groups using non-directive questioning so that respondents are not restricted to the researcher's pre-determined ideas. They can give useful insights into perceived needs, use of services, understandings of health and health-care.

Plus points

Focus groups are a useful way to identify areas not previously identified because participants are not restricted to set responses. Thus they are good at identifying unmet needs. This also allows more participation of the community in needs assessment.

Problems

These do not give quantifiable information. Training is required to facilitate focus groups. To be representative you need a suitable variety of groups.

Qualitative interviews

What these are

Qualitative unstructured or semi-structured interviews are interviews which do not simply ask for answers to pre-defined questions, but allow respondents to explain their perceptions and insights. An interview schedule may be used to guide discussion, but related issues that arise are also discussed. They can give useful insights into perceived needs, use of services, understandings of health and health-care.

Plus points

Like focus groups, qualitative interviews are a useful way to identify areas not previously identified because participants are not restricted to set responses. Thus they are good at identifying unmet needs.

Problems

These do not give quantifiable information. Training is required to undertake these. To be representative a variety of different people should be interviewed, and this can be time consuming.

Participatory Rapid Appraisal

What this is

This is an approach which involves local people in assessing needs. Visual methods like mapping with residents, interviews with 'key informants' (individuals with knowledge of the community because of their job or social position), observation and documents about the community are used to gather information about both needs and resources in the community. The information pyramid below is one framework used to guide collection and analysis of data: information on problems and resources is gathered for each block of the pyramid. Identified problems and interventions are then ranked to find priorities.

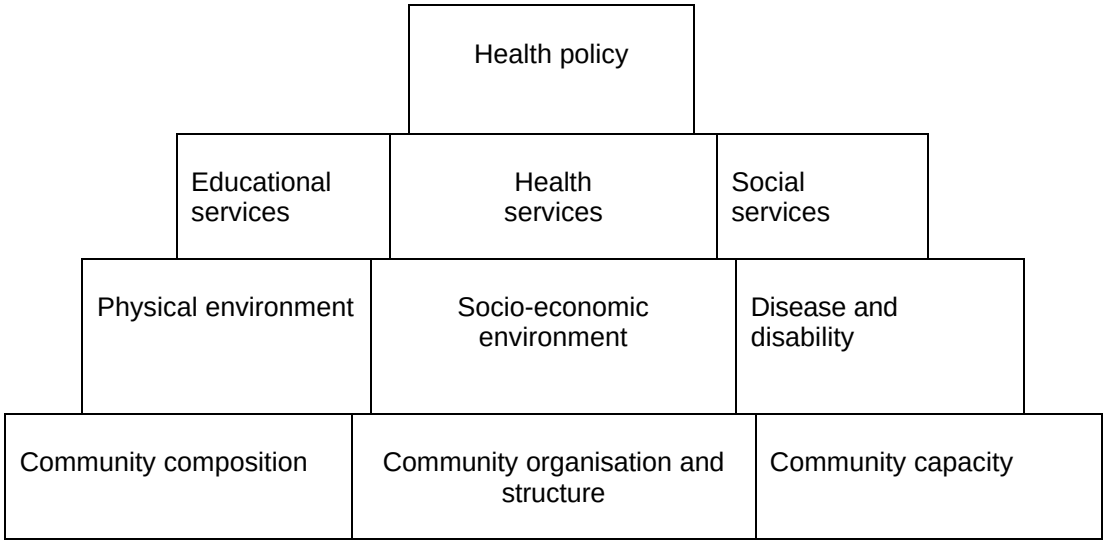


Figure 3: Information pyramid for PRA (Annett & Rifkin, 1995)

Plus points

This gains a broad perspective on health and the social context. It is a quick way to gather a lot of data, involves the local community and by raising awareness can stimulate community action. It finds the main perceived needs and problems in an area.

Problems

Training is required to perform a PRA and it requires protected time. It finds out what the problems are but does not measure the number of people affected. To work well, this requires a well-defined community.

Nominal groups

What this is

This is a method of prioritising needs. A meeting of the people to be involved in setting priorities (e.g. PHCT/locality team, community group, healthy alliance group) is set up. Needs identified by participants are listed, discussed, then ranked by each participant until an agreed level of consensus is reached. This can be a structured way to use the insights the PHCT/locality team often has into the needs of patients.

Plus points

Both qualitative (the discussion) and quantitative (the rankings) data are generated. This approach encourages team-building. Relatively quick results are obtained.

