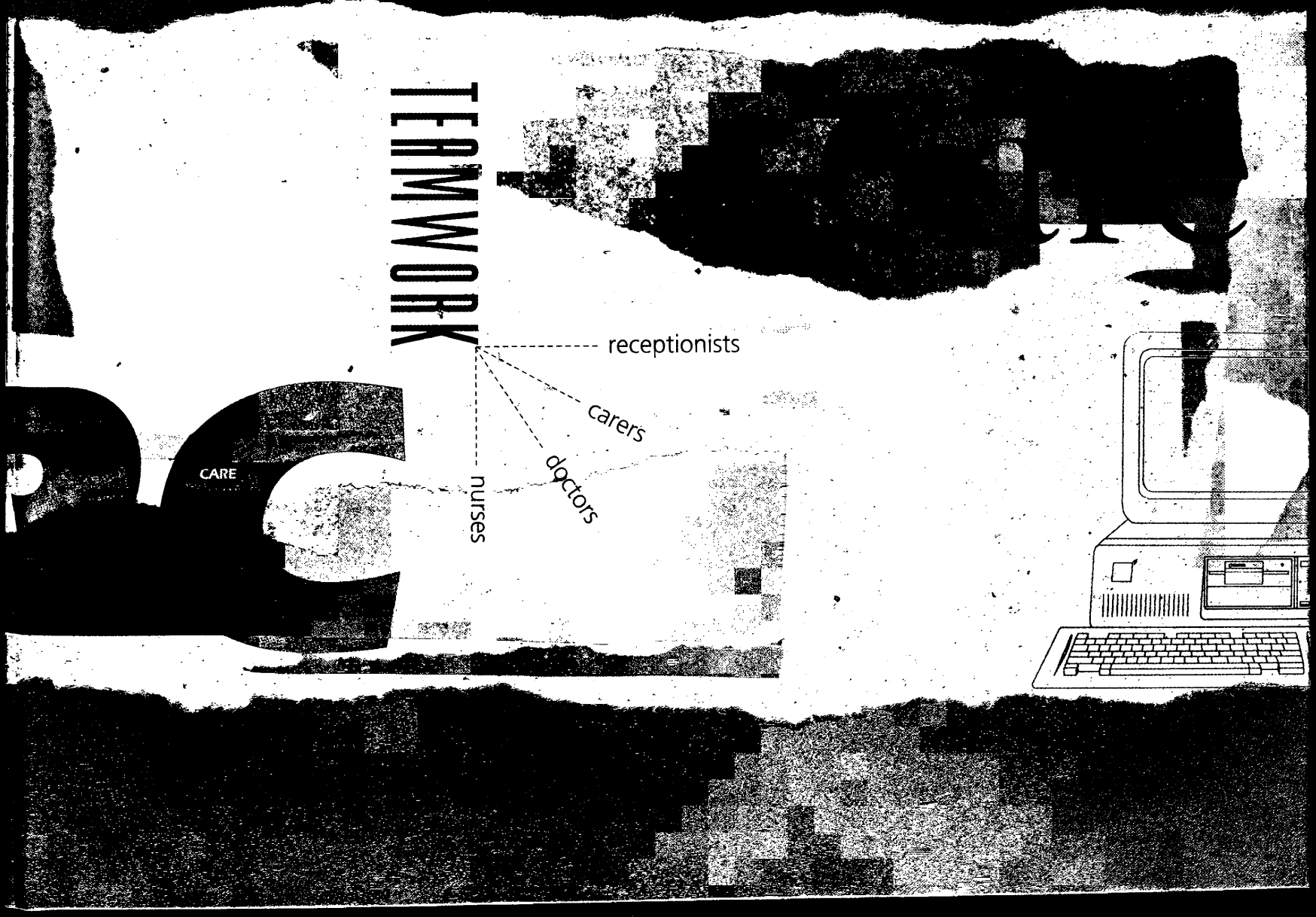
COMMUNITY-ORIENTED PRIMARY CARE

A resource for developers



COMMUNITY-ORIENTED PRIMARY CARE

A RESOURCE FOR DEVELOPERS

King Edward's Hospital Fund for London

Department of Social Medicine, Hadassah Medical Organisation and Hebrew University – Hadassah School of Public Health & Community Medicine, Jerusalem, Israel

SESSION 1
SESSION 2
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SESSION 8
TOOLBOX
PARTICIPANTS'

COMMUNITY-ORIENTED PRIMARY CARE

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Welcome to the King's Fund Community-Oriented Primary Care (COPC) package.

COPC has been in use in primary care for over 40 years, but access to COPC training has been limited. This package makes COPC training more widely available by providing a resource which can be used by local primary health care (PHC) developers.

The package has been designed to support a four-day workshop for PHC teams with the emphasis on developing team rather than individual skills. There is a wide range of materials in the package, with different items being designed for different people in the training process.

If you work for a commissioning agency, then you should first read the notes on *Establishing Local COPC Workshop Programmes*. These notes will help you decide what actions you need to take to create an environment in which the pack can be used successfully. You will not need to look at much of the pack at this stage, although you might wish to read the *Workshop Handbook*.

If you are going to be in charge of running the workshop, then you should first read the notes on *Establishing Local COPC Workshop Programmes* and then the *Workshop Handbook*. The handbook explains how the pack is structured, how the workshops might be structured and which materials are to be used when.

All the other materials in the pack are for use at various points in an actual workshop. These items are:

- *Participants' Preparatory Work* – this is sent to workshop participants about three to four weeks before their workshop starts.
- Eight *Presenter's Guides* – these contain all the notes that you and your colleagues will need to present the workshops.
- A collection of acetates for use by you on an overhead projector.
- *Selected Overheads and Examples* – each participant should be given a copy of these on arrival at the workshop.
- Seven *Participants' Task Notes* – these are handed out to participants at various points in the workshop. They provide detailed advice for the group work.
- *Tool box 1: Data analysis methods; Tool box 2: Data display methods; Glossary; References and book list* – these are reference material for use by you and the participants whenever they are needed.

The pack contains only one copy of each item, so you will need to photocopy any items needed by participants.

We hope that you find the pack stimulating and that it enables you to run a successful workshop. Please send us your ideas for developing the materials further (Primary Care Group, King's Fund).

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ESTABLISHING LOCAL COPC WORKSHOP PROGRAMMES

INTRODUCTION

These notes have been written for staff working in DHAs, FHSAs, Health Boards and other agencies considering introducing COPC programmes in local primary health care teams (PHCTs).

The notes should help you identify the issues that you need to consider. They also contain some suggestions based on the experience of UK agencies which have sponsored the development of COPC programmes.

WHAT ARE THE BENEFITS OF COPC TO SPONSORING AGENCIES?

The first thing you will need to consider is why you are recommending that your agency introduces COPC. To do this, you will need to:

- be aware of the benefits of COPC
- be able to link those benefits to your agency's own strategic aims.

Benefits of COPC

Practices that introduce COPC are more likely to:

- meet the needs of their whole populations rather than just those people who attend the surgery
- evaluate their work to identify what health gain is being achieved
- reallocate resources to match needs
- have a team approach.

Linking to strategic aims

COPC can support the strategic aims of agencies in several ways. It can:

- help focus PHCTs on health gain
- promote the collaboration of public health and PHC
- enhance the role of GPs in commissioning because COPC identifies health needs of the whole population – this may assist in making purchasing decisions
- support the shift from secondary to primary care
- support and extend audit
- support developments within practices of databases to monitor and evaluate their health promotion activities
- help build a shared understanding with PHCTs about which data are worth recording and sharing.

HOW CAN YOU GET YOUR AGENCY'S SUPPORT?

To gain your agency's support, you need to do three things:

- identify the relevant personnel
- consider the benefits they will seek from any initiative
- demonstrate that COPC can deliver those benefits.

Relevant personnel

The relevant personnel will vary according to local factors, but are likely to include:

- the Chief Executive or general manager
- the Director of Public Health
- an initial group of GPs to show that your initiative has practice support.

In each case, you will need to identify meetings at which you can begin to develop the case for COPC.

The benefits sought

Benefits sought by the Chief Executive are likely to focus on health gain.

Benefits sought by GPs are likely to focus on team building, better control of the workload and more effective interventions.

WHAT SUPPORT WILL YOUR AGENCY HAVE TO GIVE PHCTs?

If your agency commits itself to promoting COPC, this will have resource implications for the agency.

Staff time

The largest resource demand will be on staff time which will be needed to:

- make the case for COPC
- identify practices suitable and willing to take part
- brief the practices prior to the workshop
- plan and run the workshop
- support the practices after the workshop.

At an early stage, you will need to consider who is available to provide this support.

Workshops

The planning and running of the initial workshop will be the most intensive resource demand. More is said about this below.

Money

Practices are likely to need some additional money to help with the developmental aspects of their projects. The sums involved are usually small but crucial.

WHAT ARE THE OTHER IMPLICATIONS FOR AGENCIES?

You may need to consider the skills of your own team. Will these need to be enhanced as you take on COPC? For example, will your staff need additional skills in any of the following?

- project management
- needs assessment
- decision making
- planning
- team building
- training
- shared understanding of service goals.

HOW CAN YOU SELECT AND MOTIVATE PRACTICES?

In the early stages only a small proportion of your practices will participate in the programme. Typically, a first phase involves three or four practices. You will need to consider the criteria for selecting the first batch of practices. Later, you will need to consider how those criteria need to change as more and more practices are involved.

Criteria for the first batch might include:

- identifying particularly active practices
- supporting practices that have good leaders in them
- setting a minimum size of practice
- limiting COPC to practices with computerised records
- choosing only practices that have a concept of the practice team as an entity.

Later issues that will need to be addressed include:

- how can you avoid innovations always going to the good practices?
- could you use COPC to improve a poor practice?
- should single-handed practices participate as single-handed practices, or should they be encouraged to link with other single-handed practices?

Exploratory meeting

As part of the selection process, you might wish to hold an exploratory meeting at which practices interested in COPC can find out more about it.

PLANNING A COPC WORKSHOP

Once you have selected your practices, you will need to plan the workshop. Detailed guidance on this is given in the *Workshop Handbook* in the pack. Here, we mention the main points that you will need to consider.

Timing

You will need to select practices at an early enough stage to allow them to release staff and carry out the preparatory work. A minimum of four weeks' notice is advisable.

The best times for workshops are probably May/June and October/November to miss both the busiest periods and holidays.

Preparatory work

The quality of a PHCT's experience at the workshop is dependent on the quality of the preparatory work which they do before they arrive at the workshop. They may not appreciate the importance of this, so it might help if you give them the preparatory work four weeks before the workshop and then visit them two weeks before the workshop to discuss how they have got on.

Venue

A choice of venue is difficult. It needs to be comfortable and well provided with the facilities needed for a workshop. Equally, if it is too lavish, participants may feel that the money would be better spent in other ways.

You also need to consider whose premises are to be used: independent (e.g. a hotel) or agency premises.

PHCT participants

Practices need to bring a representative team of around six to ten participants. The team might include: a GP, a practice nurse, a community nurse, a health visitor and a practice manager.

Agency participants

Assuming that the workshop involves three to four practices, then the agency probably needs to involve four to seven people of its own. These might include: a primary health care professional (e.g. a doctor or nurse); a commissioning person; an FHSA representative (e.g. primary care manager); a health promotion person; a manager of district nursing.

The agency role in workshops is negotiable. You may wish to consider:

- how you can establish what authorities want from the workshop
- how you can adjust the programme to meet those needs

- whether to involve the agencies in only parts of the workshop (e.g. the beginning and the end).

The crucial point is to ensure that in some way the workshop promotes links between agencies and PHCTs.

Presenters and facilitators

You will need to decide who will actually run the workshop in terms of presenting the sessions and running the small-group work. You might consider:

- the pros and cons of in-house people (where there might be underlying sensitivities) against third-party trainers
- the potential for using GPs and others who have developed COPC skills.

Whoever you choose, you will need to ensure that they:

- have an understanding of and empathy with PHC
- have facilitator skills.

PRESENTER'S MATERIALS

WORKSHOP HANDBOOK

PRESENTER'S MATERIALS

INTRODUCTION

Welcome to the Community-Oriented Primary Care (COPC) workshop programme.

As presenter you will play a crucial role in ensuring the success of your workshop. True, there is a bulky pack of materials for you and quite a few handouts for participants. These will help to give the workshop content and structure, but success at the human level depends on you. This handbook should help you to fulfil your presenter role.

You should study this handbook carefully several weeks before the workshop. It gives guidance on important pre-workshop activities for you, your facilitators and participants.

This workshop programme has been designed for use in a UK context. If you are using it outside the UK, you will need to decide where to add local examples and use local terminology.

CHECK YOUR MATERIALS

Before you read on, check that you have copies of all the items in the package. These are:

Presenter's materials	**Participants' materials**
Workshop Handbook	Participants' preparatory work
Presenter's guide: Introducing COPC	
Presenter's guide: Community diagnosis	Task notes: Community diagnosis
Presenter's guide: Prioritising	Task notes: Prioritising
Presenter's guide: Detailed problem assessment	Task notes: Detailed problem assessment
Presenter's guide: Intervention planning	Task notes: Intervention planning
Presenter's guide: Project implementation	Task notes: Project implementation
Presenter's guide: Evaluation	Task notes: Evaluation
Tool box: Data analysis methods	Glossary
Tool box: Data display methods	References and book list
Overheads on acetate sheets	Selected overheads and examples
Items for additional, optional session	
Presenter's guide: Changing behaviour	Task notes: Changing behaviour

WORKSHOP AIMS

This COPC workshop is designed for primary health care teams (PHCTs) as teams. Through the workshop the teams will:

- assess the health needs of their community
- prioritise those health needs
- for one health need:
  - diagnose the correlates and possible causes of that health state
  - develop an intervention plan
  - develop an operational plan
  - develop an evaluation plan.

In the process of this, the teams will learn:

- the principles of COPC
- the application of the principles of epidemiology to primary health care
- the skills of community diagnosis
- the skills of detailed problem assessment
- the skills of intervention planning
- the skills of evaluation planning.

Much of the workshop involves principles and skills that PHCTs can apply to all their work. Some of the principles and skills, though, are specific to COPC programmes.

THE APPROACH

All this is learnt through practical activities based on the work of each PHCT. The work which the PHCTs do at the workshop may never be used in practice, but that does not matter. What matters is that, through the work, they acquire the skills and confidence to go back to their practices and apply COPC to a health problem of their choice.

The workshop should be a risk-free learning environment. By attending, the teams are freed from the day-to-day responsibilities of looking after patients. They should feel able to experiment and learn in an unthreatening environment.

THE ACID TEST

You will have succeeded in your role if, at the end of the workshop, the PHCTs agree that:

- they can develop a community diagnosis
- they can develop a detailed problem assessment
- they can develop an intervention plan
- they can develop an evaluation plan
- they can see at least one health problem to which it is worth trying to apply COPC
- they are ready to start their programme.

WORKSHOP STRUCTURE

THE PARTICIPANTS

The workshop is designed primarily for representatives of PHCTs. Each practice should have sent a varied group comprising a mix of doctors, practice nurses, community nurses, health visitors, practice managers, pharmacists, counsellors, etc. With the exception of a few of the buzz group activities, the workshop tasks are team tasks. That is, each PHCT works as a team on its own community or practice health problems. They are assisted in this by facilitators.

In addition to PHCTs, your workshop will contain other representatives, such as those from the FHSA or DHA. For most of the time, these people will form their own group to work on the group work tasks. However, it is useful if they can also spend some time with the PHCT groups.

THE FACILITATORS

Each group needs a facilitator. You might be one of these. The facilitator's role is to help the group achieve the workshop aims. We say more about this below (p. 7).

SESSION PLANS

The workshop materials are based on a core workshop programme which consists of:

Pre-workshop information collection by PHCTs

Session 1: Introducing COPC

Session 2: Community diagnosis
Task: PHCTs prepare their community diagnoses

Session 3: Prioritising
Task: PHCTs decide their priorities

Session 4: Detailed problem assessment
Task: PHCTs write their detailed problem assessments

Session 5: Intervention planning
Task: PHCTs write their intervention plans

Session 6: Project implementation
Task: PHCTs prepare their implementation plans

Session 7: Evaluation
Task: PHCTs write their evaluation plans

Session 8 (optional): Changing behaviour
Task: PHCTs practise behaviour change

You do not have to keep to this core format in any rigid sense. You should devise your own programme to fit your style and the needs of your participants. Some possible programmes and timings are given in the Appendix to this handbook.

YOUR ROLE

Your precise role will vary according to who else is working with you in planning and running the workshop. However, unless others have agreed to take on some of the tasks, you will have to:

- plan the programme
- send copies of the programme, instructions and the *Participants' Preparatory Work* to participants
- choose a venue
- ensure that all the facilities are at the venue, including rooms and meals
- select and brief facilitators
- monitor facilitators
- provide copies of *Participants' Task Notes* for each of the sessions
- present the plenary sessions using the *Presenter's Guides* in this workshop pack
- monitor how the workshop is going and adjust the programme as needed
- collect feedback at the end of the workshop.

WHERE YOU ARE ALONE

You, and you alone, are responsible for:

- ensuring that the needs of the participants are articulated
- deciding which needs can or cannot be met within the workshop
- ensuring that no individual or individuals dominate the workshop to the exclusion of others – everyone who attends should participate fully
- ensuring that the event is a learning experience for everyone.

The facilitators will help you in this, but you must remain in control. If you do not, your workshop will be rapidly owned by the vociferous few. *Silent participants in workshops are often those who feel alienated in some way.* You and your facilitators should never accept the 'Oh, I am just listening' participant at face value. Why is he or she only listening?

WHERE YOU ARE NOT ALONE

You will be in a room full of a variety of medical experts. Neither you nor your facilitators need to be experts in epidemiology or any other aspect of medicine. When a medical question arises to which you are uncertain of the answer, you must not feel that you have to appear to know it. Instead, throw the issue out to the participants.

ADAPTING THE PACK

It is important that the way the pack is used meets the needs of your participants. There is more in the pack than any one group of participants will need in a four-day workshop. You should therefore select which parts to use.

PRE-WORKSHOP PLANNING

You should check that the following have been arranged.

VENUE

- [ ] For the venue staff: a list of *all* your requirements, participants' names, facilitators' names and programme timetable
- [ ] Room large enough for main presentations with overhead projector, screen and flipchart
- [ ] Small rooms (one for each PHCT) with flipcharts
- [ ] Tea, coffee, meals specified
- [ ] Parking, telephone and message arrangements known

PARTICIPANTS

- [ ] Sent programme, venue details and copies of *Participants' Preparatory Work*

FACILITATORS

- [ ] Selected
- [ ] Briefed
- [ ] Supplied with copies of *Participants' Preparatory Work* and all *Participants' Task Notes*

MISCELLANEOUS ITEMS

- [ ] Have studied this handbook
- [ ] Have studied the *Presenter's Guides* and decided which parts to use
- [ ] Have enough copies of *Participants' Task Notes*
- [ ] Have copies of the overhead transparencies
- [ ] Have (or available at the venue):
  - [ ] Flipchart pads – one for each room
  - [ ] Flipchart pens – several colours for each room
  - [ ] Self-adhesive notepads
  - [ ] Blu tack
  - [ ] Writing paper for participants
  - [ ] Pens for participants
  - [ ] Stapler
  - [ ] Scissors
  - [ ] Spare projector bulb
  - [ ] Name tags

FACILITATORS

CRITERIA FOR SELECTION

The key role of a group facilitator is to help the group learn. Any expert knowledge which the facilitators bring to their groups is a bonus, not an essential. You need to choose facilitators who:

- are warm, open and friendly
- are good listeners
- are aware of group dynamics and able to help the group handle disruptive individuals
- know how to make sure everyone is heard in a group and are able to draw out the reticent
- have a sharp sense of keeping a session's aims in mind and know when to let the group follow a diversion and when to bring it back
- are good at asking questions, especially the obvious ones, which challenge what the speaker or group is taking for granted
- are comfortable at saying, 'I don't know the answer to that'
- know when to keep quiet.

Clearly, it will help if facilitators have some knowledge of COPC in general and of specific COPC programmes in particular.

BRIEFING

If possible, you and the facilitators should spend some time together before the workshop. You need to ensure that the facilitators:

- know the shape of the programme and are clear about the aims of each session
- identify very clearly the aim of each task. If a group is working to no effect, the facilitator must pull it back to the task. This will not happen unless the facilitator is clear what that task is
- have a chance to review the full workshop pack before the workshop.

You need to agree with your facilitators who will do what during each session. There is no reason why the facilitators should not do some of the presenting and run some of the feedback sessions. You will also need to:

- have some time together at the end of each day to review how the workshop is going
- listen to their problems.

ON THE DAY

You should arrive early to check that:

The main room is ready, with overhead projector working, flipchart pad loaded, flipchart pens out and chairs suitably arranged ☐

Group rooms are ready with overhead projector working, flipchart pad loaded, flipchart pens out and chairs suitably arranged ☐

Venue staff have the participants' and facilitators' lists and programme timetable

You know the location of fire exits ☐

You have the name of the person on duty to whom problems can be referred ☐

Meal and coffee-break times are known to the staff ☐

Name tags are ready ☐

Any required direction signs are in place ☐

GETTING STARTED

Before you start on the first presentation, remember to:

- Introduce yourself ☐
- Introduce the venue and its staff ☐
- Explain the fire exits ☐
- Explain the location of key facilities – toilets, tea/coffee area, meals, telephones, etc. ☐
- Explain the venue's house-rules about telephone messages ☐

RUNNING THE WORKSHOP

THE PRESENTER'S GUIDES

The *Presenter's Guides* provide you with the content and structure of the workshop. Almost certainly, there is far more in the guides than will ever be needed in one workshop, so do feel free to select what you use.

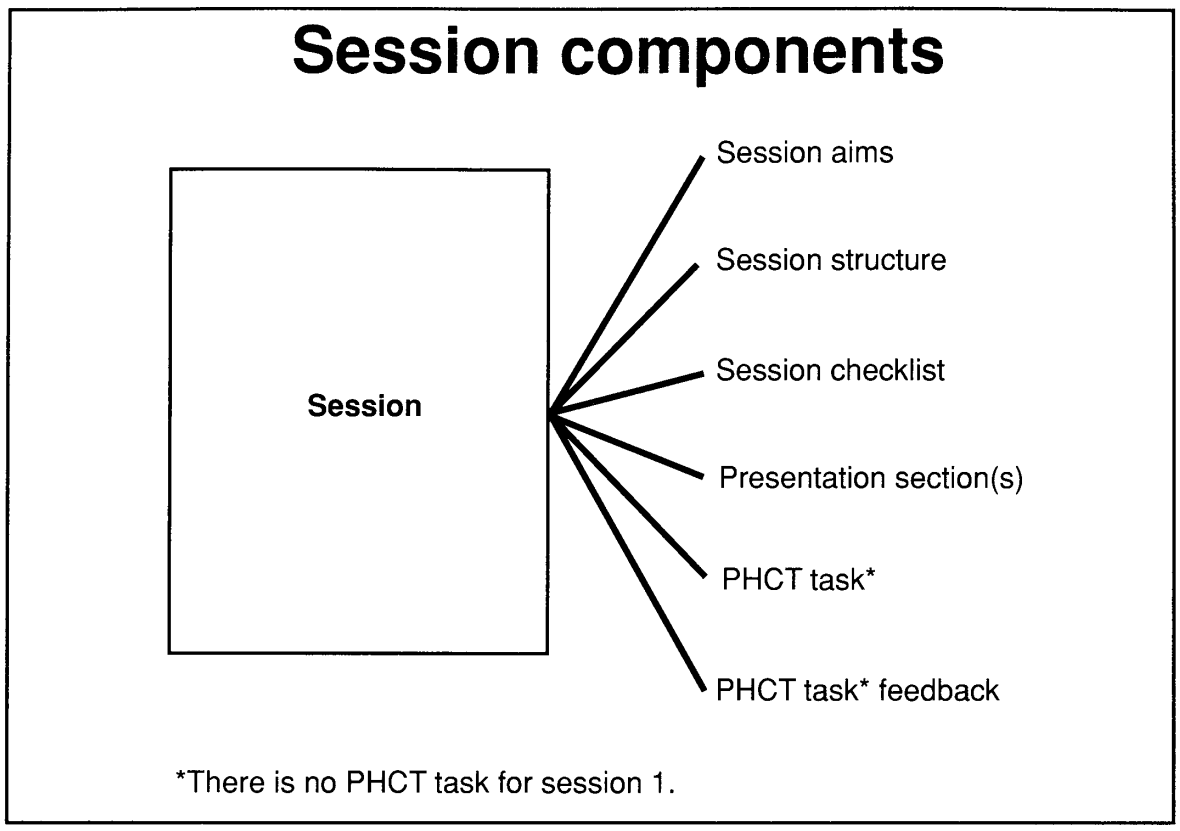
THE SESSIONS

There are guides for seven core sessions and an eighth optional one on changing behaviour. The seven core sessions are:

1. Introducing COPC
2. Community diagnosis
3. Prioritising
4. Detailed problem assessment
5. Intervention planning
6. Project implementation
7. Evaluation

SESSION STRUCTURE

Each session follows the same structure as in the figure below.