Problems

Training is required to facilitate nominal groups.

Ranking matrix

What this is

This is another method to prioritise identified needs or proposed interventions. It works by measuring different interventions against pre-determined criteria. Possible criteria could include: potential to improve health, available capacity to implement, equity implications etc. Participants in a ranking matrix exercise first weight the criteria, then give each intervention a score for each criterion. Each score is multiplied by the weight, and the scores are totalled for each intervention. In the example below, the criteria are all weighted equally and the outcome is that smoking education is the highest priority.

	Proposed interventions		
Criteria	Smoking education	Counselling service	Lobby for bus service
Potential health gain	5	2	1
Capacity to implement	2	3	2
Addresses inequalities	4	4	4
TOTAL	**11**	**9**	**7**

Figure 4: Ranking matrix of proposed interventions (adapted from Annett & Rifkin, 1995)

Plus points

Using a ranking matrix allows explicit decision making as it is very clear on what criteria you have based your decisions. Community members can participate to get scores that represent community views.

Problems

You need to decide the possible interventions and criteria first. The group may disagree on scores, so you need to decide how to agree the consensus scores.

WHERE TO GET HELP AND ACCESS TO DATA SOURCES

In working your way through the rough guide, you will reach points where you may need expert help, access to funding or data. The following are possible sources of advice, expertise or information to help you make progress through your needs assessment.

Consultant in Public Health Medicine

Health Boards will usually have a consultant with special responsibility and interest in primary care. He/she can help you to identify the most useful data and methods for your needs, provide practical support and help interpret your findings.

Health Board Information Services department

The information services department in your local Health Board should be able to help you get suitable data, including mortality, hospital activity, and comparisons of some practice data with other practices.

Health Service Library

Health service libraries have much useful data and information. A medical librarian may help you find published survey data and literature.

Information and Statistics Division

The Information and Statistics Division collates Scottish health data including hospital activity. They also hold data from Continuous Morbidity Recording in General Practice (CMR).

Local Authority Information Services and Planning Departments

Councils often have census data available for small areas.

University Departments of Public Health and General Practice

University Departments of Public Health or General Practice have expertise, especially in research methods.

Scottish Needs Assessment Programme

The Scottish Needs Assessment Programme publishes reports on a variety of topics, reviewing the literature and data available and making recommendations for health services.

Electronic Questionnaire

This is run by Aberdeen University Department of General Practice and collates data held on practice computers which have GPASS. It can generate a profile of information about a practice or locality and comparisons with the Health Board area.

SIGN guideline co-ordinators

SIGN guideline co-ordinators for primary care in each Health Board area provide advice and support to choose and implement guidelines.

Health economics support

Health economics support and advice may be accessible via your local Health Board. If this is not available Greater Glasgow Health Board and Ayrshire and Arran Health Board have economics teams who can offer advice. The University of Aberdeen also has a Health Economics Research Unit funded by the Scottish Office.

National Research Register

The Chief Scientist's Office keeps a register of all research undertaken with a CSO grant. Access to this register allows you to find contacts who have researched a subject, whether or not it has been published and contacts who are currently working in a particular field.

USEFUL NATIONAL CONTACTS

	Contact name	Address	Tel. no.
SNAP Secretariat	Jackie Gregan	Scottish Needs Assessment Programme 7 Lilybank Gardens Glasgow G12 8RZ	0141 330 5607
SNAP Primary Care Network	Dr J Cavanagh	Tayside Public Health Medicine Service Kings Cross Hospital Clepington Road Dundee DD3 8EA	01382 596984
ISD	Dr J Chalmers	Trinity Park House South Trinity Road Edinburgh EH5 3SQ	0131 552 6255
National Research Register	Ms Alison McIntosh	Chief Scientist Office Scottish Office St Andrew's House Edinburgh EH1 3DG	0131 244 2259
Aberdeen University Department of General Practice		GPASS Data Evaluation Project Department of General Practice and Primary Care University of Aberdeen Foresterhill Health Centre Westburn Road Aberdeen AB25 2AY	01224 663131 x53078
SIGN	Dr P Donald	Royal College of Physicians 9 Queen Street Edinburgh EH2 1JQ	0131 225 7324
Edinburgh University Department of General Practice	Dr S Murray (for advice on health needs assessment)	University Department of General Practice Mackenzie Medical Centre Levinson House 20 West Richmond Street Edinburgh EH8 9DX	0131 650 2675/2676

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