Session aims

This section tells you what participants should know and be able to do by the end of that section.

You need to keep these aims in mind throughout the session. As long as you are meeting these aims, you can change the session in any way you want.

Session structure

This gives you an outline of how the session will run if you use all its parts. It shows you when you might consider:

- presenting
- running buzz group activities
- setting tasks
- overseeing task feedback.

The sessions also include more informal discussion points (see below). These are not listed in the session structure.

Session checklist

This tells you what you need to organise before the start of the session.

Presentation section(s)

The presentations are the bulk of the material. They are discussed in more detail below.

PHCT task

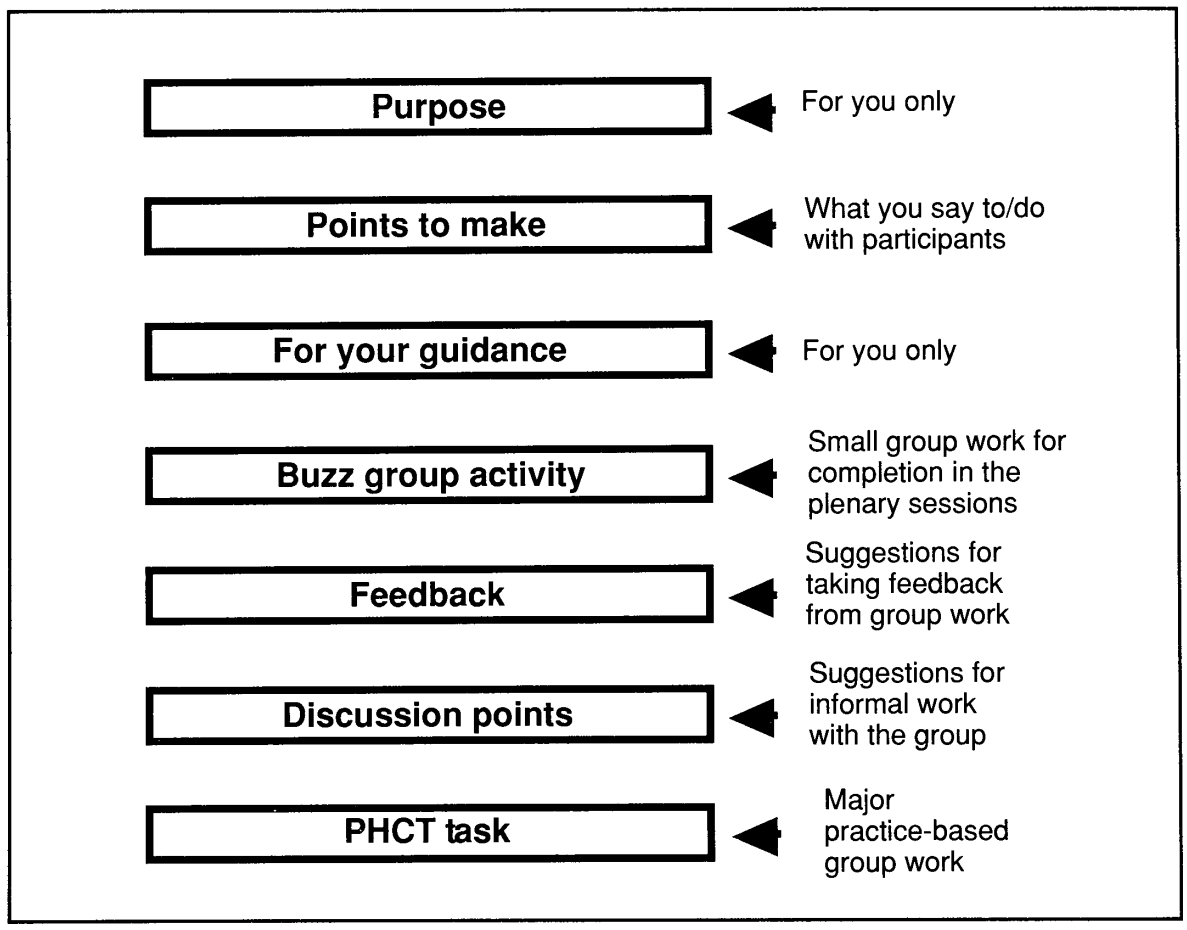
The tasks are the group work which you give to the PHCTs. Although these are generally only a few pages of text, they will take up the bulk of the participants' time at the workshop.

PHCT task feedback

After each task, the groups report back to the full group. These sections guide you through the feedback process.

THE PRESENTATION SECTIONS

These are divided into a number of different formats which are summarised in the figure below.



○○○ PURPOSE

This is for you only. It tells you what your aim should be in this part of the presentation.

!!! POINTS TO MAKE

This heading introduces what you should say to the participants. Remember, though, that you can be as selective as you like in what you use from this material. It is not intended that you read the 'Points to make' verbatim. They are a guide to the ideas which you need to get across.

PRESENTER'S MATERIALS

FOR YOUR GUIDANCE

These points are addressed to you only. They usually give you extra hints on how to handle part of a session.

BUZZ GROUP ACTIVITY

A buzz group activity is one which can be done (usually) without participants moving from their seats. Participants just link with one or two neighbours.

FEEDBACK

These sections give you some suggestions for taking feedback from the buzz groups and the PHCT groups.

DISCUSSION POINTS

This heading appears where it might be useful to prompt some discussion from the group.

PHCT TASK

This heading introduces the major tasks for the PHCTs.

OVERHEAD TRANSPARENCIES

These are marked OH in the text. You should show these to participants when indicated in the text. The actual transparencies sometimes have less text on them than the version in your guides. This is to make the overheads easier to read for participants. Guidance on how to show overheads is given in the section 'Overheads – how to use them', on p.13.

TEACHING STYLE
DO'S AND DON'TS

STARTING A SESSION
- Always start each session (except the first) with a *short* recap of the main points of the previous one. Ask for any questions or points before moving on.
- Then explain the purpose, structure and timing of the session which you are introducing.

QUESTIONS
- Encourage participants to interrupt.
- Stop regularly to take questions.
- Where a question or questions cannot be taken within a session, always agree how the point will be dealt with (e.g. 'Perhaps we could talk about that at lunch?').
- Do not allow one person to dominate questions, especially if it is clear that this is annoying the others – watch their body language.

BUZZ GROUP ACTIVITIES
- Use these activities to help you:
  - break up the presentation (variety helps concentration)
  - get a feel for how participants are reacting to what you are saying.

OVERHEADS – HOW TO USE THEM
- Always turn off the projector light when you are not showing a transparency. A bright screen commands attention – attention which should be directed at you.
- To show an overhead, the sequence is:
  - projector light off at start
  - put the transparency on the projector
  - switch on the projector light
  - talk about what is on the overhead
  - switch off the projector light
  - remove the transparency.

PRESENTER'S MATERIALS

- Remember:

  switch on after the transparency is on the projector

  switch off before the transparency is off the projector

  that way you never show a blank lit screen.

- If you need to interrupt an overhead presentation (e.g. to use the flipchart), switch the light off first.

GROUP WORK

- These workshops present an unusual challenge for facilitators because the groups are well established, with their own history and dynamics. For example, the nurses may be used to deferring to the doctors; one team member may be a loner pursuing his/her own agenda.
- The facilitator must try to use the positive aspects of the existing dynamics (friendliness, respect, team spirit) and get around the negative ones (undue deference, hostilities, demarcations). To assist this, the facilitators can:
  - show that they want to hear from everyone
  - try to balance discussion time so that each professional group (doctors, nurses, health visitors, etc.) get their fair share
  - try to engineer mould-breaking roles for some of those present (e.g. getting a relatively junior team member to lead part of a session).
- Facilitators need to remember that adapting the way the team works may be an important part of COPC.

FEEDBACK SESSIONS

- These can drag on and on, particularly since many of those giving the feedback may be nervous and inexperienced. You and the facilitators need to gently steer the feedback so that it is helpful to the group as a whole.
- Make sure that the feedback:
  - raises general issues for the whole group to discuss
  - identifies fears, worries, hostilities to COPC, etc. so that you can show that it is permissible to voice and discuss these
  - recognises PHCTs' progress and success
  - acknowledges that this is a workshop to practise COPC planning – it does not aim for perfection but for growth.
- Always finish by summarising the main points.

APPENDIX – POSSIBLE WORKSHOP PLANS

MODEL A: 4 CONSECUTIVE DAYS

Day 1

am Presentation: *Introducing COPC*
Presentation: *Community diagnosis*
pm Task: *Writing community diagnoses*

Day 2

am Feedback: *Community diagnosis*
Presentation: *Prioritising*
Task: *Prioritising*
pm Feedback: *Prioritising*
Presentation: *Detailed problem assessment*
Task: *Detailed problem assessment*

Day 3

am Task: *Detailed problem assessment (cont.)*
Feedback: *Detailed problem assessment*
Presentation: *Intervention planning*
pm Task: *Intervention planning*
Feedback: *Intervention planning*

Day 4

am Presentation: *Evaluation*
Task: *Evaluation planning*
Feedback: *Completed COPC project plans*
pm Feedback: *Completed COPC project plans (cont.)*
Plenary: *Workshop review*

MODEL B: 4 DAYS IN TWO PARTS

Day 1

am Presentation: *Introducing COPC*
Presentation: *Community diagnosis*

pm Task: *Writing community diagnoses*

Day 2

am Feedback: *Community diagnosis*
Presentation: *Prioritising*
Task: *Prioritising*

pm Feedback: *Prioritising*
Presentation: *Detailed problem assessment*
Task: *Detailed problem assessment – start*

Break During the break of two-to-four weeks, the PHCTs would continue to work on their *detailed problem assessments*, developing these to a more polished standard than is feasible in a four-day workshop without a break.

Day 3

am Feedback: *Detailed problem assessment*
Presentation: *Intervention planning*

pm Task: *Intervention planning*
Feedback: *Intervention planning*

Day 4

am Presentation: *Evaluation*
Task: *Evaluation planning*
Feedback: *Completed COPC project plans*

pm Feedback: *Completed COPC project plans (cont.)*
Plenary: *Workshop review*

PRESENTER'S GUIDE

INTRODUCING COPC

Session 1

PRESENTER'S MATERIALS

SESSION AIMS

By the end of this session, participants should understand:

- what COPC is
- the features that make up a COPC programme
- the range of approaches of COPC programmes
- the problem of prediction
- the epidemiological methods used in COPC
- the importance of needs assessment in COPC
- the benefits of COPC
- the relationship between primary health care and public health medicine
- the factors to consider when choosing a COPC project
- the outline functions of each stage in the COPC cycle.

SESSION STRUCTURE

1 WORKSHOP INTRODUCTION

Activity: Warm-up exercise
Presentation: Workshop aims

2 THE HEALTH NEEDS OF THE COMMUNITY

Presentation: Natural history of a disease
Activity: Identifying the stages of a disease
Presentation: Levels of prevention

3 WHAT IS COPC?

Presentation: Community-oriented primary care
Presentation: The COPC cycle
Presentation: COPC features
Activity: Finding examples of COPC-style work
Presentation: COPC strategies
Presentation: The problem of prediction
Activity: Current use of strategies

4 APPLYING EPIDEMIOLOGY TO COPC

Presentation: Overview
Presentation: Clinical use of epidemiology
Presentation: Needs assessment
Activity: Need, demand and supply

5 THE BENEFITS OF COPC

Presentation: Why COPC?
Activity: Small numbers at high risk and large numbers at low risk
Presentation: PHC and COPC
Presentation: Individual and population approaches
Footnote to Session 1

6 DEFINITIONS OF COPC

Additional material for Session 1.

PRESENTER'S MATERIALS

SESSION CHECKLIST

Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Read the *Workshop Handbook*
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overheads for *Introducing COPC*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Self-adhesive sheets 5" x 3" – two different colours
- [ ] Copies of *COPC selected overheads and handouts*
- [ ] Participants' list
- [ ] Name badges
- [ ] Copies of the workshop programme. (You will need to make your own programme but you can base it on the sample programme in the *Workshop Handbook*.)

1 WORKSHOP INTRODUCTION

WARM-UP EXERCISE

!!! POINTS TO MAKE

- Introduce yourself.
- Introduce your facilitators.
- Ask participants to introduce themselves.
- Explain that this is the first session of a workshop to introduce PHCTs and others to Community-Oriented Primary Care (COPC).
- Make sure that participants all have:
  - *COPC selected overheads and examples*
  - a copy of the workshop programme
  - a name badge.

○○○ ACTIVITY

- This is an ice-breaker activity to help participants get to know each other and to relax tension.
- It will also help you to identify hidden agendas which participants have brought with them.
- You may prefer to use an ice-breaker of your own, since there is no critical content in this activity.

!!! POINTS TO MAKE

- This activity is to be done in pairs. Each participant should pair with someone from another practice.
- Each person should collect two self-adhesive sheets to record their findings, using colour 1 for *hopes* and colour 2 for *fears*.
- In each pair, person A interviews person B for two minutes; then person B interviews person A.
- For their partner, each person must find out:
  - three things they hope to achieve by the end of the workshop (*hopes*)
  - three things they want not to see happening during the workshop (*fears*).
- When they have completed each other's notes, they should stick them up on the wall: *hopes* on one wall area; *fears* on another.
- Get participants to walk around and read the stickers.
- Finish off the activity by reading out a few of the hopes and fears.

PRESENTER'S MATERIALS

† FOOTNOTE

- One of the facilitators could analyse the stickers, while you make the next presentation. The results of this activity will help you to adjust the workshop to the needs of the group.

WORKSHOP AIMS

○○○ PURPOSE

- To introduce the aims of the workshop.

!!! POINTS TO MAKE

- Show OH 1.1.

OH 1.1 Workshop aims

- **To find out about COPC and its application in general practice.**
- **To compare COPC with your current work.**
- **To identify a potential COPC programme for your practice.**
- **To write a draft programme plan.**

To find out about COPC and its application in general practice

- The content of the workshop will enable you to explore the concepts of COPC and see how these have been applied elsewhere.

To compare COPC with your current work

- You will be able to note where your present work already follows the COPC approach.

To identify a potential COPC programme for your practice

- The workshop will give you a chance to review the health problems in your practice and to choose one priority problem for development.

To write a draft programme plan

- You will then write a draft COPC programme to tackle this health problem. This does not commit your PHCT to running a programme on the problem. The primary purpose of the workshop is to let you *practise* planning a COPC programme. Once you feel confident about the method, your PHCT may choose to apply it to another problem.
- Most of the time will be spent in practice-based groups.

2 THE HEALTH NEEDS OF A COMMUNITY

WHAT ARE THE HEALTH NEEDS OF THE COMMUNITY?

!!! POINTS TO MAKE

- Sidney Kark began developing the concepts and methods of COPC in South Africa, when he found that he could not meet the health needs of the community because the team did not know what those needs were.
- COPC assumes that people should receive the services they require – not the ones health professionals might wish to offer.
- This raises two basic questions:
  - what is 'the community'?
  - what do we mean by 'the health needs of a community'?
- At this stage, we will take 'the community' to be the people registered with your practice.

NATURAL HISTORY OF A DISEASE

!!! POINTS TO MAKE

- We can explore what we mean by the health needs of a community by considering the natural history of a disease.
- Show OH 1.2.

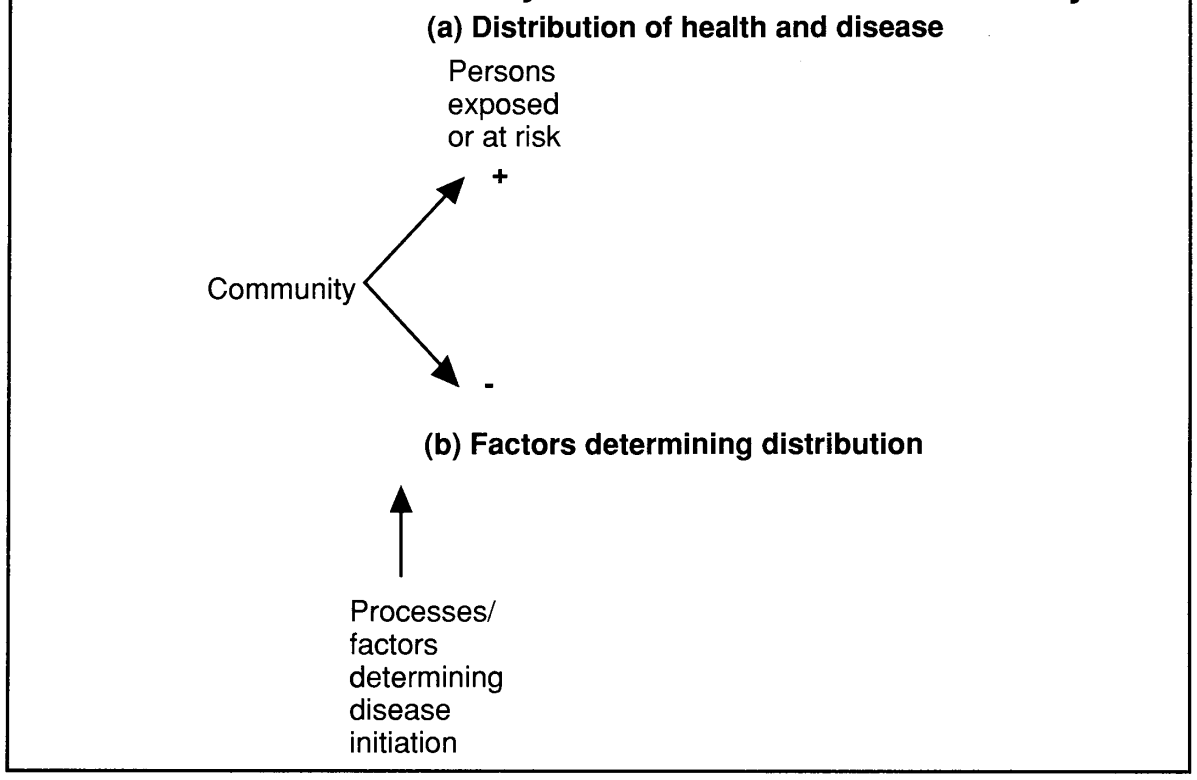
OH 1.2 Natural history of disease in the community

Community

PRESENTER'S MATERIALS

- The first question to ask is: 'What is the first stage of the development of a disease in a community?'
- The answer is 'exposure to risk'.
- We need to consider what determines people's exposure to risk.
- This stage is shown in OH 1.3.

OH 1.3 Natural history of disease in the community



- Ask the group to name a disease in relation to one of the practice populations (e.g. CHD).
- Ask them to identify:
  - who is at risk or exposed (e.g. smokers, over-weight people; those taking little exercise)
  - who is not at risk or exposed (e.g. non-smokers, those with BMI < 30; those taking regular exercise)
  - what processes or factors determine the difference between the two groups (e.g. lifestyle).

Risk factors and risk markers

- You may find it useful to remind participants about risk factors and risk markers at this stage.

A risk factor or risk marker is an aspect of personal behaviour or lifestyle, an environmental exposure or an inherited characteristic, which is known to be associated with a particular health condition. The term 'risk factor' is rather loosely used in the following ways:

1 An exposure that is associated with an increased probability of a specified outcome such as disease, not necessarily a causal factor (risk marker) (e.g. age, sex).

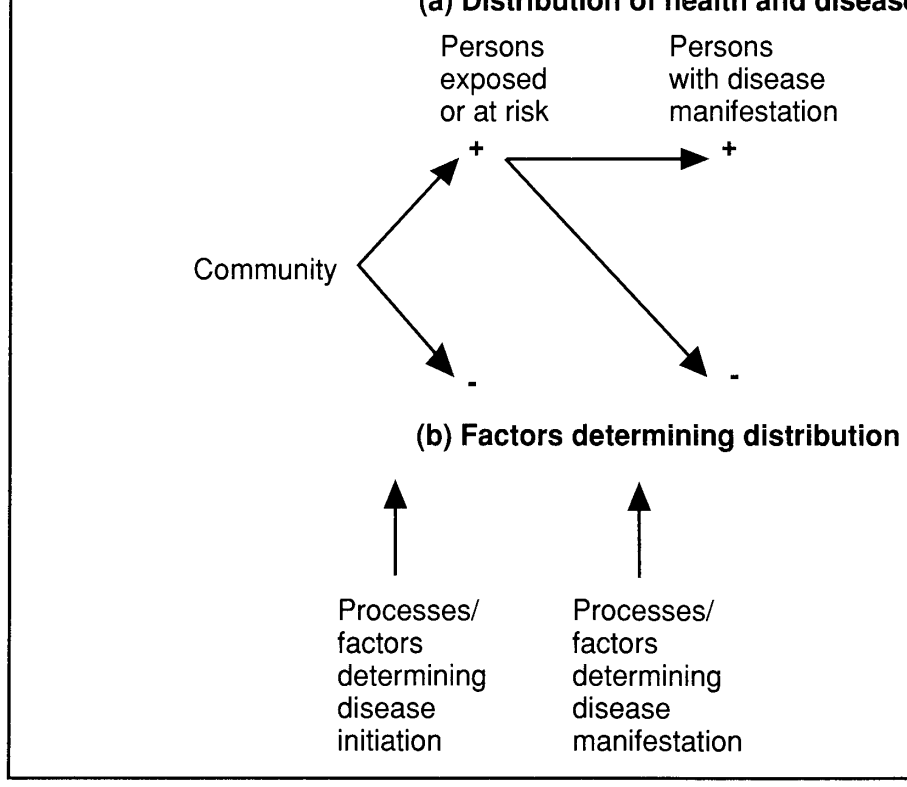
2 An exposure that increases the probability of occurrence of disease (determinant).

3 A determinant that can be modified by intervention thereby reducing the probability of disease (modifiable risk factor).

- The next step is to consider the manifestation of the disease. (This can be regarded as two stages: (a) the initiation of the disease and (b) the subsequent manifestation. We have not shown this level of detail on the overhead.)

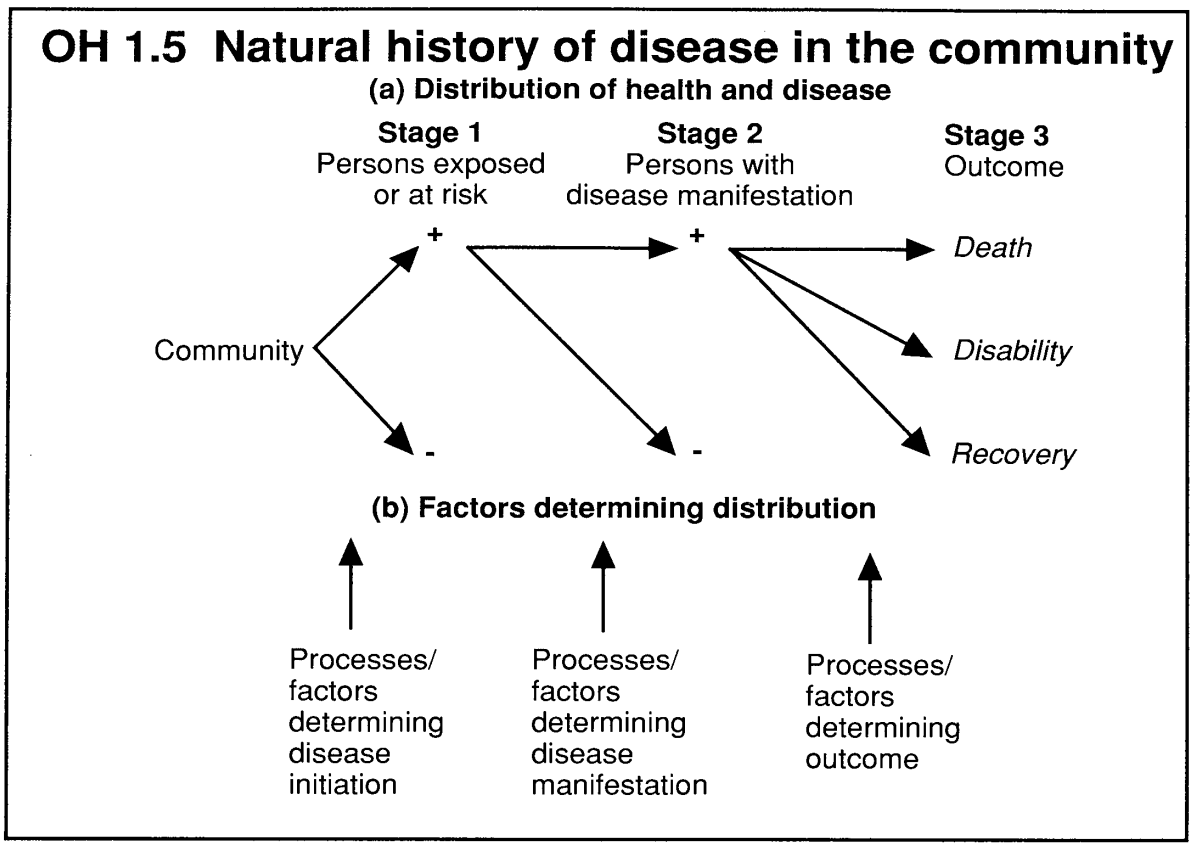
- Show OH 1.4.

OH 1.4 Natural history of disease in the community



- Now ask the group to identify which processes or factors will determine the manifestation of the disease. For example, if the disease was CHD, then lifestyle (e.g. diet, exercise and smoking) would play a key part in determining the manifestation of CHD.
- The final step is to consider the outcome of the disease.
- Show OH 1.5.

OH 1.5 Natural history of disease in the community



- Ask the group to identify the potential outcomes of the disease and the processes or factors which determine those outcomes. For example, if the disease was CHD, then the outcomes would include ischaemic heart disease; the precise outcome is determined by such factors as lifestyle (i.e. has the patient responded to lifestyle advice?) and the availability of appropriate clinical care (i.e. has the condition been correctly diagnosed and treated?).

NATURAL HISTORY, PRIMARY CARE AND COPC

- At any one time, all three stages of a disease exist in the community.
- The processes and factors at work at each stage are different.
- Medical care has tended to concentrate on treating the outcome stage. But the outcome stage is the tip of the iceberg; to reduce the need to deal with stage 3, we need to deal with stages 1 and 2 as well.
- The community's health needs are the totality of dealing with stages 1, 2 and 3.

THE KEY QUESTIONS

- The natural history diagram demonstrates that, to offer effective primary care, you need to be able to answer three questions about your practice population:

  1 What are the major exposures and risks in your population?
  2 What are their clinical manifestations?
  3 What are their outcomes?

NATURAL HISTORY AND EPIDEMIOLOGY

- The questions we have just posed are at the heart of the definition of epidemiology.
- Show OH 1.6.

OH 1.6 Epidemiology – definition

Epidemiology is the study of the distribution and determinants of health and disease in populations. It provides a basis for the planning and evaluation of health services.

BUZZ GROUP ACTIVITY

- This activity is designed to start participants thinking about the health problems in their practices at each of the three stages.

!!! POINTS TO MAKE

- Show OH 1.7.

OH 1.7 The three stages

- **Work with your PHCT colleagues in threes or fours.**
- **Identify one major health problem in your community.**
- **Identify the processes/factors which determine:**
  - **initiation**
  - **manifestation**
  - **outcome.**

FEEDBACK

- Collect some feedback from the groups.

LEVELS OF PREVENTION

- The three stages in the natural history diagram correspond to the three levels of prevention.
- Show OH 1.8.

OH 1.8 Levels of prevention

• Primary	(a) Health promotion (b) Immunisation	} Before any pathological change
• Secondary	(a) Early diagnosis (b) Medical treatment	} Preventing symptomatology
• Tertiary	(a) Reduce disability (b) Rehabilitate	} Preventing further deterioration

Prevention

- Includes the aims of:
  - promoting health
  - preserving health
  - restoring health
  - minimising suffering and distress.

Primary prevention

- Aims at reducing the incidence of disease and other departures from good health.
- Includes:
  - the promotion of healthy lifestyles through activities such as education and legislation; immunisation; anti-smoking campaigns
  - the prevention of specific diseases as in immunisation.

Secondary prevention

- Involves measures for the early detection and prompt effective intervention to correct departures from good health.
- Examples include screening for cervical and breast cancer.

Tertiary prevention

- Includes measures to reduce or eliminate long-term impairments and disabilities, to minimise suffering caused by existing departures from good health and to promote a patient's maximum functioning in relation to his/her clinical condition.
- Examples include treating CHD and diabetes mellitus.
- Show OH 1.9.

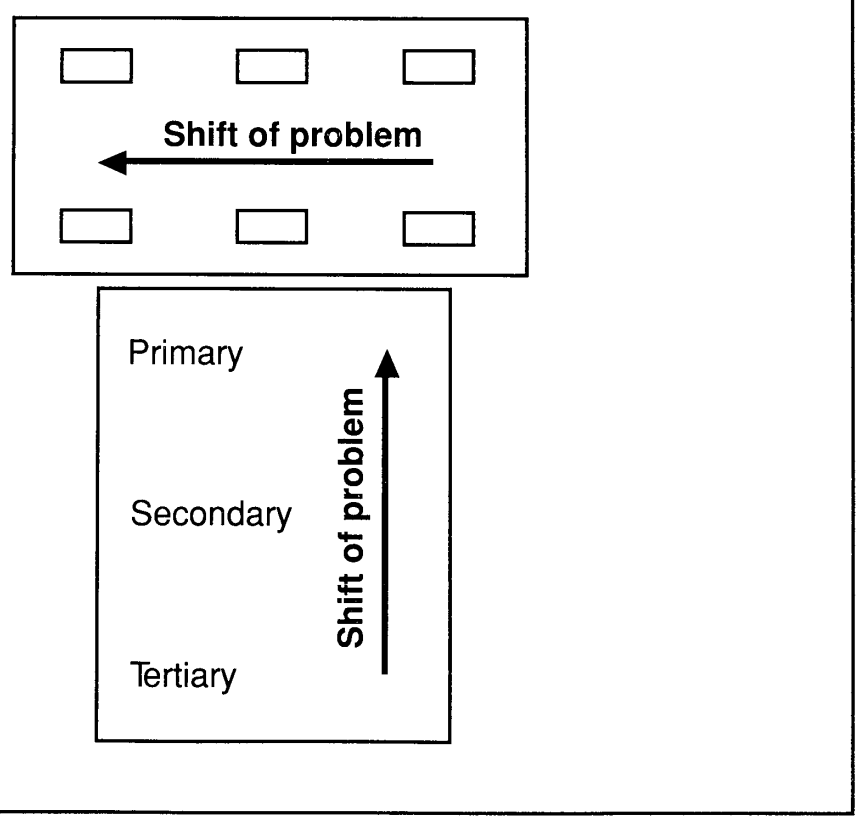
OH 1.9 Levels of prevention for CHD

PREVENTION STAGE	ACTIVITY
• Primary	Promoting exercise, non-smoking, healthy diet
• Secondary	Screening for breast cancer Treating hypertension
• Tertiary	Treating congestive cardiac failure

THE AIM OF COPC

- The principal aim of COPC can be described diagramatically as:
  - shifting the problem to the left on the natural history diagram
  - shifting the problem upwards on the levels of prevention diagram.
- Show OH 1.10 to illustrate this.

OH 1.10 Problem shift



PRESENTER'S MATERIALS

3 WHAT IS COPC?

○○○ PURPOSE

- To introduce COPC.

!!! POINTS TO MAKE

- Show OH 1.11 as an example of a COPC programme.
- Briefly talk participants through the key features of this programme:
  - the identification of a health problem
  - the definition of the group with the health problem
  - the assessment of the group's health state in relation to the health problem
  - an intervention which offers (a) clinical care and (b) anticipatory care
  - the evaluation of the programme.
- Explain that this session explores the COPC principles behind programmes such as this.

OH 1.11 CHAD* programme

Case-finding and treatment of:

Coronary heart disease	Cerebrovascular disease		Peripheral vascular disease
Hypertension	Hyperlipidaemia	Diabetes	Obesity

and

survey of community distribution of:

Systolic BP	Diastolic BP	Serum cholesterol	Weight–height index	Serum glucose

and

their modification if necessary by:

Dietary changes	Stopping cigarette-smoking	Exercise	Medical treatment

using:

CHAD clinic in family practice	Community health education

and

evaluation of the programme by:

Checking compliance with the programme by the health centre and the community	Measuring change in distribution of risk factors

* Community syndrome of hypertension, atherosclerotic diseases and diabetes

Source: Kark (1989), p 165

- Then move to the definition of COPC below.
- Show OH 1.12.

OH 1.12 Community-oriented primary care (COPC)

COPC is a continuous process by which PHC is provided to a defined community on the basis of its assessed health needs by the planned integration of public health with PC practice

- There are many other definitions (see the end of this session for some others).
- The various definitions refer to:
  - the *community* as the focus of primary care (exactly how we should interpret 'community' is discussed later in the workshop)
  - a concern with *individual* and *population/group* needs in a single integrated approach
  - concern with *well or sick* people
  - the use of *systematic programmes*
  - the use of *epidemiological methods*.
- COPC is integrated with primary care – it is not a separate programme.
- *Intervention at the population level* is at the heart of COPC. This means positively seeking out those people who would benefit from behaviour change or treatment. This is not a new concept for PHCTs. They already practise examples of intervention at the population level (e.g. cervical cancer screening, child health surveillance).

THE COPC CYCLE

○○○ PURPOSE

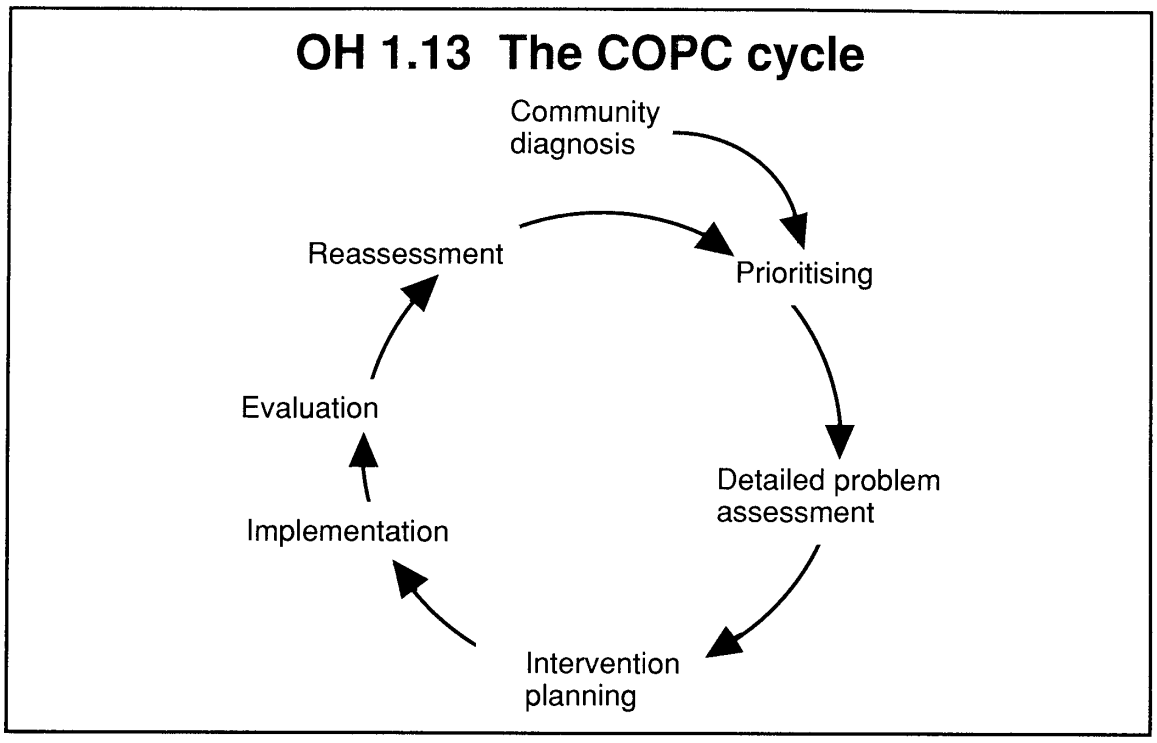
- To demonstrate the practical application of COPC.

!!! POINTS TO MAKE

- Show OH 1.13.

PRESENTER'S MATERIALS

OH 1.13 The COPC cycle



- Briefly describe each stage, explaining that later workshop sessions will take the groups through them in more detail.

Community diagnosis

This stage involves building up a picture of your local community. It involves using the *available* or *accessible data* – not special research. A key aspect is to identify the major health problems and their causes.

Prioritising

Prioritising involves choosing one health problem for your first COPC intervention by systematically considering each of the health problems against a list of criteria. At the end of this stage, you will have chosen your proposed problem for which you have decided there is a case for action. (You will have checked that a proven intervention is available to tackle the problem.)

Detailed problem assessment

In this stage, you take a more detailed look at the health problem in your practice which you have chosen to tackle. A key purpose of the detailed problem assessment is to provide a baseline measure of the health problem and a basis for planning your intervention. The impact of your intervention will be measured against this baseline figure.

Intervention planning

Having chosen your problem, you then plan how you would tackle it in practice. This includes identifying:

- what needs to be done
- when it needs to be done
- by whom it is to be done
- what resources are needed
- how it will be evaluated.

Programme implementation/surveillance

In this stage, you carry out your plan and check that you are still working to your original plan.

Programme evaluation

Throughout the programme, you will need to evaluate your work. Part of the purpose of this is to see if what you are doing is still appropriate. If not, you adjust the plan.

Reassessment/taking stock

This is effectively going back around the cycle again, but this time you have new information. This can lead you to:

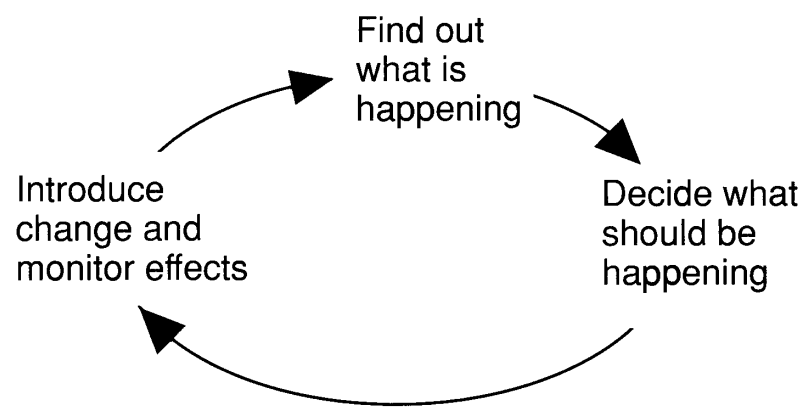
- continue with the same health problem – does it still have the same priority?
- choose a new programme – is there something with a higher priority?

In other words, the findings of your COPC programme become one of the inputs into your next community diagnosis.

† FOOTNOTES

- You might find it helpful to ask participants to compare the COPC cycle with the audit cycle.
- Show OH 1.14.

OH 1.14 The audit cycle



Source: Hughes & Humphrey (1990), p 5

How many programmes?

- You may wish to mention that there is no limit to the number of COPC programmes that a PHCT might run. The number is determined by the range of health problems for which COPC is suitable and the resources available. However, in the workshop pack we have assumed that PHCTs will concentrate on one initial programme.

PRESENTER'S MATERIALS

COPC FEATURES

PURPOSE

- To explain how COPC works.

!!! POINTS TO MAKE

- Show OH 1.15.

OH 1.15 COPC features

- **Works with a defined group.**
- **Provides primary clinical care.**
- **Has defined programmes.**
- **Interests itself in all factors that affect health.**
- **Is concerned with the total natural history of a disease and all levels of prevention.**
- **Involves a multi-disciplinary team.**
- **Involves the community.**
- **Uses epidemiological methods.**
- **Is an integral part of PHC work.**

Defined group

- Although COPC as a methodology talks about 'community-wide' and 'population-wide' programmes, practical programmes provide care to specific groups – how these are chosen is dealt with later. (In COPC, the term 'population' is sometimes used to mean 'local community' and at other times in the statistical sense of 'the group under study.')
- COPC programmes might target groups such as people over 65 years of age, pregnant women, adolescents.
- COPC programmes are not just for users of services. They are defined in a way which embraces non-users as well. Such programmes are difficult to implement solely by opportunistic meetings with individual patients and generally involve some method of systematically contacting patients.

Provides primary clinical care

- Self-evident for a PHCT, since this is its main function.

Defined programmes

- A COPC programme involves a systematic programme of intervention for *all* those in the defined group, i.e. a programme that identifies relevant needs in the group and provides appropriate clinical care (e.g. advice and support on alcohol; diabetes control).

All factors

- COPC concerns itself with all factors (physical, social, mental, biological, etc.) at all stages of a disease. It is not just concerned with outcomes.
- Because COPC has a community-wide focus, it can concern itself with risk factors that are outside the immediate control of the PHCT or the patient. If the risk factor can be modified and if modification is worthwhile, then COPC sets out to modify it (e.g. an intervention might involve helping a local factory to change its canteen menu as part of a COPC programme on diet).

Total natural history/all levels of prevention

- A COPC programme may cover any or all stages of a disease, and involve primary, secondary and tertiary prevention.

Multi-disciplinary team

- COPC work looks to the whole PHCT to apply its skills and resources to promote health gain. Many COPC programmes use nurses, social workers and health visitors for the surveillance work. Doctors are then involved in planning treatment (e.g. a programme to reduce stress in carers might involve interventions by doctors, nurses and health visitors).

Community

- Community involvement can take many forms:
  - listening to the community
  - involving the community in defining need and priorities
  - involving the community in care delivery (e.g. carers)
  - consulting pressure groups
  - consulting voluntary agencies.
- For some workers, COPC implies that the community is involved in the programme (e.g. a housing organisation might agree to work on improving the environment of poor households). Community involvement, though, is not an essential prerequisite of all programmes.
- There is also the question of what the community is. For practical purposes, it may be the practice list.

Epidemiological methods

- COPC requires the use of epidemiological methods, i.e. methods which look at the distribution and determinants of health and disease.
- Evaluation is central to COPC and so epidemiological methods are necessary. PHCTs will be used to evaluation through their audit work.

An integral part of PHC work

- While a new COPC programme might need a distinctive profile, the programme or programmes should be built into the practice function.

PRESENTER'S MATERIALS

BUZZ GROUP ACTIVITY

- This activity is designed to enable participants to identify which COPC methods they already use.

!!! POINTS TO MAKE

- Ask the participants to pair up with their neighbours. They should discuss and identify the issues on OH 1.16.

OH 1.16 COPC and your present work

- **What is new in the COPC approach for your practice?**
- **Identify examples where you already:**
  - **work with a defined group**
  - **have group-wide clinical care programmes**
  - **involve other agencies**
  - **use proven interventions**
  - **monitor the results of those interventions.**

FEEDBACK

- Ask for feedback from a few of the buzz groups.

○○○ FOR YOUR GUIDANCE

- Look for work that will help you to build bridges between what their practices do now and COPC (e.g. health promotion and audit).
- Many of the skills needed for COPC exist now in PHCTs. The workshop should help them to see COPC as a natural extension of current work which helps them achieve existing practice aims.
- Avoid blurring the distinction between these current activities and COPC. If you remove *all* distinctions, your participants may wonder why they have come to the workshop. Equally, if you make COPC sound too different, they may feel it devalues their current work. The right balance may be difficult to judge.

POSSIBLE SESSION END-POINT

If you feel that your participants are now ready to move on to community diagnosis, you can end this session here.

COPC STRATEGIES

○○○ PURPOSE

- To compare population and high-risk strategies, and to explore how COPC approaches them.

!!! POINTS TO MAKE

- Explain that you are going to discuss high-risk strategies and population strategies.

High-risk strategy

- A high-risk strategy aims to *detect* and *protect* those individuals who are at the high end of a risk distribution. They are usually a small proportion of the distribution.

Population strategy

- A population strategy aims to *reduce* the underlying causes of the incidence rate. It is concerned with factors that affect the whole of the population.

○○○ FOR YOUR GUIDANCE

- The two strategies and their advantages and disadvantages may be familiar to participants, so you should be able to briefly remind them of these and then move them straight into the activity which is about both high-risk and population strategies.
- First, discuss each of the strategies in turn.

HIGH-RISK STRATEGY

!!! POINTS TO MAKE

- Show OH 1.17.

PRESENTER'S MATERIALS

OH 1.17 The 'high-risk' strategy

Advantages

- **Intervention appropriate to individual recipient.**
- **Subject more likely to be motivated.**
- **PHCT members are motivated.**
- **Cost-effective.**
- **Favourable benefit : risk ratio.**

Disadvantages

- **Costs and problems of screening.**
- **Limited potential for health of total population.**
- **Socially/behaviourally inappropriate.**

Example: Controlling hypertension

Advantages

- Patients know that the treatment they are getting is specific to their needs.
- They are likely to feel the need for treatment, i.e. to be motivated.
- PHCT members will be motivated by the knowledge that the patient needs care and from seeing the benefits to the patient.
- The time and drugs used will cost little compared to the health gain.

Disadvantages

- Whatever the short-term benefits to the patients, the health problem cannot be eradicated.
- Treating hypertensive patients does nothing to prevent others becoming hypertensive.
- Treatment does not help change the population's behaviour (e.g. over diet and exercise).

POPULATION STRATEGY

!!! POINTS TO MAKE

- Show OH 1.18.

OH 1.18 Population strategy

Advantages

- **Radically effective.**
- **Large potential benefits for population.**
- **Behaviourally appropriate.**

Disadvantages

- **Small benefit to individuals – the prevention paradox.**
- **Poor motivation of subjects.**
- **Poor motivation of PHCT members.**
- **Benefit : risk ratio may give concern.**

Example: Tackling adolescent health

Advantages

- Changing adolescent behaviour tackles the roots of their potential health problems (e.g. through proper diet, exercise, non-smoking).
- The gain to the population will be considerable.
- Changing population behaviour is the appropriate way to tackle the problem.

Disadvantages

- Each individual adolescent may feel he/she has little to gain from a change in behaviour – especially if the health benefits are long term.
- This can make it difficult to motivate the adolescents to participate.
- PHCT members will not see large health gains in individuals; this can reduce PHCT motivation.

THE PROBLEM OF PREDICTION

PURPOSE

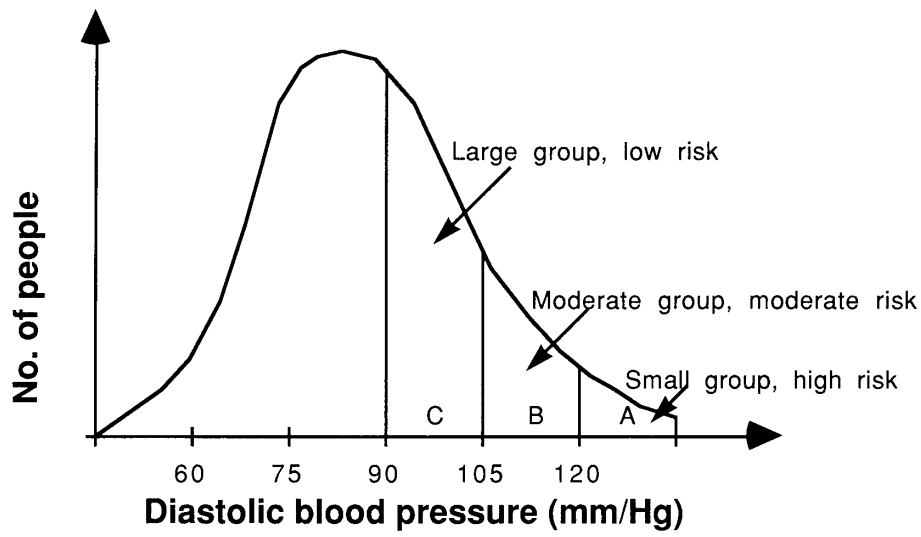
- To show how adopting a population-wide approach helps overcome the difficulty of predicting who will become ill at any given risk factor level.

!!! POINTS TO MAKE

- Show OH 1.19.

PRESENTER'S MATERIALS

OH 1.19 Blood pressure distribution



Source: Padfield (1988)

- Ask, 'Who will have a heart attack?' The question cannot be answered from the graph. The points below explain why.
- As diastolic blood pressure rises, so does the risk of a heart attack. However, not all those in the high-risk group will have heart attacks, nor will all those in the low-risk group escape heart attacks.
- If we confine intervention to those in the high-risk group, many deaths will result in the much larger moderate and low-risk groups.
- Intervening medically with the group at high risk does nothing to change the risk factors for the rest of the population.
- Asking the cases at high risk to change their behaviour (e.g. over exercise, smoking or diet) when the cases at lower risk are not going to change, demands a great deal from the cases at high risk. (In the optional section on behaviour change, we look at how to help people change behaviour. One way is to see whether the environment that cues the behaviour can be changed.)
- Hence, if we wish to intervene successfully, we need to:
  - change the *behaviour* of the whole population
  - change the *environment* of the whole population
  - provide *clinical care* for those who need it.

BUZZ GROUP ACTIVITY

- This activity is designed to help participants begin to consider the relative merits of high-risk and population strategies for their practices.

!!! POINTS TO MAKE

- Ask the participants to pair up with someone else from their PHCT. The pairs should have different professional roles (e.g. GP and nurse, or nurse and practice manager).
- Ask them to identify current examples of the type in OH 1.20.

OH 1.20 Programme types

Find examples from your practice of:

- **a high-risk programme where the balance of advantages and disadvantages justifies continuing with the high-risk approach**
- **a high-risk programme where the balance of advantages and disadvantages suggests changing to a population approach**
- **a population approach where the balance of advantages and disadvantages justifies continuing with the population approach**
- **a population approach where the balance of advantages and disadvantages suggests changing to a high-risk approach.**

FEEDBACK

- Collect feedback from some of the pairs.

CONCLUSION

- COPC aims to resolve the tension between high-risk and population approaches by integrating them within particular COPC programmes.

PRESENTER'S MATERIALS

4 APPLYING EPIDEMIOLOGY TO COPC

○○○ PURPOSE

- To show how epidemiological results and methods are used in COPC.

!!! POINTS TO MAKE

- COPC is concerned with the underlying causes of disease; so is epidemiology. This was demonstrated by the discussion of the natural history of disease at the start of the session.
- In COPC, we wish to make interventions that will reduce risk on a population basis, as well as providing treatment and rehabilitation. We need to know whether or not we have been successful. Epidemiology offers methods for measuring how successful we have been.
- Classical epidemiology work often requires huge samples and costly studies. COPC will not involve PHCTs in this type of fundamental research.
- In COPC, the use of epidemiology is pragmatic and related to the health problems of a specific community.

CLINICAL USE OF EPIDEMIOLOGY

!!! POINTS TO MAKE

- Show OH 1.21.

OH 1.21 Clinical use of epidemiology

- **Contributes to the care of individuals.**
- **Is pragmatic.**
- **Its purpose is to benefit a particular community.**
- **The data which are collected are used both for clinical care and for epidemiological purposes.**
- **Can stimulate the community to become more active in the promotion of its own health.**

Source: Abramson, Kark & Palti (1983), pp 255–7

Contributes to the care of individuals

- While COPC uses epidemiological methods, the purpose is to deliver care. However, useful findings may come from COPC programmes.

Is pragmatic

- PHC epidemiology will involve small numbers – especially small numbers of those who are helped. For example, a COPC smoking programme might change the behaviour of 5 per cent of a programme population of 500. The 25 'successes' are too small a number to draw formal epidemiological conclusions. COPC must accept that.
- Some epidemiology requires the collection of masses of data which have little clinical relevance. Beware of this in PHC.

Benefits a particular community

- Epidemiology in primary care is about short-to-medium-term benefit to the health of the practice population – in research, the benefits of epidemiology may be more long term.

Data used for clinical care and for epidemiological purposes

- The data have to be of two kinds:
  - those needed to inform the care of an individual patient, i.e. clinical data
  - those needed to inform the care of the population, i.e. epidemiological data.

Can stimulate community activity

- The additional information gained about the community through a population or epidemiological approach may lead to community action (e.g. it could raise concerns about children's diet or care of elderly people).

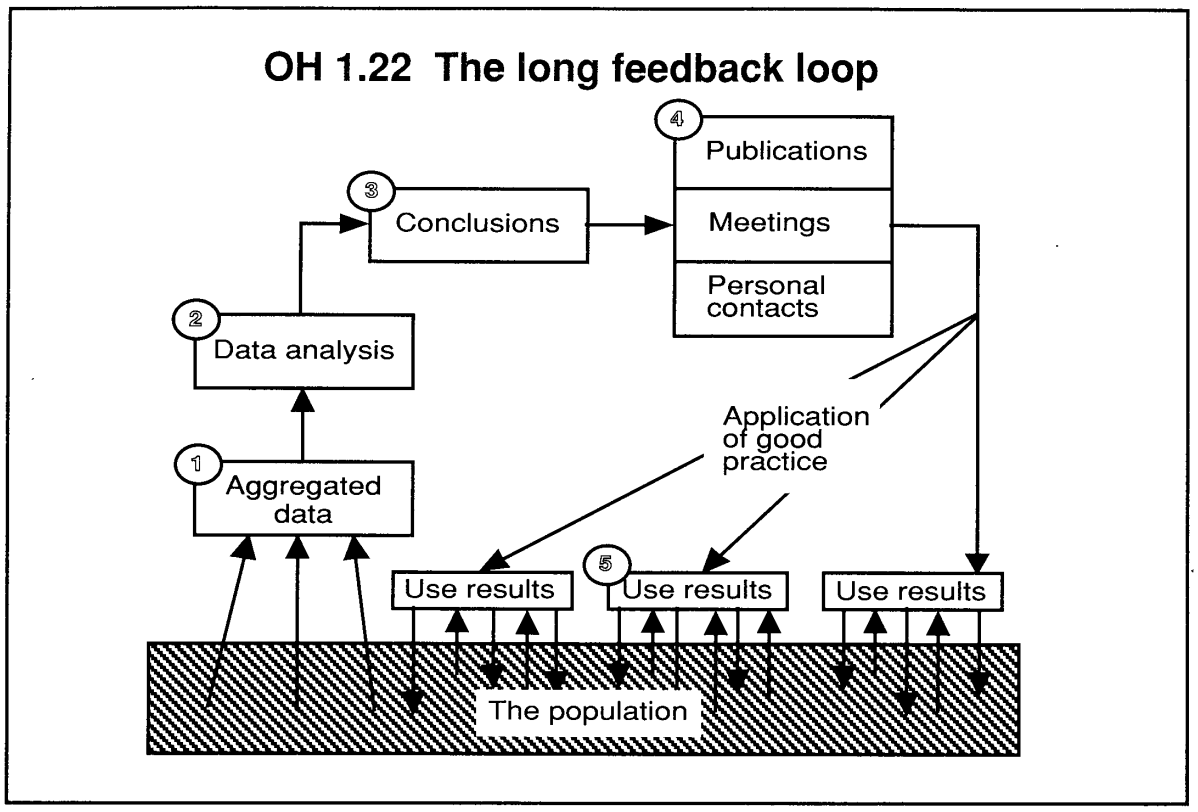
DISCUSSION POINTS

- What sort of changes does the use of epidemiological methods imply for PHCTs?
- Where could epidemiological methods give your practice information that would help it measure its effectiveness?
- What do you see as being the dangers of using epidemiological methods in PHC?

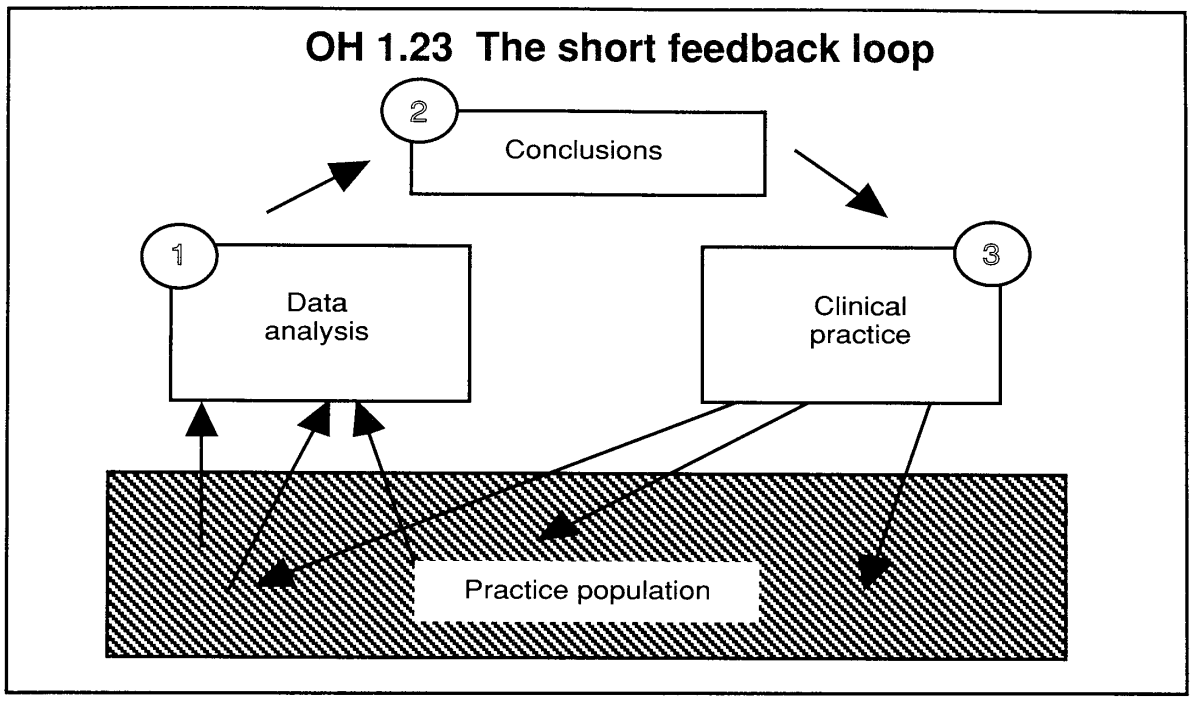
TRADITIONAL EPIDEMIOLOGY

!!! POINTS TO MAKE

- In traditional epidemiology, the feedback of results to routine clinical care may take many years. This is illustrated by the next overhead.
- Show OH 1.22.



- The stages in the cycle are:
  1 Researchers gather raw data after detailed planning.
  2 The data are analysed.
  3 Conclusions are reached.
  4 The conclusions are publicised.
  5 The conclusions are applied to the care of patients.
- Classical epidemiology usually involves large samples, usually over long periods of time. This is necessary in order to identify relationships which have not previously been proven.
- The time from the first observations of the population to the application of the results to patients may be of the order of 5–20 years, especially in cohort studies.
- This type of epidemiological work is not practical for PHCTs: it takes too long; costs too much; and needs samples larger than can be found in one practice.
- The methods of epidemiology can, though, be applied on a different scale in COPC. This is demonstrated in the next overhead.
- Show OH 1.23.



- The stages in the cycle are:

  PHCT members analyse data on the practice population.

  Conclusions are reached about the care needed by integrating practice data and those from existing epidemiological studies.

  Primary care is provided to patients.

- In the short feedback loop, the PHCT takes a well-established epidemiological result and applies it to a group in the practice population.
- The feedback to the team is not basic epidemiological results, but data on the application of such results to the particular group, i.e. the results will tend to answers questions of the type 'How well does intervention X work in our practice?' and 'In what ways do we need to modify intervention Y in order that it works for us and our patients?'.

NEEDS ASSESSMENT IN COPC

PRINCIPLES

!!! POINTS TO MAKE

Definitions

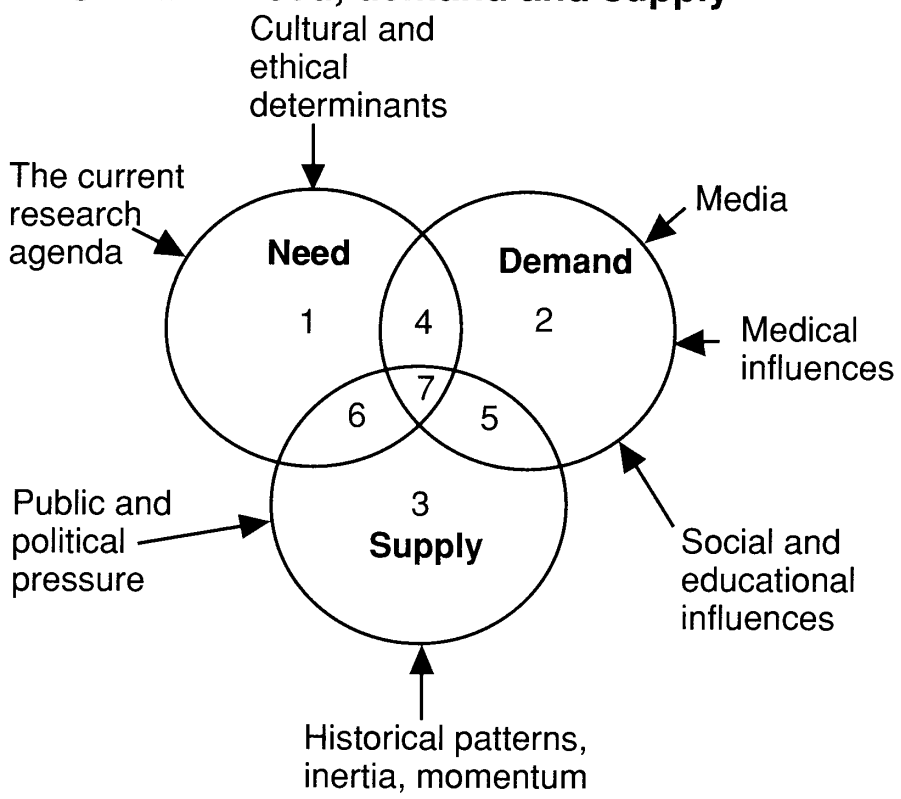
- A simple definition of need is 'the population's ability to benefit from health care' (*NHSME 1991, p 3*), but can be extended to include the patient's view more explicitly: 'A need for health care can be said to exist when an individual has a condition for which there is an effective and acceptable treatment'. (*Gillam 1992, p 404*)

PRESENTER'S MATERIALS

Need, demand and supply

- In an ideal health service, what is needed would be exactly matched by what is demanded and what is supplied. There are many influences which produce a mismatch between need, demand and supply. These are illustrated in the next overhead.
- Show OH 1.24.

OH 1.24 Need, demand and supply



Source: Stevens & Gabbay (1991), p 21

- The Stevens & Gabbay model divides provision into seven fields:
  - **1** Needed but not demanded nor supplied.
  - **2** Demanded but not needed nor supplied.
  - **3** Supplied but not demanded nor needed.
  - **4** Needed and demanded but not supplied.
  - **5** Demanded and supplied but not needed.
  - **6** Needed and supplied but not demanded.
  - **7** Needed, demanded and supplied – the ideal match.

BUZZ GROUP ACTIVITY

- This activity is designed to encourage participants to think about the practical difficulties of identifying need.

!!! POINTS TO MAKE

- Show OH 1.25.

OH 1.25 Identifying need

- **Work in threes.**
- **Identify one health problem for each of the fields 1 to 7.**
- **For each health problem except field 7, identify some of the pressures which create the mis-match (e.g. professional desire to use high-tech methods or patient demand).**
- **Interpret 'need' as what people would benefit from and find acceptable.**

FEEDBACK

- Ask for the results of the activity from some or all of the groups. Put these on a flipchart, using 7 rows across the page:

  1 …

  2 …, etc.

- Ask participants to feedback some of the pressures they identified. List these on a separate flipchart page.

NEEDS IDENTIFICATION METHODS

!!! POINTS TO MAKE

- Methods of identifying needs fall into four types:
  - epidemiological
  - comparative
  - professionally defined
  - consumer-defined.

  (Gillam 1992, p 404)

Epidemiological

- The NHSME paper *Assessing Health Care Needs* (1991) sets out a research model for assessing needs epidemiologically. (Note that this model is for use with specific health problems, e.g. diabetes.) The model reviews:
  - the sub-categories of the problem (e.g. IDDM, NIDDM, …)

- the prevalence and incidence rates, by age, sex, region, etc. where possible
- the services available for prevention, diagnosis, treatment, care and rehabilitation
- the effectiveness of the services and their cost effectiveness.

Comparative

- Comparisons of incidence, prevalence and service usage can be made on a geographical basis, by sex, age or socio-economic group.
- These can make use of a range of information sources, including:
  - Office of Population Censuses and Surveys (OPCS) demographic statistics (e.g. mortality and fertility statistics)
  - census small area statistics
  - occasional local health status and behaviour surveys
  - hospital utilisation rates and waiting lists
  - selected morbidity statistics (e.g. the cancer registry)
  - treatment and effectiveness reviews.

  (See NHSME 1991, p 7 for a more detailed discussion of the value of these sources.)

Professionally defined

- Professionals can define need in many ways:
  - by choosing to supply services
  - by using unevaluated health technologies
  - by defining a problem as non-medical and therefore not a need (e.g. 'social' problems)
  - by declaring a problem untreatable.

Consumer-defined

- Patient views can be obtained from:
  - patient surveys
  - patient groups
  - rapid appraisal methods
  - consultation with community workers (e.g. police, social workers, teachers).

5 THE BENEFITS OF COPC

○○○ PURPOSE

- To highlight the gains which COPC can bring to a PHCT.

!!! POINTS TO MAKE

- Show OH 1.26.

OH 1.26 Why COPC?

- **Emphasises the whole team's responsibility for the health of the defined population.**
- **Offers a better understanding of the practice population and its health needs.**
- **Provides more control of the workload.**
- **Extends audit.**
- **Addresses the prevention paradox.**

Team responsibility

- COPC emphasises that the care is provided by the PHCT, not just by individual members working in isolation.

Better understanding of the practice population

- A PHCT generally sees the practice through the patients that attend. This inevitably gives a partial view. COPC's methods involve looking at the whole practice – the population – and so give the team a new, wider view.

More control of the workload

- PHCT work has a very high reactive load. The team waits for the problems to come in. This can lead to a sense of loss of control and to an inability to direct the use of resources. COPC offers one way of bringing some proactivity into the practice and of enabling the team to plan how to use resources.

Extends audit

- Much clinical audit work can get stuck at the analysis stage. An audit does not necessarily carry its own means of acting on the results. COPC is one method of acting on audit findings (e.g. if an audit shows that a PHCT is not making an impact on a particular disease, then a COPC programme might be the answer).

PRESENTER'S MATERIALS

Addresses the prevention paradox

- Because PHCTs tend to concentrate on the sick, there can be a tendency to see the treatment of cases at high risk as the overriding priority and to see this as prevention. The following section explores why that is not quite the case.
- Show OH 1.27.

OH 1.27 The prevention paradox

'A large number of people at a small risk may give rise to more cases than a small number of people who are at a high risk.'

Source: Rose (1992), p 24

!!! POINTS TO MAKE

- We can see this paradox in CHD.

A man with a serum cholesterol level of 7–7.5 mmol/l is more likely to die of CHD than a man with a serum level of 5–5.5 mmol/l.

But, male CHD deaths with serum level 5–5.5 mmol/l are 17 per cent of deaths as against 9 per cent for serum level 7–7.5 mmol/l.

How can this paradox occur? The answer is that there are far more men with serum levels between 5 and 5.5 mmol/l than between 7 and 7.5 mmol/l.

This contains an important lesson for preventive work. The patients with the highest exposure to risk factors may be few in number. However effective their treatment, it will make little impact on the overall level of morbidity when there are much larger numbers exposed to a smaller but still significant risk.

(Rose 1992, pp 23–4)

- The prevention paradox '... means that a high-risk preventive strategy is dealing only with the margin of the problem.'
  (Rose 1992, p 24)

BUZZ GROUP ACTIVITY

- This activity is designed to help participants distinguish between diseases which involve small and large numbers of people at varying risks.

!!! **POINTS TO MAKE**

Ask the group to identify:

- diseases which involve a small number at high risk
- diseases which involve large numbers at low or moderate risk.

POSSIBLE SESSION END-POINT

This is the second point at which you might wish to move on to community diagnosis.

PRIMARY HEALTH CARE AND COPC

○○○ **PURPOSE**

- To show how much of PHC methodology is compatible with the COPC approach and how COPC adds to effective PHC work.

!!! **POINTS TO MAKE**

- Show OH 1.28.

OH 1.28 The nature of primary health care

- **Accessible.**
- **Affordable.**
- **Acceptable.**
- **Includes: promotion, prevention, treatment and rehabilitation.**
- **Involves the community.**
- **May involve continuing surveillance of the population's health.**

- Primary health care is in a very strong position for preventive work for a number of reasons.

Accessible

- Primary health care is accessible, being the first point of contact with the health service for many people. Typically, a PHCT sees 70 per cent of its patients every year and 90 per cent over three years; this creates an enormous opportunity for effecting behaviour change with both high- and low-risk patients.

Affordable

- Primary health care is free at the point of use (except for prescriptions).

Acceptable

- Patients are more likely to respond to advice from members of the PHCT than from many other sources; doctors are known and respected.

Promotion, prevention and audit

- The changes in the contractual basis of general practice emphasise health promotion, prevention and audit alongside clinical care.

Involves the community

- PHCTs may have means of consulting and cooperating with other sections of the community (e.g. churches, schools and social workers).

Continuing surveillance

- Continuing surveillance of the health status of the community is already part of PHC work (e.g. child health surveillance and screening).
- Show OH 1.29.

OH 1.29 Population-based medicine

- **Deals with populations as well as individuals.**
- **Diagnoses the state of health of the community.**
- **Uses outreach and planned programmes.**
- **Provides anticipatory care.**
- **Involves continuing surveillance of the population's health.**
- **Sees potential for prevention in every consultation.**
- **Needs epidemiological skills.**

Populations as well as individuals

- PHCTs are increasingly dealing with populations – screening, health promotion and audit are all methods of treating or looking at groups of patients. These changes are not meant to replace responding to patients as individuals, but the approaches do shift the balance between being reactive and proactive.

The state of health of the population

- The new health promotion scheme requires practices to find out about the health of all their patients, not just of those who attend. This new knowledge can be used to direct resources in a more effective way.

Outreach and planned programmes

- The idea of proactively seeking out patients and implementing a planned programme with them is central to COPC.

Anticipatory care

- While the emphasis of much primary care is on care of sick people, COPC adds to this the anticipatory care of those who are at risk of becoming sick.

Continuing surveillance of the population's health

- The new work on the population does not stop at diagnosis. The effects will need to be monitored both to learn what has and has not been effective, and to decide what future work needs doing.

Prevention potential

- Stott & Davis (1979) classify consultation activities into four types:
  - management of presenting problems
  - modifying help-seeking behaviours
  - management of continuing problems
  - opportunistic health promotion.

  Population-based medicine extends this last category.

Epidemiological skills

- Population-based work has to use epidemiological skills (e.g. needs assessment and evaluation).

INDIVIDUAL AND POPULATION APPROACHES

○○○ PURPOSE

- To provide a summarising comparison of the two approaches and to demonstrate their complementary nature.

!!! POINTS TO MAKE

- Explain that this is a summary of the two approaches.
- Show OH 1.30.

OH 1.30 The complementary functions of clinical and epidemiological skills

INDIVIDUAL	POPULATION
Examination of a patient	Survey of community
Diagnosis of patient	Diagnosis of community
Treatment of patient	Treatment of community
Continuing observation	Continuing surveillance
Evaluation of treatment	Evaluation of programme

PRESENTER'S MATERIALS

- Briefly talk through the illustrative points made by Kark using the table below.

The complementary functions of clinical and epidemiological skills

Clinical (individual)	Epidemiological (population group)
Examination of a patient Interview and examination of individuals by history taking, physical and psychological examinations, laboratory, X-ray and other special techniques.	**Survey** State of health of community and families, using psychological testing and special facilities for such investigations.
Diagnosis 1. Usually of a patient. Differential diagnosis to determine main causes of patient's complaint.	**Community diagnosis** 1. Usually problem-oriented. Differential distribution of a particular condition in the community and the causes of this distribution.
2. Appraisal of health status of a 'well' person, such as a pregnant woman, well children, periodic health examinations of adults.	2. Health status of the community as a whole or of defined segments of it (e.g. health of expectant mothers, growth and development of children, birth and death rates).
Treatment 1. According to diagnosis and depending on resources of patient and medical institutions.	**Treatment** 1. According to the community diagnosis and depending on resources of the health service system.
2. Intervention usually follows on the patient seeking care for illness or advice about health.	2. Intervention on basis of survey findings often before any illness notified or recognised.
Continuing observation Evaluation of patient's progress and sometimes for further diagnostic work-up.	**Continuing surveillance** Surveillance of health state of community and ensuring continuing action. Evaluation of intervention programmes.

Source: Adapted from Kark (1989), p 18

† FOOTNOTE TO SESSION 1

Your participants may feel that the shift to population-based methods raises ethical questions.

- Does the population approach neglect the individual?
- Does the greater emphasis on management and planning get in the way of offering effective clinical help?

If these issues are raised, encourage the group to discuss them. If the issues are pursued by a few vociferous participants, then you may have to halt the discussion by referring to the fact that the views have all now been heard and that the group should not expect to reach a consensus.

6 COPC DEFINITIONS

These additional definitions may be useful for Part 1 of Session 1. It is not essential to refer to them.

COPC ...

'... is an integration of community medicine with the primary health care of individuals in the community. In this form of practice, the community practitioner or community health team has responsibility for health care both at a community and at an individual level.'

(Last 1988)

'... is a form of integrated practice of primary care. An essential health programme, within the framework of primary care, to deal with the health problems of the community or its subgroups, as determined by epidemiological appraisal.'

(Abramson 1984, pp 437–42)

'... brings together the health care of the community and the health care of individuals, in a single integrated practice. The characteristic feature of COPC is that it embraces specific programmes to deal in a systematic way with a community's main health problems, as well as providing clinical care for the community's individual members.'

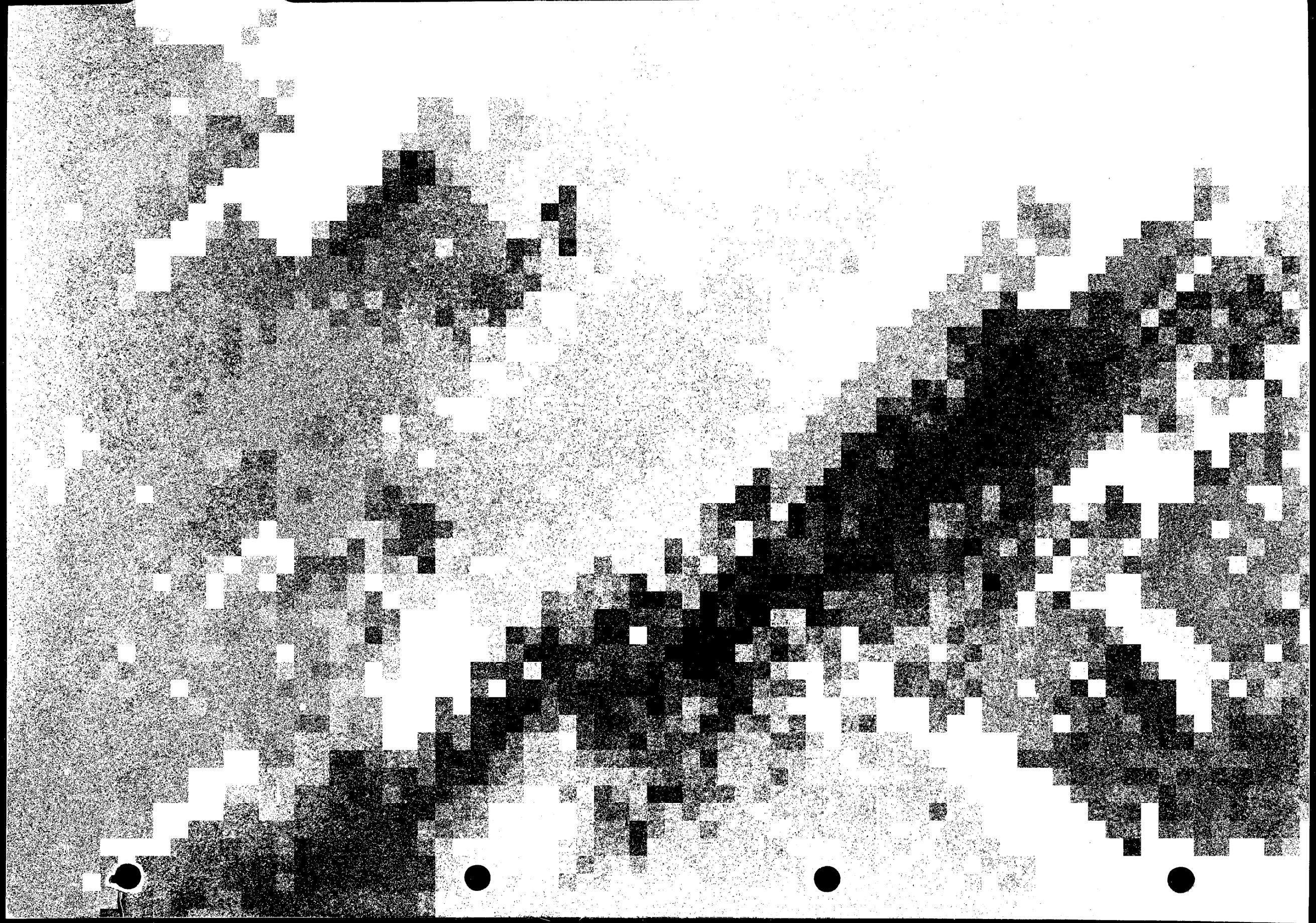
(Abramson 1988, pp 35–98)

'... is a synthesis of separate components into an ongoing whole, with insistence that all these elements of community organisation, demographic study, epidemiological investigation, personal medical services, environmental interventions, community organisation, and health education be performed by the same practice team, or at least by a small number of practices and health agencies working as a single system.'

(Geiger 1983)

'... [is] the provision of primary care services to a defined community, coupled with systematic efforts to identify and address the major health problems of that community through effective modifications in both primary care services and other appropriate health programmes.'

(Nutting & Connor 1984)



PRESENTER'S GUIDE

COMMUNITY DIAGNOSIS

Session **2**

PRESENTER'S MATERIALS

SESSION AIMS

By the end of this session participants should be able to:

- identify reasons for preparing a community diagnosis
- list the factors to include in a community diagnosis
- list the information sources which might be used in preparing a community diagnosis
- prepare a community diagnosis for their own practices
- identify the major health care problems in their practices.

SESSION STRUCTURE

1 THE COMMUNITY DIAGNOSIS

Presentation: What is a community diagnosis? Why a community diagnosis?
Activity: Looking at community diagnoses

2 METHODS OF IDENTIFYING HEALTH PROBLEMS

3 THE COMMUNITY DIAGNOSIS CHECKLIST

Presentation: Content
Presentation: Information sources

4 PHCT TASK: WRITING THE COMMUNITY DIAGNOSIS

Presentation: Setting the task
Task: PHCT work on community diagnoses

5 FEEDBACK ON PHCT TASK

Feedback: Community diagnosis presentations from PHCTs
Presentation: Conclusion

PRESENTER'S MATERIALS

SESSION CHECKLIST

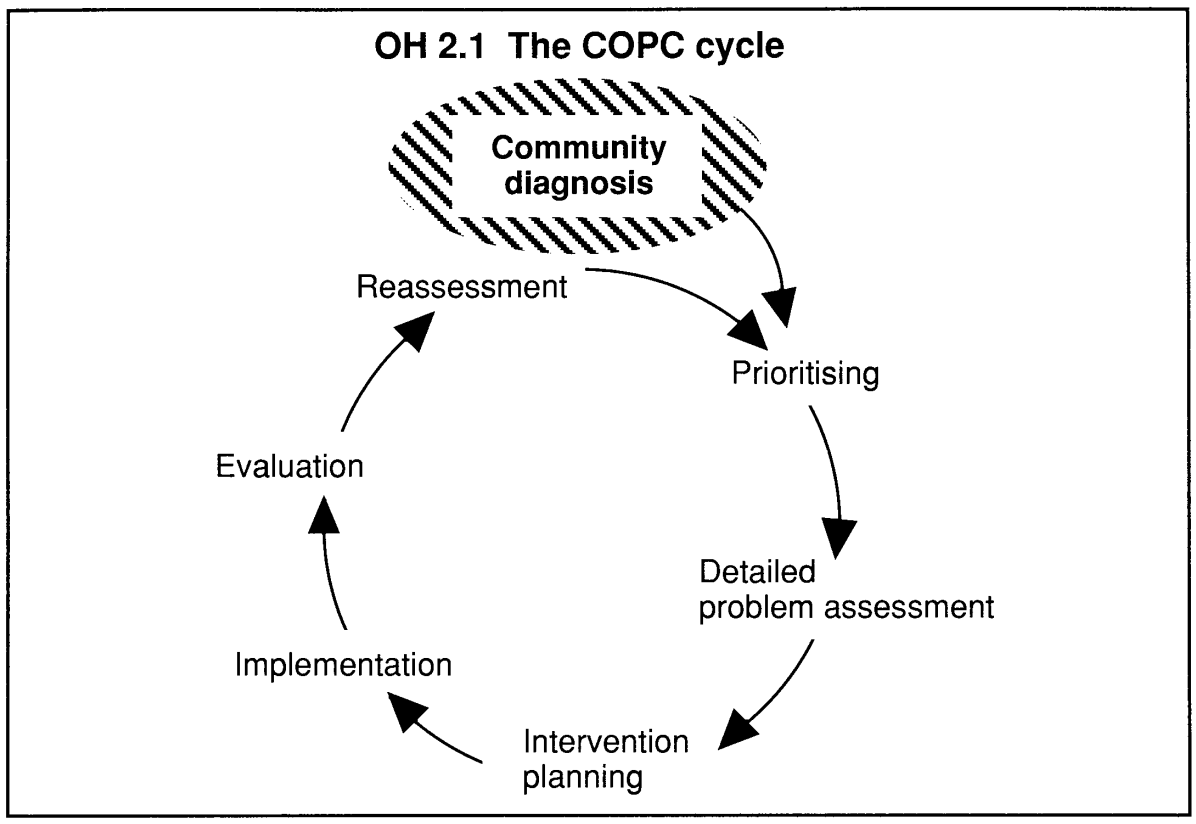
Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overhead transparencies for *Community diagnosis*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Copies of Participants' Task Notes: *Community diagnosis*

1 THE COMMUNITY DIAGNOSIS

!!! POINTS TO MAKE

- Remind participants of where they are in the COPC cycle with OH 2.1:



WHAT IS A COMMUNITY DIAGNOSIS?

- A community diagnosis is an overview of a practice and the community in which it lies. Profiles are descriptive, concentrating on what things are like *now*.

WHY A COMMUNITY DIAGNOSIS?

- Some participants may have chosen their COPC topic before the workshop. You need to get all the participants to put their initial assumptions about the health problems in their practices to one side and to look afresh at their practices.
- Aim to widen the information sources that the PHCTs consider relevant when assessing priorities in their work.

PRESENTER'S MATERIALS

!!! POINTS TO MAKE

- Show OH 2.2.

OH 2.2 Why a community diagnosis?

- **To know your practice.**
- **To identify all major health problems.**
- **As the basis for selecting your COPC priority.**
- **To ensure that you do not overlook potential resources.**
- **To ensure that you take a population-based view.**
- **To ensure that you do not inadvertently plump for an 'obvious' project.**

To know your practice

- PHCTs are probably used to describing their practices in terms of:
  - the people who work in the practice
  - its buildings
  - the patients who attend for treatment.

  Emphasise how the community diagnosis draws a much wider picture of the practice, including:
  - the people who do not attend, i.e. the total registered population
  - demographic influences
  - socio-cultural influences
  - geographical location and influences (e.g. transport difficulties)
  - community resources (e.g. clubs, churches, schools, voluntary organisations).

To identify all major health problems

- In their group work, the PHCTs will identify key indicators of health status and health problems, including:
  - risk factor prevalence (e.g. smoking behaviour)
  - the morbidity in the practice – the incidence of these may be available (unlikely) from practice records, hospitalisation rates, presenting patterns and referrals for consultation
  - the mortality in the practice – this may be available from practice records. The purpose of this part of the profile is to help the team to begin to identify the major health problems in their practice.

As the basis for selecting your COPC priority

- The major purpose of the community diagnosis is as a preparation for choosing a COPC programme. The diagnosis needs to be 'good enough' to ensure that a sensible choice of health problem is made.

To ensure that you do not overlook potential resources

- The resources available to the practice will influence the choice of health problem. It is important therefore to identify all significant resources before choosing the priority problem.

Population-based view

- The model used in the diagnosis ensures that the community dimension is considered.

Avoiding the 'obvious' project

- The pressures of day-to-day primary care, combined with the personal interests of practice members, may well produce a list of obvious health problems. The community diagnosis is a way of surfacing other problems. The relative claims of all the problems can then be evaluated through the prioritising process (Session 3).

BUZZ GROUP ACTIVITY

- This activity is designed to begin to get participants to think about how they might use a community diagnosis and what benefits it might have.

!!! POINTS TO MAKE

- Show OH 2.3.

OH 2.3 Use of community diagnoses

- **Work in pairs with someone from another practice.**
- **Identify three ways in which a community diagnosis might influence decisions which you make about your work.**
- **What benefits do you think will come from the wider view which the community diagnosis gives?**

- Ask for feedback from some of the groups. Put this on a flipchart. Try to score the frequency of different responses, e.g.:

  Helps to see what we are not doing ✓✓
  Shows relative size of different health problems ✓

○○○ FOR YOUR GUIDANCE

At this stage, participants may not see any benefits. There is no need to press the point – the benefits should become clear when they start writing their detailed problem assessments.

PRESENTER'S MATERIALS

2 METHODS OF IDENTIFYING HEALTH PROBLEMS

PURPOSE

- To illustrate some of the methods that practices have used to identify health problems.

!!! POINTS TO MAKE

- The following are some examples of how health problems have been identified using readily available data.

By using survey data

- Show OH 2.4.
- In Israel, a problem with the development of certain groups of children became apparent through the analysis of national data on children's IQs.

OH 2.4 Mean IQ of children aged 4–6.5 years, Israel national sample

SOCIO-ECONOMIC STATUS	FATHER'S ORIGIN			
	Israel	E Europe	Middle East	N Africa
High	111.4 (130)	110.5 (92)	101.5 (39)	98.9 (24)
Low	101.5 (125)	102.1 (94)	93.2 (224)	90.0 (156)

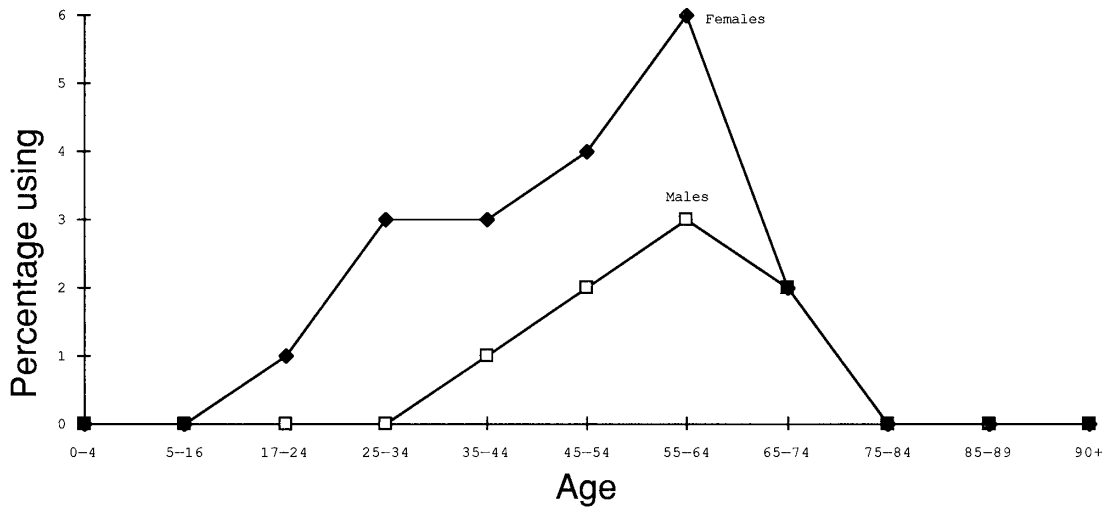
Source: Abramson, Kark & Palti (1983), p 240

By using practice computer data

- Show OH 2.5.
- In this example, the practice used its computer data to identify the pattern of antidepressant use. Once its data were displayed graphically, it was clear that female use tended to increase in the 25–34 age group. The PHCT identified this as a health problem that they wished to explore.

OH 2.5 Antidepressant use

Age group	0–4	5–16	17–24	25–34	35–44	45–54	55–64	65–74	75–84	85–89	90+
Males	0	0	2	4	6	13	14	8	0	0	0
Base	366	1301	779	809	870	819	556	432	228	44	11
Percent	0	0	0	0	1	2	3	2	0	0	0
Females	0	0	9	21	24	33	31	10	0	0	0
Base	349	948	616	754	808	793	550	534	453	103	45
Percent	0	0	1	3	3	4	6	2	0	0	0



Source: Part of a COPC plan prepared by a Wiltshire practice at a COPC workshop

By consulting the community

- Show OH 2.6.
- In this example, a practice consulted its community about the problems of that community. The consultation was fairly general rather than about 'pure' health issues. The key suggestions for improvement from the community were as below.
- This list demonstrates the potential difference in agendas between health professionals and the community.

OH 2.6 Dumbiedykes community consultation

- Remember the 50–75 year olds who are very well represented in Dumbiedykes (e.g. more home helps).
- Start a crèche or play group run by middle-aged/elderly to help unite the old and the young.
- Get a bus into the estate.
- Create multiple small play areas (dog-free zones).
- Increase the use of the community rooms, both in the high flats and in Viewcraigs Street. The residents' associations could plan these activities according to the needs of the community.
- Housing department official to come to the community room regularly.
- Regular citizens' advice in a community room.
- Outreach health promotion courses for specific groups (e.g. carers, the stressed, the unfit, or even a first-aid class) were thought to be useful.
- Counselling service – individual or group-based – could be developed by Mental Health Development Officer (Social Work) or a health visitor or counsellor.
- A number of taster (one-off) classes on a range of topics to assess potential interest.
- Various specific recommendations to improve the running of Mackenzie Medical Centre and other practices.
- Chemist to help more – collecting and delivering prescriptions.
- Hold an information day as 'it is finding out about services that is difficult'.
- Feed local needs assessment to Lothian Health Purchasing Unit via the locality group of GPs.
- Inform all residents about Dial-a-bus, taxi cards and other initiatives which help deal with the difficult physical environment.
- Have community notice-board.

Source: Dumbiedykes Health: A Community Appraisal (1993), pp 18–19

3 THE COMMUNITY DIAGNOSIS CHECKLIST

○○○ PURPOSE

- To introduce participants to the sort of issues about which they will need to think when drawing up their community diagnoses.

!!! POINTS TO MAKE

- Show OH 2.7.

OH 2.7 The community diagnosis checklist

- **General description of environment.**
- **Community characteristics.**
- **Health service system:**
  - **within the practice**
  - **outside the practice.**
- **State of health:**
  - **morbidity**
  - **mortality**
  - **behaviour.**
- **Health problem list – maximum of 6.**

ENVIRONMENT

- This should give a general view of the setting in which the practice lies:
  - physical location
  - topographical features
  - transport
  - physical description of surgery
  - local employment
  - housing
  - local environmental risk factors.

Data on factors in this list will tend to be available by ward, not practice.

COMMUNITY CHARACTERISTICS

- This should cover:
  - age/sex breakdown
  - socio-economic status
  - educational status
  - ethnic minorities (numbers and special needs)
  - deprivation indices
  - unemployment rates.

Data on factors in this list will tend to be available by ward, not practice.

STATE OF HEALTH

Morbidity

- This might cover:
  - blood pressure
  - cholesterol level
  - chronic diseases (e.g. cancer)
  - low birth weight*
  - teenage conception rates*
  - termination rates*
  - infectious disease notifications
  - specialist referral rates
  - practice registers (e.g. diabetes, hypertension)
  - hospital admission rates.

(*These data may only be available by ward rather than by practice.)

Mortality

- This should cover:
  - standardised mortality ratios (SMRs) for all causes together;
  - SMRs for specific causes (e.g. CHD, lung cancer).

  SMRs should be available at district level and may be available at ward level. You will have to consider how well district or ward figures match your practice list.
- It is important to stress that, since most of these data will not be available at practice level, they may be misleading.

Behaviour

- This might cover:
  - sexual behaviour
  - smoking behaviour
  - alcohol consumption
  - dietary patterns
  - exercise patterns
  - drug taking/substance abuse
  - suicide/depression.
- Information may be available from practice records or local surveys.

HEALTH SERVICE SYSTEM

Within the practice

- Services within the practice should cover:
  - GPs
  - nurses
  - health visitors
  - other medically allied staff
  - administrative staff
  - special interests
  - complementary therapy.
- Practice population turnover rate.

Outside the practice

- Services outside the practice should cover:
  - health services (e.g. hospital and community)
  - voluntary services (e.g. meals on wheels).

HEALTH PROBLEM LIST

- Finally, list the major health problems in your practice.
- In the session on prioritising, this list will be reduced to one problem which will be the PHCT's COPC topic.

PRESENTER'S MATERIALS

○○○ PURPOSE

- To start the PHCTs thinking about where the data for their community diagnoses will come from.

!!! POINTS TO MAKE

- Show OH 2.8.

OH 2.8 Information sources

Inside the practice

- **Practice computer**
- **Annual reports**
- **Practice leaflets**
- **Audit reports**

Outside the practice

- **Local census data**
- **Local education authority**
- **FHSA**
- **DHA**

- A community diagnosis should be confined to easily available information.
- The commonest sources are discussed below.

Practice computer

- This may give some data on all the practice; other data will relate to attenders only (e.g. you will be able to find the ages of all your patients, but not their exercise habits). Care has to be taken in extrapolating from these data to the whole of your practice population.
- Despite these limitations, your computer will yield valuable data on:
  - disease incidence
  - prescribing patterns
  - differential uptake of services (e.g. by age, sex or ethnic group).

Annual reports

- While the data in your annual report will have been largely derived from those in your computer, the reports may well contain valuable analysis which can be extracted for your community diagnosis (e.g. you may have already looked at differential uptake of immunisation).

Practice leaflets

- Part of your diagnosis should involve thinking about what you offer your patients. Your practice leaflets will remind you of the services your staff offer.

Audit reports

- Your audit reports may give valuable community diagnosis data. The audit's value will depend on the type of audit; for example, disease and process audits will be highly relevant to your community profile; case audits (because they are not necessarily representative of the whole practice list), less so.

Commissioning agencies

Health Boards, joint commissioning agencies, FHSA, DHA

- Contacts: probably the Director of Information and/or the Public Health Directorate.
- Data available:
  - Director of Public Health's Annual Reports
  - special studies
  - hospital and community activity data.

Local authority

- Contacts: Housing, Social Services and Environmental Health Departments.
- Data available include:
  - Local census data for the local authority area on:

    economic activity

    industry of employment

    patterns of travel to work

    number and size of households.
  - Local census data are also available at ward level covering such things as:

    population of 65 and over

    elderly people living alone

    population under five years of age

    one-parent families

    unskilled workers

    unemployed

    households lacking basic amenities

    population born outside the UK.

(Pickin & St Leger 1993, p 193)

PRESENTER'S MATERIALS

General approach to information sources

- There are two first ports of call for information:
  - for wider population data, the first place to call is the health authority
  - for practice population data, the first place to call is the FHSA.
- Even if these sources do not have the data, they should be able to direct PHCTs to other sources.

DISCUSSION POINTS

- Ask the participants for other ideas about information sources, especially local ones.
- If people from the FHSA or DHA or other non-PHCT group are present, ask them to say what information they can offer.
- Put all these ideas on a flipchart.

4 PHCT TASK

WRITING THE COMMUNITY DIAGNOSIS

○○○ PURPOSE

- For each PHCT to produce its own community diagnosis.

!!! POINTS TO MAKE

- Show OH 2.9.

OH 2.9 Group work: community diagnosis

- **Split into practice-based groups – one group per practice.**
- **Follow the instructions in your booklet under 'Preparing your community diagnosis'.**
- **When you have finished you will have:**
  - **a full profile on paper**
  - **a summary on a flipchart.**
- **Report back to the full group.**

!!! POINTS TO MAKE

- Talk through the instructions on the overhead.
- Agree with the groups:
  - how long they have for the task
  - when they are to report back
  - how long they will have for each report back.
- Ask if there are any questions about the task.

PRESENTER'S MATERIALS

5 FEEDBACK ON PHCT TASK

○○○ PURPOSE

- To identify any problems which PHCTs have had in producing their diagnoses.
- To resolve those problems by drawing on the expertise in the room, including the other PHCTs and the FHSA and DHA, if they are present.
- To build the link to the next session on prioritising.

!!! POINTS TO MAKE

- Remind the group of the function of a community diagnosis.
- Remind the group how long each practice has for its feedback.
- Invite the first practice to feed back.
- Remember that the full group expects you to manage this on their behalf. You will need to be prepared to intervene if:
  - the presenters are in danger of running over time
  - the presenters go into too much detail or stray from the main community diagnosis agenda
  - if any member of the audience dominates questions or discussion.
- Make sure that the groups not only outline their diagnoses but comment on how useful they have found the process.

FEEDBACK

- At the end of the presentations, round up the discussion by agreeing with the participants:
  - any further work they wish to do on their diagnoses
  - what they have learnt from the exercise
  - any remaining queries and issues which they wish to discuss.
- Explain that the next session is on prioritising – you could put the COPC cycle overhead on the screen.
- Make sure the whole group appreciates:
  - what they have achieved
  - how the diagnoses link into the prioritising process.

PRESENTER'S GUIDE

PRIORITISING

Session 3

PRESENTER'S MATERIALS

SESSION AIMS

By the end of this session, participants should be able to:

- score their identified health problems using a standard set of criteria, or their own criteria
- choose and apply an appropriate set of weights to their scores
- make a final choice of health problem for use in the rest of the workshop.

SESSION STRUCTURE

1 PRIORITISING

Presentation: Why prioritise?

2 THE PRIORITISING METHOD

Presentation: The prioritising grid
Presentation: Applying the grid

3 EXAMPLE

4 PHCT TASK: PRIORITISING

Presentation: Task instructions
Task: PHCT work

5 FEEDBACK ON PHCT TASK

Feedback: PHCTs report back

PRESENTER'S MATERIALS

SESSION CHECKLIST

Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overhead transparencies for *Prioritising*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Copies of Participants' Task Notes: *Prioritising*

1 WHY PRIORITISE?

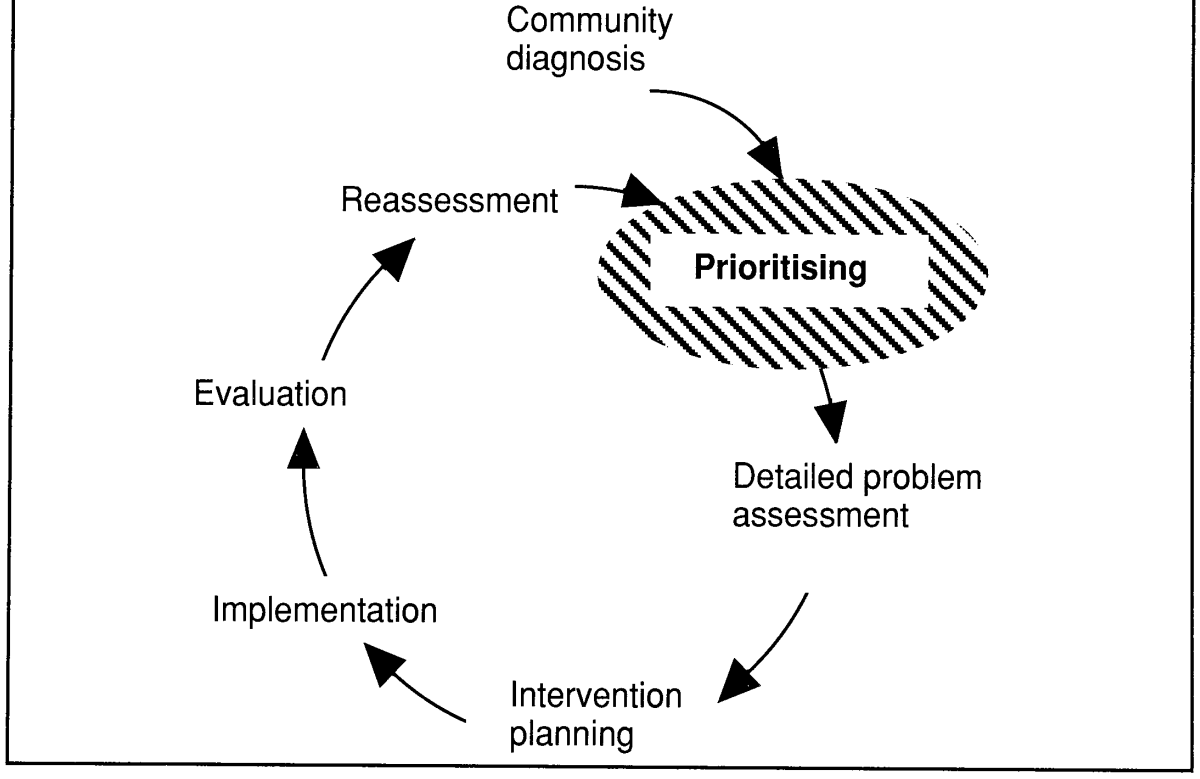
○○○ PURPOSE

- To emphasise the need to
  - select an initial COPC topic
  - use a systematic method for the selection.

!!! POINTS TO MAKE

- Remind participants of where they are up to in the COPC cycle with OH 3.1.

OH 3.1 The COPC cycle



- It is important that a PHCT's first COPC project is a success, so do not try to do too much at once.
- In particular, at the start there should be only one project. When the PHCT is more experienced, it might run more than one project at a time.
- It is not enough to look at the health problems in the practice profile and just pick the apparently most serious one. The problem selected must:
  - be amenable to COPC
  - not be too demanding as a first project
  - be something PHCTs wish to do.

PRESENTER'S MATERIALS

- Within a PHCT there may be several strong views about which projects to go for. It is important that all these views are fully aired and that the final choice is made on criteria which everyone understands. The decision has to be lived with for the initial life of the project.
- PHCTs should not agonise about which project to choose. The main purpose of a first project is to get started.

2 THE PRIORITISING METHOD

THE GRID

○○○ PURPOSE

- To introduce a method of prioritising which uses a suggested set of criteria.
- The method works best when it is standardised between practices, but participants may wish to develop their own set of criteria. This is quite acceptable provided that:
  - they are clear why they are changing the criteria
  - within the practice they retain the same criteria for all their possible COPC programmes.

!!! POINTS TO MAKE

- Show OH 3.2.
- A copy of this scoring grid is also in the *Participants' Task Notes*.

OH 3.2 Prioritising grid

CRITERION	PROJECT					
	A	B	C	D	E	F
Prevalence/incidence						
Severity of problem						
Effective intervention						
Acceptability/feasibility						
Community involvement						
Cost and resources						
TOTAL SCORE						

- The aim is to allocate a score against each criterion for each project.
- Score is 0 (very low priority) to 4 (very high priority).
- Work across the rows. This helps to ensure that each criterion is applied in the same way to each health problem.

PRESENTER'S MATERIALS

- It is important that PHCTs bear in mind their current work when allocating scores. The fact that something is being done to address this problem now can reduce its priority score when new work is being considered. For example, if a PHCT has a major smoking intervention, then smoking would get a low score for acceptability/feasibility, since not much more can be done.
- When finding the column totals, the scores can be weighted. If this is done, though, the same weighting must be used in any future prioritisations within the practice.

APPLYING THE GRID

○○○ PURPOSE

- This section works through the set of criteria on OH 3.2 in more detail.
- It should help participants understand how to use the prioritising grid.

SIZE OF THE PROBLEM

!!! POINTS TO MAKE

- Prevalence and incidence are measures of how common the problem is. Their definitions are on the overhead. (Period prevalence is also defined in the *Glossary*.)
- Show OH 3.3.

OH 3.3 Prevalence/incidence

$$\text{Incidence rate} = \frac{\text{Number of new cases in period}}{\text{Number at risk in period}}$$

$$\text{(Point) prevalence rate} = \frac{\text{Number of persons with the disease at a point in time}}{\text{Total population}}$$

- If the disease affects a lot of people, then it gets a high score on this criterion.

SEVERITY OF THE PROBLEM

!!! POINTS TO MAKE

- Mortality and morbidity are measures of how severe the problem is.
- Show OH 3.4.

OH 3.4 Severity

Morbidity

- **Does the disease seriously affect quality of life?**
- **Is the disease a big drain on PHCT resources?**
- **Is the disease a big drain on community resources?**

Mortality

- **Mortality rates – what are they?**
- **What is the case fatality rate?**

Morbidity

- A disease would be rated high for morbidity if it was:
  - a disease that seriously affects quality of life (e.g. dementia, deafness)
  - a disease that is a big drain on PHCT resources (e.g. anxiety/depression)
  - a disease that is a big drain on community resources (e.g. backache, diabetes).

Measuring morbidity

- Here, we are trying to make an assessment of the impact of the disease in day-to-day terms. If we take an initiative over disease A and do nothing (extra) about disease B, will this be more worthwhile than taking an initiative about B and doing nothing (extra) about A?
- However, measuring morbidity is not easy. How do you compare the burden of ill-health from dementia with that of depression? *The Health of the Nation* (1991) discusses the potential use and limitations of such measures as:
  - days off work
  - consultation rates.
- One way of doing this is to use an 'objective' measure such as Quality Adjusted Life Year (QALY), but this is not an easy measure for PHCTs to apply.

Mortality rates

- Practice mortality rates may be a useful indicator of severity. To obtain reliable data, a practice may need to total the figures for a 10-year period.
- Mortality rates, standardised by age and sex, may be available for your area.

Case fatality rates

- Case fatality rates are also useful indicators of severity. A case fatality rate is the proportion of cases of a specified condition which are fatal within a specified time:

$$\frac{\text{No. of deaths from a disease in a given period}}{\text{No. of diagnosed cases of that disease in the period)}} \times 100$$

(Last 1988)

PRESENTER'S MATERIALS

DISCUSSION POINT

- Try to get the group to come up with examples of diseases which are superficially quite a problem but which they would rate high and low on morbidity.

EFFECTIVE INTERVENTION

!!! POINTS TO MAKE

- Show OH 3.5.

OH 3.5 Effective intervention

- **A disease for which there is no proven intervention must score low.**
- **A disease for which there is a proven and effective intervention must score high.**

- PHCTs should use existing proven interventions. The PHCT's role is to apply that intervention locally.
- The intervention may not be a GP or PHCT intervention (e.g. improving the diet at a local school or factory). In such cases, the PHCT plays a catalytic role.
- The *Effectiveness Bulletins* are a good source of information on what is known about the effectiveness of various interventions.

DISCUSSION POINTS

- Ask the group whether they know of proven interventions for the health problems which they identified in their practice profiles.
- If there are health problems for which they are not sure whether proven interventions exist, how are they going to research known interventions?

ACCEPTABILITY TO/FEASIBILITY FOR PHCT

!!! POINTS TO MAKE

- Show OH 3.6.

OH 3.6 Feasible for the PHCT?

Consider:

- **Is this project too big for us?**
- **Do we have/can we gain the skills for it?**
- **Do we all want to do it?**
- **Does it fit with DHA/FHSA priorities?**
- **Are we likely to succeed?**
- **Can we find time to do more?**

- It is very important that the chosen project has a high probability of success – especially for a first one.
- The overhead sets out the main questions which the PHCT needs to ask to establish a score on this criterion.
- If the PHCT has any doubts about its capacity to succeed with a project, then it should rate that project low.
- Factors which can affect feasibility include:
  - the mobility of the target population (a stable population is easier to handle than, say, the homeless)
  - the degree to which the intervention is welcomed by the target group
  - the specific interests in the community (e.g. ethnic and religious sensitivities)
  - the community's priorities
  - the resources available
  - the skills of the PHCT
  - the FHSA, DHA and government priorities
  - the interests and needs of the PHCT.

DISCUSSION POINTS

- Ask the group what sort of factors might render a project non-feasible for a PHCT.
- Can they think of examples of projects they would discount on this basis?

OPPORTUNITY FOR COMMUNITY INVOLVEMENT

!!! POINTS TO MAKE

- Show OH 3.7.

OH 3.7 Community involvement

- **Is community involvement needed for your project?**
- **What are the benefits to the PHCT?**
- **What are the benefits to the community of its involvement?**

Is community involvement needed?

- Community involvement is not necessarily essential to achieving the aims of every COPC project.
- The community should be involved where that involvement is necessary to achieve the goals of the project.
- Whether or not community involvement is essential, no community involvement means a low score on this criterion.

What are the benefits to the PHCT?

- The teams need to consider whether there are any benefits of community involvement to the PHCT itself. The greater the benefits, the higher the score.

What are the benefits to the community of its involvement?

- If there is likely to be a clear benefit to the community from its involvement, then that gives involvement a high score.

DISCUSSION POINT

- Ask the group to identify potential community involvement in their projects.

COSTS AND RESOURCES

!!! POINTS TO MAKE

- Show OH 3.8.

OH 3.8 Resources

- **How much staff time will be needed?**
- **What staff skills will be needed?**
- **What equipment will be needed?**
- **What other resources (including training) will be needed**
- **Where might extra resources come from?**

- An intervention is pointless if the PHCT does not have and cannot acquire or mobilise the resources needed to carry it out.
- At this stage it is only possible for PHCTs to make very rough estimates of the resources which their projects might require.
- The overhead shows the types of resource which the PHCTs should consider.
- In the prioritising stage, PHCTs should not aim for definitive answers to the questions posed – what matters is that they have a gut feeling for the resource scale. You could suggest that they ask themselves whether the resource demand is:
  - no problem (score = 4)
  - a problem, but there is a good chance they can get the resource (by redeployment or getting outside resources)
  - too high to be worth dreaming of (score = 0).
- Part of the point of raising the issue of resources this early is to give early warning to potential supporters such as the FHSA/DHA.

PRESENTER'S MATERIALS

3 EXAMPLE

!!! POINTS TO MAKE

- The following is an example of a grid completed at a COPC workshop.
- Show OH 3.9.

OH 3.9 Prioritising grid

CRITERION	PROJECT					
	Coughs and colds	Postnatal depression	Carers	Asthma	Smoking	Cancer
Prevalence/incidence	3	3	3	3	3	3
Severity of problem	1	3	3	3	3	3
Effective intervention	1	3	3	3	2	1
Acceptability/feasibility	1	3	2	2	3	2
Community involvement	1	2	3	2	2	2
Costs and resources	3	2	2	2	2	2
TOTAL SCORE	10	16	16	15	15	13

- After totalling the scores, PHCTs still need to consider whether there is an overriding reason for not doing something. For example, if they feel that they are doing enough already, or that the topic is unacceptable to the team, then they should strike the topic off the list.

4 PHCT TASK: PRIORITISING

○○○ PURPOSE

- To enable the PHCTs to prioritise the health problems which they identified in their practice profiles.
- To enable the PHCTs to select the one health problem which they will use for the rest of the workshop.

!!! POINTS TO MAKE

- Show OH 3.10.

OH 3.10 Working out your priorities

- **Divide into practice groups.**
- **Discuss each potential project under the seven headings.**
- **Allocate it a score from 0 to 4.**
- **Decide what weight to give each criterion.**
- **Total all your scores for each health problem.**
- **Decide which health problem you are going to tackle.**
- **Prepare a report back.**

- The aim of the prioritising task is to reach a rational, defensible choice of health care problem. If the PHCTs wish to vary the method, they are free to do so (e.g. they might wish to add additional criteria).
- Check that they understand the scoring method.
- Explain that they might wish to weight different criteria differently (e.g. they might give a weight of 2 to 'effective intervention' and a weight of 1 to 'acceptable to community'). In deciding weights and criteria, a PHCT might wish to involve the FHSA/DHA.
- Remind them that they have to report back.
- Agree how long they have for the task.

PRESENTER'S MATERIALS

5 FEEDBACK ON PHCT TASK

PURPOSE

- To enable the PHCTs to reflect on their own prioritising in the light of what other teams have done.
- To prompt discussion of problems that have arisen – especially problems with the prioritising method.
- To ensure that each team is in a position to go forward to the community diagnosis stage.

FEEDBACK INSTRUCTIONS

- Ask each group to present their results of the prioritising process.
- Make sure that they concentrate on:
  - showing the final scores they gave for each health problem on each criterion
  - if they changed the criteria, explaining why
  - explaining which health problem they chose as the top priority and why
  - raising any unresolved issues for general discussion.
- Gently move on any presenters that just repeat their group discussion.

DISCUSSION POINTS

- Do the participants now see the need to prioritise?
- A zero or very low score for 'feasibility' should lead to the rejection of a health topic, irrespective of the total score for that topic. Ask the participants whether there are any other criteria on which a low score might lead to rejection.
- Ask the participants whether they feel bound to choose the topic with the highest score. When might they choose one with a lower score?

PRESENTER'S GUIDE

DETAILED PROBLEM ASSESSMENT

Session 4

PRESENTER'S MATERIALS

SESSION AIMS

At the end of this session, participants should be able to:

- explain the aim of a detailed problem assessment
- list the components of a detailed problem assessment
- list the requirements for:
  - a group definition
  - detailed problem assessment measures
  - rigour in measurement
- list and identify the strengths and weaknesses of the main data collection methods
- describe the characteristics of good detailed problem assessment records.

Participants should have completed a first draft of their detailed problem assessments and have presented them to the full group.

SESSION STRUCTURE

1 OVERVIEW

Presentation: Overview
Presentation: What is detailed problem assessment?
Presentation: Components of a detailed problem assessment

2 DETAILED PROBLEM ASSESSMENT

Presentation: Overview
Presentation: Definition of the group
Activity: Defining the group
Presentation: Characteristics to be measured
Presentation: Technical aspects of measures
Activity: Choosing measures
Presentation: Definition of the measures
Presentation: Methods of data collection
Activity: Baseline data collection
Presentation: Records

3 PHCT TASK: WRITING A DETAILED PROBLEM ASSESSMENT

Presentation: Setting the task

4 FEEDBACK ON PHCT TASK

Feedback: Reviewing the detailed problem assessments

PRESENTER'S MATERIALS

SESSION CHECKLIST

Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overhead transparencies for *Detailed problem assessment*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Copies of Participants' Task Notes: *Detailed problem assessment*

1 OVERVIEW

○○○ PURPOSE

- To remind participants of the purpose of the detailed problem assessment stage – they have met this briefly in your overview of COPC in Session 1.

!!! POINTS TO MAKE

- Remind the group of what they have achieved so far:
  - written a community diagnosis which identified a range of health problems
  - selected one health problem for a COPC project, through the prioritising process.
- Show OH 4.1 to illustrate where detailed problem assessment fits into the cycle.

OH 4.1 The COPC cycle

- Explain that the next step is to define the current health status of the COPC group. This definition is needed as the base from which all future measures will be taken.

PRESENTER'S MATERIALS

WHAT IS A DETAILED PROBLEM ASSESSMENT?

PURPOSE

- To provide an overview of the function of a detailed problem assessment.

!!! POINTS TO MAKE

- Show OH 4.2.

OH 4.2 Detailed problem assessment

What

- **A description of where your group is now:**
  - **what the health problem is**
  - **who is in the group**
  - **the extent of the health problem.**

Why

- **As a base from which to:**
  - **plan**
  - **implement**
  - **evaluate**

  your COPC project.

What

- The detailed problem assessment is a full analysis of the priority health problem identified in the prioritising stage. It establishes:
  - the precise nature of the health problem

Example 1

For an ischaemic heart disease reduction project, the team had to establish for 40–50 year old people their:

- blood pressure
- smoking status
- cholesterol level (selective)
- family history
- past medical history
- exercise
- obesity (BMI)
- diet (e.g. salt and alcohol intake)
- employment status.

- the group of people for the intervention

Example 2

On a COPC project tackling antidepressant use, the target group was chosen as:

- women aged 24–45 years.

- the extent of the health problem

Example 3

On the same antidepressant project, the numbers involved were identified from the computer as:

- number of women aged 24–45 years = 1562
- number currently on antidepressants = 45.

- The detailed problem assessment is a snapshot of how things are *now*. In evaluation terms, the detailed problem assessment is the baseline from which future measures are taken.

Why

- COPC projects are justified by meeting their objectives and, if possible, demonstrating measurable improvement in the population's (or group's) health. (This is ambitious, but to continue any activity, you need to be able to demonstrate that it is worthwhile.)
- This can only be done if the starting health status is accurately known.

PRESENTER'S MATERIALS

2 DETAILED PROBLEM ASSESSMENT

○○○ PURPOSE

- To provide an overview of the headings that the PHCTs will be using for their detailed problem assessments.

!!! POINTS TO MAKE

- Show OH 4.3.

OH 4.3 Detailed problem assessment – content

- **Definition of the group.**
- **Characteristics to be measured.**
- **Definition of the measures.**
- **Methods of data collection.**
- **Records.**

- The overhead is a summary of the next five sections of this session.

○○○ PURPOSE

- To demonstrate the need for care in defining the COPC project group.

!!! POINTS TO MAKE

- Show OH 4.4.

OH 4.4 Defining the group

The group must be:

- **well defined**
- **identifiable**
- **contactable**
- **sufficiently stable.**

Well defined

- COPC data collection and evaluation will break down if the group is not capable of precise definition (e.g. 'unemployed' is vague. Does it include those with no job and not seeking work? 'Those on the unemployment register for at least three months during the present year' is more precise). Emphasise the need for an unequivocal rule which decides who is and who is not in the group. The rule should give the same decision whichever team member undertakes the group selection.

Identifiable

- It is not much use defining a group who cannot, in practice, be identified (e.g. battered children).

Contactable

- Nor is it any use defining a group who cannot be contacted sufficiently easily to make a COPC project practical (e.g. homeless people or illegal immigrants).

Sufficiently stable

- Given that most COPC projects will run over several years, there are special difficulties in defining a project around a highly mobile group (e.g. travellers are not a practical proposition for a PHCT COPC programme). These problems have to be addressed when planning the intervention.

BUZZ GROUP ACTIVITY

- Ask the participants to split into buzz groups of three or four.
- Refer to the examples on p.10 which are in the handouts.
- Run through the instructions on OH 4.5.

OH 4.5 Activity – Defining the group

Look at the examples in your handouts.

How well do these meet the criteria below?

- **a well-defined group**
- **identifiable**
- **contactable**
- **sufficiently stable.**

PRESENTER'S MATERIALS

Examples 4–6

- In a project to improve the health of diabetics, the group was defined as those patients who, on the computer, were listed as having diabetes. *(Nutting & Garr 1989, p 10)*
- Another project identified that black males aged 29–40 probably included a large number of undiagnosed hypertension cases. The defined group was all those black males on the computer aged 29–40. *(Nutting & Garr 1989, p 17)*
- In a project on adolescent health, the group was all the children in three year-groups in one school. *(Practice at a Wiltshire COPC workshop)*

CHARACTERISTICS TO BE MEASURED

THE HEALTH MODEL

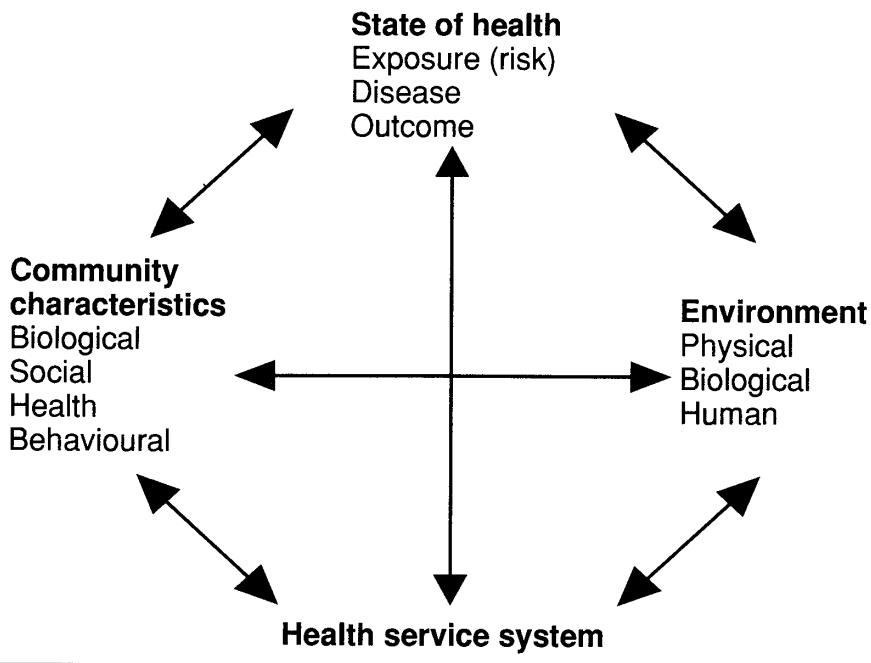
○○○ PURPOSE

- To introduce a model for producing an assessment of a health problem.

!!! POINTS TO MAKE

- Explain that the following model can be used to generate an assessment of a health problem.
- Show OH 4.6.

OH 4.6 The health model



- This model uses four main categories:

  1 State of health:
  - risk markers and risk factors
  - disease manifestation
  - disease outcome

  } These correspond to the natural history stages (see Session 1)

  2 Community characteristics:
  - biological determinants (e.g. age/sex distribution)
  - social determinants (e.g. income/resources; educational level; religious/ethnic group culture)
  - behavioural determinants (e.g. smoking, drinking, sexual behaviour, physical activities)

  3 Environment:
  - physical (e.g. urban/rural; water; air pollution)
  - biological agents of disease (e.g. viruses and animals)
  - human (e.g. family structure)

  4 Health service system:
  - practice (e.g. its constituents, its services)
  - other services locally.

- PHCTs may not immediately see the relevance of some of these headings to their work. The true relevance of, say, community characteristics can only be judged as the assessment develops.
- Participants may have a problem in deciding when to refer to the practice list and when to the community. Where a practice has a very high proportion of the local population on its list, the list and community are near enough the same. This can be true in rural areas. Where a practice has a small proportion of the local population on its list, the characteristics of the practice list and the community may differ significantly.

HOW TO USE THE MODEL

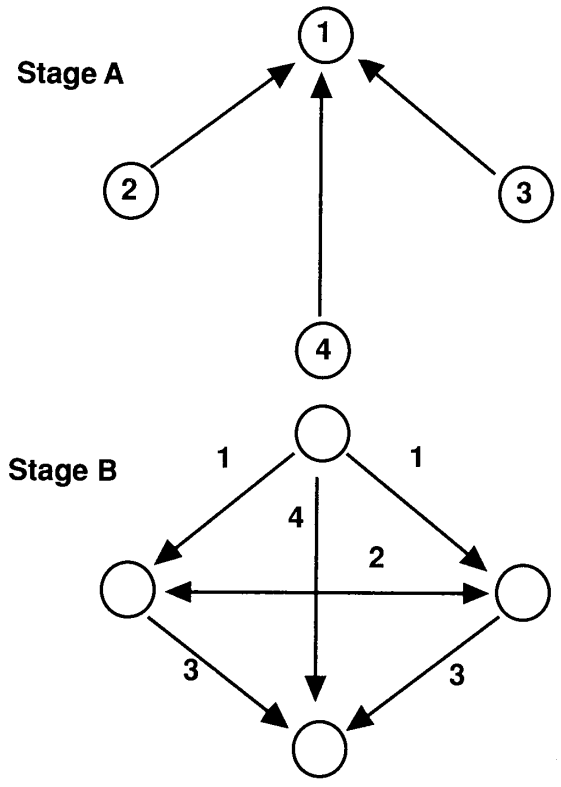
○○○ PURPOSE

- To demonstrate how the model is used in practice.

!!! POINTS TO MAKE

- Outline the steps in using the model with OH 4.7.

PRESENTER'S MATERIALS



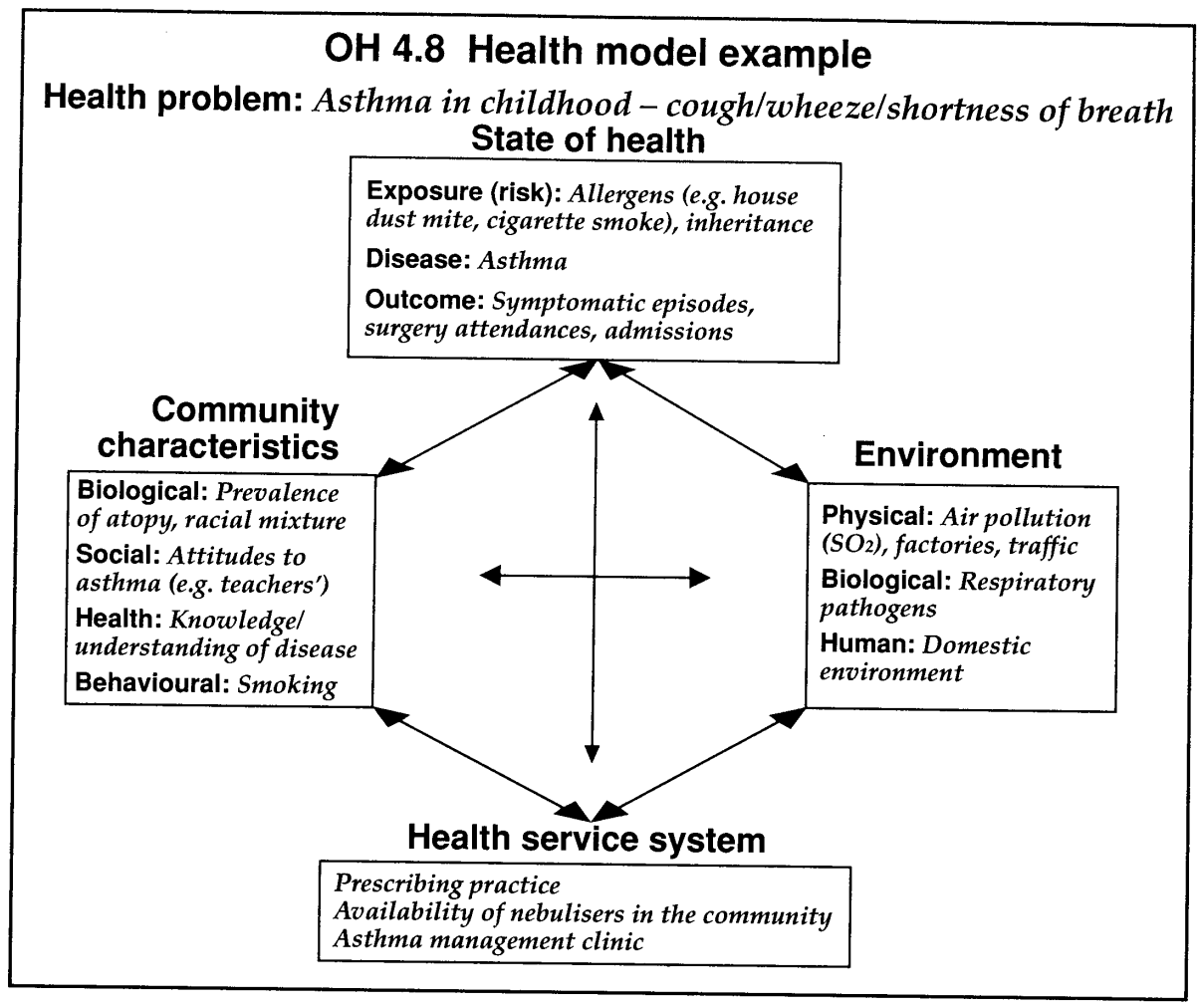
- In Stage A (the top half of the overhead), the steps are:
  1 Choose a health problem.
  2 Identify the community characteristics which impact on the problem.
  3 Identify the environmental characteristics which impact on the problem.
  4 Identify the health service characteristics which impact on the problem.

- Then, in Stage B (the bottom half of the overhead), consider how:
  1 The health problem impacts on the community and the environment.
  2 The community and the environment impact on each other.
  3 The community and environment interact with the health system.
  4 The health problem impacts on the health system.

DETAILED EXAMPLE 1

!!! POINTS TO MAKE

- The following is an example of the health model in action.
- Show OH 4.8.



DETAILED EXAMPLE 2: HEALTH STATE MODEL

ACTIVITY

- This activity is designed to help participants understand how to use the health state model.

!!! POINTS TO MAKE

- This activity involves the full group.
- Draw OH 4.6 on a flipchart sheet.
- Ask the group to choose a health problem.
- Then ask the group for examples of the contributing factors. Put these on the flipchart.
- Encourage the group to identify as many factors as possible but not to discuss or evaluate them. At this stage, the key process is identification of factors which need further investigation.

PRESENTER'S MATERIALS

TECHNICAL ASPECTS OF MEASURES

○○○ PURPOSE

- To demonstrate the need for the careful choice of the factors to be measured in the baseline survey.

!!! POINTS TO MAKE

- Show OH 4.9.

OH 4.9 What to measure

- **Valid indicators of current health status.**
- **Valid measures of any health status change.**
- **Correlates of health status in the community.**
- **Measures accepted by other workers.**

Need for validity

- Deciding what to measure is critical to the practicality of a COPC project.
- The baseline measures are the key measures in the later evaluation of the project. If they are invalid or unrealistic indicators, then the project can never be proved effective or even to have made a detectable difference.

Need for acceptability

- It helps if you can adopt measures that are used in other research. This makes it easier to compare what you have achieved with the work of others. For example, if you measure baseline depression with your own questionnaire, it will be difficult to (a) be certain your measures are valid and (b) to compare, say, your 'mild depression' with another worker's 'mild depression'.

Example 7: Baseline measures

In a COPC project to improve the health of 1,000 school pupils through a reduction in behavioural risk factors, the PHCT planned to use a practice-devised questionnaire with all the pupils to establish the current exposure to risk factors. This questionnaire covered:

- smoking behaviour
- family smoking
- sexual activity
- height and weight
- eating habits
- exercise habits.

Source: Practice at Wiltshire COPC workshop

Example 8: Baseline measures

In a New Mexico project to reduce deaths in young children from gastro-enteritis, the baseline data were established by examination of practice records. The data were:

Infant population: 236

Indices of infant gastro-enteritis

Factor	*Rate*
Infant deaths due to gastro-enteritis	22 (9.3%)
Mean episodes of gastro-enteritis per infant	2.5
Mean outpatient visits per infant	3.2
Hospital admissions per 100 infants	126
Hospital days per 100 infants	884

Soure: Nutting & Garr (1989), p 24

BUZZ GROUP ACTIVITY

- Ask the participants to split into practice-based groups of three or four.
- Run through the activity instructions on OH 4.10.

OH 4.10 Baseline measures

Consider your priority health problem.

For that health problem:

- **what measures would you use to establish the current health status of your practice population?**
- **what measures might you use to establish health status change later on?**

DEFINITION OF THE MEASURES

PURPOSE

- To emphasise the need for measures to be reliable, consistent and valid.

!!! POINTS TO MAKE

- Show OH 4.11.

OH 4.11 The need for rigour

Reliability

- **Everyone must be measuring the same thing.**
- **Measurements must be consistent within and between observers.**
- **Measurements must be consistent over time.**

Validity

- **Measurements must reflect the state of the health problem and/or the intervention – measure what is wanted.**

Agreed definitions – all measuring the same thing

- If a COPC project deals with obesity, it is no use leaving individual PHCT members to decide who is obese. That would mean that a patient might one day be in the group and another day be out of it without any change in weight. There must be a PHCT-wide definition of what is 'obese' (e.g. a BMI of 30 or more).

Reliability – minimising variation

- Once a definition is agreed, the PHCT needs to be sure that the method of measuring is one which eliminates as much avoidable variation as is practical and economical. In particular, they need to be sure that:
  - if two PHCT members take the same measurement, they will get the same result within an agreed margin of error
  - if a case of given severity is measured at two different points in time by the same observer, the same result occurs.
- This requires clear, written protocols for how measurements are to be taken. However, no amount of care in measurement can remove inherent biological variation. For example, a patient's blood pressure will vary from day to day – which is the 'correct' value?

Validity

- Care taken in measuring the wrong thing is care wasted. Before deciding to use a measure, there must be good epidemiological evidence for the use of that measure.

Example 9

A project to reduce smoking would need a baseline measure which produces consistent results. Instead of PHCT members making judgements on the severity of a person's smoking, a precise scale could be used, e.g.:

- current
  - light: 0–9 cigarettes a day
  - moderate: 10–19 cigarettes a day
  - heavy: 20 or more cigarettes a day
- ex-regular
- never regularly smoked.

Example 10: Taking blood for cholesterol measurement

- Allow 5–10 minutes to lapse before taking blood sample.
- Avoid prior stasis by removing cuff or tourniquet *before* blood is withdrawn.
- Avoid haemolysis by removing needle from syringe *before* transferring blood into collecting tube. Do not shake sample.
- Transport blood sample to laboratory on the same day if possible. If not, store in fridge for transport the following day.
- The effect of diet on blood cholesterol is not immediate, taking days rather than hours. It is therefore not necessary to take a fasting blood sample for screening purposes, although a fasting lipid profile should be taken for diagnostic purposes.
- Cholesterol assessment should be delayed for three months following major illness such as myocardial infarction and major surgery; and delayed for one month after minor illness.
- Posture affects measurement due to intravascular fluid shifts (e.g. a person moving from a supine to standing position, or vice versa, can increase his/her cholesterol level by 15 per cent).
- If repeat tests for cholesterol are needed, it is wise to do these around the same time of day (i.e. morning, afternoon or evening) as there is a small diurnal variation in level.

Source: Priest & Speller (1991), pp 73–4

Example 11

The use of the Dundee Risk Disk to assess risk of death from CHD.

Example 12

The use of a validated questionnaire to assess mental state in the Heeley Green COPC project.

METHODS OF DATA COLLECTION

○○○ PURPOSE

- To illustrate the range of data collection methods available to PHCTs.

!!! POINTS TO MAKE

Data on all the group

- Stress that we are concerned here with collecting data on *all* the patients in the group. The detailed problem assessment requires the whole picture.

Commensurate with the intervention/acceptable to the patients

- Whatever method is chosen, it must:
  - be commensurate with the potential benefit of the intervention (e.g. it would be unnecessary to administer a complex diet questionnaire to a whole practice population)
  - be acceptable to the patients (e.g. patients will probably accept blood pressure or cholesterol checks, but would balk at the routine use of colonoscopy examination for the early diagnosis of cancer).

Integrate COPC and clinical data collection

- Wherever possible, COPC data collection should be integrated with clinical data collection. Ideally, the same data which are needed for clinical purposes are also used for COPC purposes. Try to avoid massive COPC data collection exercises which neither inform clinical work nor are explicable to patients.
- However, if data collection is initiated when patients attend at the surgery, thought has to be given on how data are to be collected from the non-attenders. Without those data, you cannot know (a) the extent of the health problem and (b) the potential of any *population-based* intervention.
- Make sure that your team do not confuse the necessity to gather clinical data with the necessity to get a population baseline.

Methods

- Show OH 4.12.

OH 4.12 Main data collection methods

- **Data may exist in practice records.**
- **Questioning patient (e.g. discussion on smoking habits).**
- **Observation of patient (e.g. blood pressure).**
- **Questioning a person close to the patient (e.g. asking a parent about an infant).**
- **Self-administered questionnaires.**
- **PHCT-administered questionnaires.**
- **Patient diaries.**

- Briefly mention the range of methods.

Example 13

In an ischaemic heart disease project, data were collected by inviting the target group (40 and 50 year old people) to a health check. The invitation itself was a birthday card.

Example 14

In a project to identify and prevent depression, a self-administered questionnaire was used.

Golden rules

- Whatever methods are chosen, keep to the four rules:
  1. Do not collect too many data – collect only what is needed
  2. Sketch out the analysis at the project design stage – this will reveal data gaps, surplus data and inappropriate data
  3. Pre-test all proposed methods of data collection
  4. Think carefully about obvious omissions.

BUZZ GROUP ACTIVITY

- Show OH 4.13.

> **OH 4.13 Baseline data collection**
>
> - **Work in practice-based threes or fours.**
> - **Identify some methods which you might use to collect baseline data for your project.**

- Collect feedback from the groups.
- Discuss any problems they raise.

DISCUSSION POINTS

- Even if a PHCT defines a reasonably small group and one which is fairly accessible, collecting baseline data on 100 per cent of the group will rarely be possible. Where should the line be drawn?
- Ask if the participants can think of cases where a COPC project would not be feasible because baseline data would be too difficult or expensive to collect.

RECORDS

PURPOSE

- To emphasise the need for recording systems that fit the needs of both clinical decisions and COPC evaluation.

!!! POINTS TO MAKE

- Show OH 4.14.

OH 4.14 The need for good records

- **Relevant data are trapped.**
- **Data are accessible for clinical work, COPC evaluation and continued surveillance.**
- **Recording is simple and not prone to error.**
- **The skill needed to record data is minimised.**
- **Existing systems are used where possible.**
- **Recording format should permit easy analysis.**

Relevant data are trapped

- COPC data may represent hours of expensive work. Those data need to be carefully recorded so that they are not lost.

Data are accessible

- The system must be one which leaves staff confident that they can get the data they need when they need them for whatever purpose: clinical work, COPC evaluation or continued surveillance.
- This means that when designing the system, you have to consider how and when the data will be retrieved. Retrieval needs determine the data format and the classification system used.

Recording is simple

- Recording in itself can introduce error so systems should be simple (e.g. well-designed forms or computer screens).

Minimise skill

- The less skill the data recording needs, the more likely it is that it will be done and done correctly.

Use or extend existing systems where possible

- Where possible, it is best to extend existing recording systems since staff will be used to them (e.g. adding new screens to a computer system is better than having a separate COPC system).

Recording format should permit easy analysis

- You need to consider what sort of analysis is to be done on the data. If the recording system is designed before the analysis requirements are known, a costly reorganisation of the data may be needed before the analysis can begin.

3 PCHT TASK

WRITING A DETAILED PROBLEM ASSESSMENT

PURPOSE

- Each PHCT should prepare a detailed problem assessment on the health problem which it selected during the prioritising stage.

!!! POINTS TO MAKE

- Show OH 4.15.

OH 4.15 Writing your detailed problem assessment

Headings

- **The health problem.**
- **Definition of group for assessment.**
- **Characteristics to be measured.**
- **Definition of how the measurements are to be taken.**
- **Data collection methods.**
- **Records formats.**
- **Plan of analysis with dummy tables.**

Task content

- Run through the contents and format as in OH 4.15.
- Point out that dummy table examples are in the *Participants' Task Notes*.

Groups

- This task is to be completed in practice groups.

Task format

- A report in a form appropriate for sharing with the full PHCT (i.e. including those people who have not attended the workshop).
- A flipchart summary for presentation to the full workshop.

PRESENTER'S MATERIALS

Timing

- Agree with the groups:
  - how long they have for the task
  - when they are to report back
  - how long each group has for reporting back.

Other

- Ask if there are any questions about the task.
- Remind the participants that the instructions are repeated in their Task Notes: *Detailed problem assessment*.

4 FEEDBACK ON PHCT TASK

REVIEWING THE ASSESSMENTS

!!! POINTS TO MAKE

- Invite each group to feed back.
- Keep the reports to time.
- Keep questions and discussion relevant and positive. If someone points out a weakness in an assessment, try to elicit from the group a positive way of overcoming the weakness.
- Finally, check that each practice knows what it has to do next with its detailed problem assessment.

PRESENTER'S MATERIALS

INTERVENTION PLANNING

Session **5**

PRESENTER'S MATERIALS

SESSION AIMS

By the end of this session, participants should be able to:

- define objectives for their interventions
- select a suitable intervention to match their objectives
- set intervention criteria
- write plans for their interventions, including plans for:
  - protocols
  - who does what
  - records
  - monitoring.

SESSION STRUCTURE

1 PRINCIPLES OF INTERVENTION

Presentation: Introduction
Presentation: Reviewing where you are now
Presentation: Setting objectives
Activity: Improving objectives
Presentation: Choosing intervention options
Presentation: Deciding intervention criteria
Discussion: On intervention criteria

2 PLANNING YOUR INTERVENTION

Presentation: Introduction
Presentation: Activities and their protocols
Presentation: Who does what and when
Presentation: Records
Discussion: Records – how detailed?
Presentation: Monitoring/surveillance
Presentation: On appropriate monitoring

3 PHCT TASK: PLANNING THE INTERVENTION

Presentation: Planning the intervention

4 FEEDBACK ON PHCT TASK

Presentations: PHCT intervention plans

PRESENTER'S MATERIALS

SESSION CHECKLIST

Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overhead transparencies for *Intervention planning*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Copies of Participants' Task Notes: *Intervention planning*

1 PRINCIPLES OF INTERVENTION

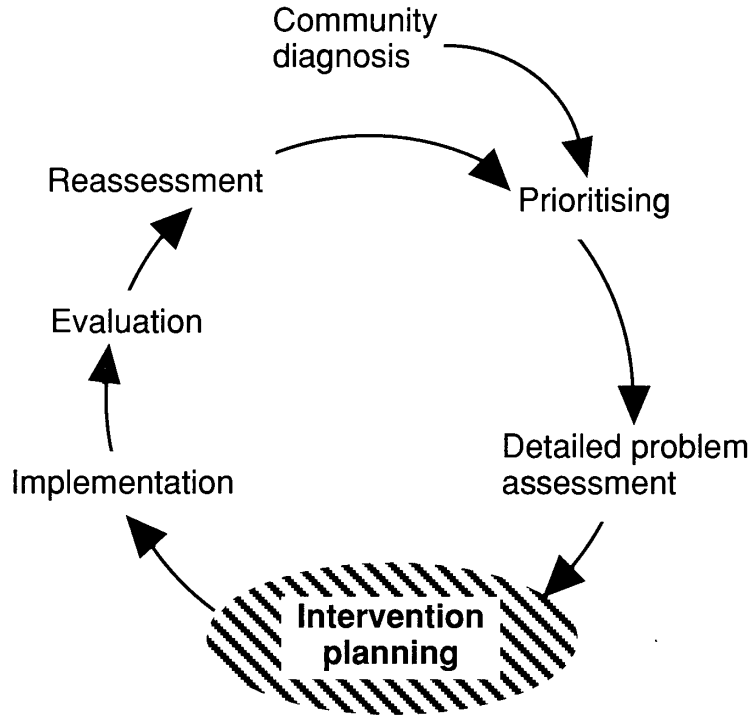
○○○ PURPOSE

- To give a brief overview of the stages in planning an intervention.
- After you have presented this overview, you will then take the participants through the stages in more detail.
- Finally, the PHCTs will produce their own intervention plans.

!!! POINTS TO MAKE

- Show OH 5.1 to remind participants of where they are in the cycle.

OH 5.1 The COPC cycle



- Set the scene for this session by providing an overview of the intervention planning process. The eight steps of this process are listed on OH 5.2.
- Show OH 5.2.

PRESENTER'S MATERIALS

OH 5.2 Planning an intervention – the steps

1 Review where you are now.
2 Formulate your objectives.
3 Choose an intervention.
4 Decide on your criteria for intervention.
5 Devise your protocols.
6 Decide on who does what and when.
7 Devise your recording system.
8 Devise your monitoring system.

- Distinguish between the initial community diagnosis, which *measures* the current health state of the subgroup and the intervention plan, which seeks to *change* that state.
- Explain that, by the end of this session, each practice group will have written the first draft of their own intervention plan.

REVIEW WHERE YOU ARE NOW

○○○ PURPOSE

- To ensure that the interventions start from where the PHCTs are now.

!!! POINTS TO MAKE

- Show OH 5.3.

OH 5.3 Where are you now?

- What are you doing about the problem now?
- What are you achieving?
- What changes/improvements do you want to make?

Why review?

- The review is a minor step in intervention planning – but still necessary.
- Its purpose is to ensure that PHCTs build on their current work.

The review components

- The review summarises:
  - what PHCTs are doing now about the health problem
  - what they are achieving and what their problems are
  - what they would like to achieve and what they would like to change.

SETTING OBJECTIVES

PURPOSE

- To introduce a formal method for writing health objectives.

!!! POINTS TO MAKE

- Setting the right objectives for a COPC project is critical to success – over-ambitious or inappropriate objectives will not be achieved.
- OH 5.4 sets out some criteria for good COPC objectives. Note the use of the mnemonic 'ARMPITS'. Work through these as below
- Show OH 5.4.

OH 5.4 Objectives

Should be:

A Appropriate
R Realistic
M Measurable
P Positive
I Important enough
T Time-related
S Supported by the team

Appropriate

- The objectives should be central to whatever is the health problem being addressed. For example, when planning a CHD project, it would not make sense to include objectives about reducing death rates from CHD at practice level; but it would make sense to have an objective about numbers to be interviewed by a given date.
- The objectives must also be *scientifically appropriate*, i.e. they should reflect an established intervention.

Realistic

- There is no point in setting an objective that you have no chance of meeting. For example, 'All our smokers to give up smoking'. In most cases, a 5 per cent shift in average behaviour will be a major achievement, so 'To reduce our number of smokers by 5 per cent' is much nearer to being realistic and yet is still challenging.
- In many cases, objectives will be more realistic if they reflect intermediate steps to the final outcomes.

Measurable

- An objective must be phrased in a way which allows the PHCT to see a difference when it occurs. For example, 'To make our male patients less dependent on alcohol' is very vague. 'To reduce by 5 per cent the number of our male patients with over 21 units per week alcohol intake' is more precise.
- This difference must also be measurable in a consistent way, i.e. when two different team members measure the same health state, they should reach the same result.

Positive

- You want to see success, to know that the PHCT is moving in the right direction. To help this, phrase objectives in terms of both the *positive* and *negative* change you wish to see.

Important enough

- You should only include objectives that the team agree are worth achieving. This can be difficult to judge. In one context, 'Work together as a real team' might be a major step forward, providing the base for more ambitious COPC work. In another context, such an objective might be trivial.

Time related

- The objective 'To reduce the number of our male patients with over 21 units per week alcohol intake' does not tell us by when this is to be done. After 1, 5, 10 years? It should be rephrased to give a definite date for its achievement (e.g. 'To reduce, within 2 years from the project start date, the number of our male patients with over 21 units per week alcohol intake').

Supported by the team

- Objectives which are not shared by all those affected by them are hard to achieve. There are two key reasons for this:
  1. If workers in a COPC team do not share the same objectives, then they will each push the project in different directions;
  2. COPC projects shift the use of resources within a practice; even PHCT staff not directly involved in a COPC project are indirectly involved in the sense that they need to support the redirection of resources to the project.
- Show OH 5.5.

OH 5.5 *Example 1:* A set of COPC objectives

The Glyncorrwg ischaemic heart disease programme

1 All persons 20–64 years of age to have a blood pressure measurement every five years.

2 Persons 20–39 years of age whose blood pressure exceeded systolic 165 or diastolic 100 mm/Hg (mean of three separate readings) to be placed in the treatment group.

3 Persons 40–64 years of age whose blood pressure exceeded systolic 180 or diastolic 105 mm/Hg (mean of three separate readings) to be placed in the treatment group.

4 Persons in the treatment group to have a follow-up visit every three months.

5 Treatment has the following specific objectives: no smoking, reduction of pressure to the range below 160–180 systolic and 90–100 diastolic, and weight reduction to within 10 per cent above desirable weight level.

Source: Adapted from Nutting (1987), p 252

BUZZ GROUP ACTIVITY

- This activity aims to encourage participants to look critically (but constructively) at objectives. The challenge here is not to find an objective deficient, but to find a better way of expressing it.

!!! POINTS TO MAKE

- Keeping the group in the plenary room, ask them to split into buzz groups and to discuss for ten minutes the questions on OH 5.6.
- Show OH 5.6.

OH 5.6 Assessing COPC objectives

- **How well do the Glyncorrwg objectives fit the ARMPITS criteria?**
- **To what extent do the objectives reflect both activities and outcomes?**
- **What changes would you make to fit the criteria better?**

- Collect feedback from the groups on the objectives and any changes they propose.

PRESENTER'S MATERIALS

CHOOSING AN INTERVENTION

PURPOSE

- To demonstrate the need to choose an intervention that will be practical and effective in achieving the project objectives.

!!! POINTS TO MAKE

- Show OH 5.7.

OH 5.7 Choosing an intervention

Primary prevention

- **The risk factors must be known and modifiable.**
- **The risk markers must be known.**

Primary, secondary and tertiary prevention

- **The proposed intervention must be accepted/state-of-the-art.**

PRIMARY PREVENTION

Risk factors must be known and modifiable

- A risk factor is an exposure which increases the probability of contracting the disease.
- Risk factors are causative (i.e. contribute to the disease) and modifiable.
- For a primary prevention programme to work, the risk factors and/or risk markers (see below) must be known and modifiable.
- A central part of COPC is choosing interventions where it is practical to modify risk factors (e.g. smoking, CHD, depression, alcohol).
- In COPC, the intervention can be at the individual level (persuading a patient to smoke less) and/or at the population level (persuading the local school to change the lunch menu).

Risk markers must be known

- Risk markers are factors associated with an increased probability of the disease. They may be causative, but they are not modifiable (e.g. sex or age).
- Risk markers can be useful in identifying who might be at risk.
- Show OH 5.8.

OH 5.8 *Example 2:* Risk factors

The following are the risk factors used in a CHD COPC project

FACTOR	BORDERLINE	HIGH
Systolic BP (mm/Hg)	140–159	160+
Diastolic BP (mm/Hg)	90–94	95+
Serum cholesterol (mg/100ml)	200–239	240+
Serum glucose (mg/100ml)	180 or possible diabetes mellitus	Diabetes mellitus
Relative weight	10–19% above standard weight	20+% above standard weight

Source: Kark (1989), p 169

Example 3: The following is an example of a pre-term delivery risk scale

Score	Constant risk	Score	Variable risk	Score	Gest week
1	Low economic level Sole caretaker for children One previous abortion Short pregnancy interval		Employment outside the home Complaints of tiredness Weight gain > 2 kg or < 1/2 kg Husband called up for army duty > 2 weeks		
2	Single-parent family Two consec. abortions Age < 18 or > 37		Smoking > 10 cig./day BP > 140/90 or inc > 30 mm /Hg Strenuous work		
3	Very low economic level Height < 150 cm Weight < 45 kg Three consec. abortions		Travelling long distances daily Monthly weight loss > 2 kg First trimester bleeding High fever Stress, fears		
4	Pre-term delivery in past Abortion after 12 weeks		Pylonephritis or other UTI Cervical dilation > 3 cm Cervical effacement 50-80% Uterine contractions Head engaged Breech position Serious illness in family Death in family Sudden financial problems		
5	Uterine abnormality Systemic disease More than one abortion late in pregnancy History of mental illness Myoma		Effac. of cervix > 80% Hydramnion Bleeding in the second trimester Acute mental illness Anaemia Toxaemia		
10	Cervical incompetence Two pre-term deliveries		Diabetes Multiple pregnancy Pregnancy with IUD Placenta praevia		

(Source: From the programme for prevention of pre-term delivery at Beit Shemesh, Israel)

SECONDARY PREVENTION

Proven intervention available

- The key starting point for PHCTs is to ask themselves:

  If we had known about this problem earlier, could we have prevented it or ameliorated it?

  i.e. there must be an accepted intervention available to use.

- Ideally, the intervention will have been proven effective by previous workers. Where no proven intervention is available, PHCTs need to follow an accepted state-of-the-art approach.

BUZZ GROUP ACTIVITY

- This activity should be done in practice-based groups of three to four.

OH 5.9 Choosing your intervention

Primary prevention

- **List some of the risk factors for the health problem you have chosen to tackle.**
- **Is it practical in all cases to establish the level of risk for each patient in the subgroup?**
- **If not, what are the implications for the project?**

Primary, secondary and tertiary prevention

- **Is there an established intervention for the health problem?**
- **Can intervention levels be set to decide with whom to intervene?**
- **If not, what are the implications for the project?**

SPECIFICITY AND SENSITIVITY

PURPOSE

- To remind participants of deciding a cut-off level for the intervention.

!!! POINTS TO MAKE

- It is rarely worthwhile to intervene with every patient in a group. A cut-off level has to be chosen below which no intervention is thought worthwhile.

Example 4

- Randall *et al* (1992) looked at the implications of setting varying thresholds when using cholesterol measures and Dundee risk scores in CHD prevention.

- With varying thresholds, varying numbers would fall into the group requiring 'special care'. These numbers are illustrated in the table below. The median cholesterol level was between 4 and 5.

- The table shows that as the cut-off level rises, the number of patients requiring special care falls. With a preset of 8 (nearset of 6), the proportion requiring special care is 31.8 per cent, which is a large workload for a practice. To get the special care group down to around 15 per cent, a preset of 20 (nearset of 16) is needed.

- As the cut-off level rises, so does the risk that a patient who needs special care will fall outside the special care group. For example, with a preset of 12 (nearset of 8):

  - 40.7 per cent of smokers of 20 or more cigarettes a day
  - 33.9 per cent of those with systolic BP ≥ 180 mm/Hg
  - 37.9 per cent of those with total cholesterol concentration ≥ 10 mmol/l

would be allocated to the general advice group, not the special care group.

	Nearset (preset)				
Cholesterol measurement	**16 (20)**	**12 (16)**	**8 (12)**	**6 (8)**	**4 (6)**
No. (%)	**980 (20.6)**	**1219 (25.6)**	**1794 (37.7)**	**2155 (45.3)**	**3813 (80.1)**
Special care No. (%)	**734 (15.4)**	**831 (17.5)**	**1074 (22.6)**	**1512 (31.8)**	**2112 (44.4)**

Source: Randall et al (1992)

- The underlying issue here is that of the sensitivity and the specificity of the cut-off rule.

- A cut-off rule should ideally have a high sensitivity (i.e. it should include a high proportion of those who need intervention) and it should have a high specificity (i.e. it should exclude a high proportion of those who do not need the intervention).

- Sensitivity and specificity are illustrated by the following hypothetical example.

Example 5

Test result	Disease present	Disease absent	Totals
Positive	5	2	7
Negative	1	92	93
Totals	6	94	100

$$\text{Sensitivity} = \frac{\text{True positives}}{\text{Those with disease}} = \frac{5}{6} = 83\%$$

$$\text{Specificity} = \frac{\text{True negatives}}{\text{Those without disease}} = \frac{92}{94} = 99\%$$

$$\text{Positive predictive value} = \frac{5}{7} = 71\%$$

$$\text{Negative predictive value} = \frac{92}{93} = 98.9\%$$

OH 5.10 *Example 6:* **Intervention levels**

The following are the intervention levels used in treating anaemia in pregnancy in a COPC project

HAEMOGLOBIN LEVEL (per 100 ml)	**TREATMENT**
12 gm and over	**No treatment**
11 gm	**1 iron tablet daily**
10 gm	**3 iron tablets daily**
Over 10 gm	**Hematocrit and full blood count. Treatment according to the nature of the anaemia**

Source: Kark (1989), p 134

PRESENTER'S MATERIALS

2 PLANNING YOUR INTERVENTION

○○○ PURPOSE

- To give an overview of the stages of an intervention plan.

!!! POINTS TO MAKE

- Show OH 5.11.

OH 5.11 The intervention plan

- **Activities and protocols to be used.**
- **Who does what and when.**
- **Records to be kept.**
- **Monitoring system.**

- The overhead gives a summary of the four main steps in planning the intervention.
- An intervention, once agreed, might take place over several years and involve many people. If it is going to be effective, it needs careful planning and monitoring. This section is about what needs to go into the intervention plan.

ACTIVITIES AND PROTOCOLS

○○○ PURPOSE

- To illustrate the need for agreed protocols for the intervention.

!!! POINTS TO MAKE

- All measurements and interventions must be made in a systematic way across the PHCT so that the evaluation is meaningful. For example, blood pressure must always be measured to the same protocol; 'heavy smoking' must always be defined in the same way.
- Ideally, the measurements and interventions should follow accepted methods so that project results can be compared to those of other workers.
- Show OH 5.12.

OH 5.12 *Example 7:* Respiratory infections protocol

INFORMATION GATHERING	STAGE I	STAGE II	STAGE III
Subjective			
How long has it been present?	< 5 days	5–7 days	≥ 7 days
Is there coughing?	Yes/No		
Does he cough so hard he passes out or turns blue?	No		Yes
Does he indicate that his ear hurts?	No		Yes
Is there pus in his ear?	No		Yes
Does he have a sore throat?	No	Yes	
Is he throwing up – after coughing only?	No		Yes
– after each feeding?	No		Yes
Objective			
Temperature: [ ] age 0–6 months	< 100°		≥ 100°
[ ] age 6 months to 2 years	< 100°	100°–101°	≥ 101°
[ ] age 2–4 years	< 101°	101°–102°	≥ 102°
Respiratory rate	< 32/min	32–40/min	≥ 40/min
Are there retractions present?	No		Yes
Is there flaring of the nostrils?	No		Yes
Is there grunting when he breathes out?	No		Yes
Is there wheezing present when he breathes out?	No		Yes
Is the baby lethargic?	No		Yes
Does he have a stiff neck?	No		Yes

ASSESSMENT	TREATMENT PLAN
[ ] Well child	Do educational task A
[ ] Respiratory infection stage I	Treat as below; do educational task A and follow up in 5 days; refer to clinic if not better
[ ] Respiratory infection stage II	Treat as below; do educational task A and follow up in 24 hours; refer to clinic if not better
[ ] Respiratory infection stage III	Refer to clinic rightaway
[ ] No sickness – medicine given to be kept on hand	

TREATMENT	
1 Fever or headache Use acetaminophen drops	[ ] 0–6 months – Acetaminophen drops 0.3 cc every 4 hrs [ ] 6–12 months – Acetaminophen drops 0.6 cc every 4 hrs [ ] 12–18 months – Acetaminophen drops 0.9 cc every 4 hrs [ ] 18 months–2 yrs – Baby aspirin 75 mg – 1 tablet for each yr of age, every 4 hrs
2 Runny or stuffy nose: Saline nose drops. 1 drop in each side every 3–4 hrs	
3 Coughing Use Glyceryl Gualacolate Cough Syrup	DO NOT GIVE TO BABIES LESS THAN 6 MONTHS OLD [ ] 6 ms–2 yrs – 1/2 teaspoonful 3 times a day [ ] 2 yrs–4 yrs – 1/2 teaspoonful 4 times a day
4 Sore throat	[ ] Throat culture – label with name, date, number and village and send to disease control lab within 24 hrs
5 Educational task A	Encourage fluids Other

Source: Nutting in Nutting (1987), p 301

PRESENTER'S MATERIALS

- This is an example of a protocol which:
  - assigns respiratory infections to three stages of severity
  - ensures all workers use the same criteria for determining the stage of a child's illness
  - ensures all workers prescribe consistent treatment.
- A child's stage of disease is defined as the highest stage for which one or more symptoms are present.
- In the project, it was important that all health workers identified Stages I to III in the same way. To ensure this, the team drew up the protocol shown in OH 5.12.
- For any protocol, a sensible degree of detail must be set. Too little detail will give a useless protocol which delivers no standardisation. Too much detail will weigh team members down and lead to a reluctance to use the protocol.

Example 8 – An alcohol intervention protocol

0: Abstainer
Assess other risk factors.

1: ≤ 14 units (women); ≤ 21 units (men)
Discuss safe limits. Where appropriate, remind patient of occasions when it would be prudent not to drink at all (i.e. before driving, when taking certain medications, or during pregnancy).
Check vulnerability and exposure, by finding out, for example, occupation and any problems related to intoxication.
Assess in relation to other presenting factors.

2: 15–24 units (women); 22–34 units (men)
As 1.
Explain to the patient that he/she may be drinking more than is advisable and should consider cutting down.
Assess other health risks/harm.
Explore health beliefs and desire for action.
Agree realistic target/action and invite back for further support.
Provide health education materials to support action.

3: 25–34units (women); 35–49 units (men)
Advise importance of cutting down in order to avoid harm.
Possible blood test.
As 2.

4: 35 units or over (women); 50 units or over (men)
Explain health risks. Indicate urgency of situation.
Possible laboratory tests (check practice protocol on alcohol).
Assess for problems relating to heavy drinking or intoxication.
Assess presence of other risk factors.
Explore beliefs and readiness for action.
May need specialist intervention.

Source: Priest & Speller (1991), pp 88–9

WHO DOES WHAT AND WHEN

PURPOSE

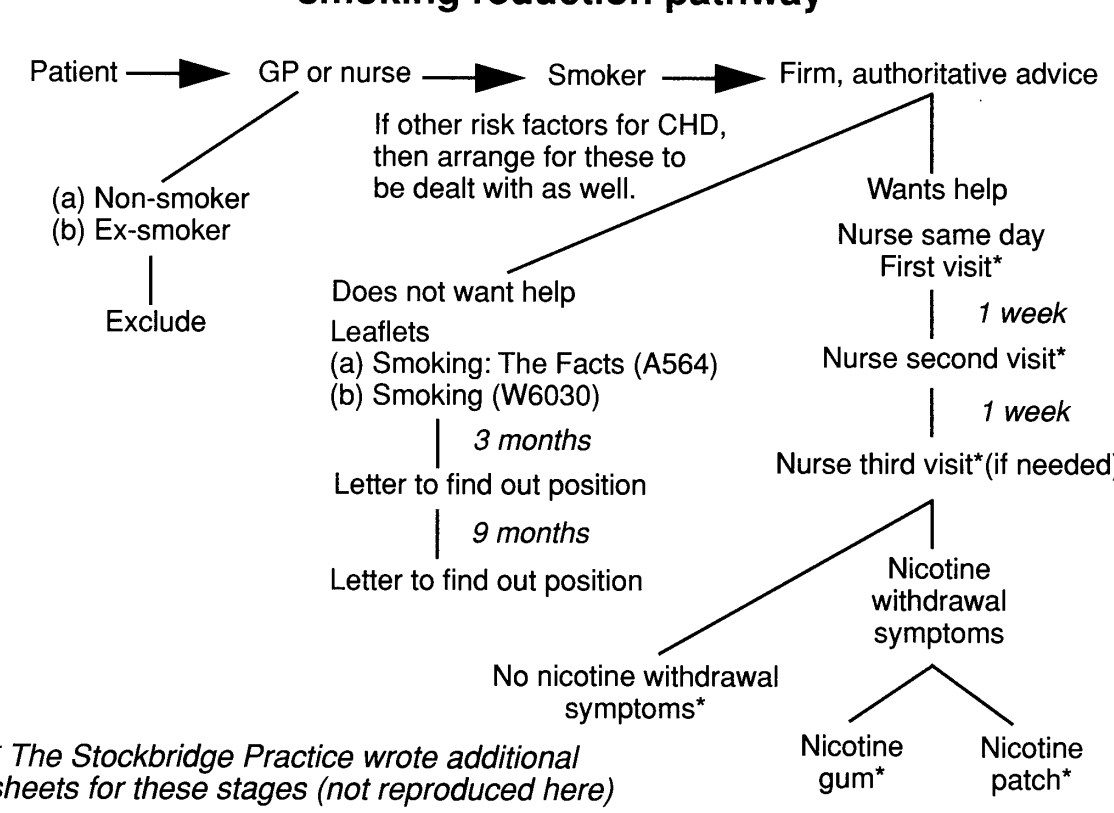
- To illustrate the need to identify the intervention tasks and decide who will carry them out.

  (The detail of drawing up a project plan comes later in the session on Project Implementation. This section provides an overview only.)

!!! POINTS TO MAKE

- COPC involves a variety of PHCT members (and, often, others in the community) in a range of coordinated tasks. A project will only work if everyone knows what their role is and when they have to carry out their tasks.
- OH 5.13 shows how one practice drew up its initial definition of the process of intervention and defined who was to do what. Timings are also shown.
- Show OH 5.13.

OH 5.13 *Example 9:* **Stockbridge Practice smoking reduction pathway**



** The Stockbridge Practice wrote additional sheets for these stages (not reproduced here)*

- As OH 5.13 makes clear, the intervention plan ran to several pages; the additional detail of the various tasks is not shown here.

PRESENTER'S MATERIALS

- The key test of this stage is: can each PHCT member tell:
  - what tasks need to be done by the PHCT?
  - the order of the tasks?
  - the timing of the tasks?
  - who is to do what?

RECORDS

○○○ PURPOSE

- To illustrate the need to consider how the COPC data will be recorded and the relationship of COPC data to clinical data.
- PHCTs will be used to noting data for later clinical work but may be less familiar with noting data for monitoring and evaluation.

!!! POINTS TO MAKE

- Show OH 5.14.

5.14 Intervention records

- **Dual purpose:**
  - **for patient treatment**
  - **for COPC monitoring and evaluation.**
- **When are the data needed?**
- **What actions will you take?**
- **Collect only what you need.**
- **Must be accurate.**
- **Must be reliable.**
- **Must be valid.**

Dual purpose

- PHCTs will be used to making clinical records. These are used for making future decisions about the treatment of a given patient. Such records are usually kept in the patient's notes or in the patient's computer record.
- COPC additionally requires data which can be analysed for the project group as a whole. This usually means keeping more data than are strictly needed for clinical work.

Access to the data

- The key factors to consider are:
  - how will we wish to *access* these data? (e.g. by patient name? by postcode? by stage of disease? by intervention given?)
  - how will we wish to *analyse* these data? (e.g. treated compared to untreated? before compared to after?)
  - when will we wish to use these data? (e.g. daily? occasionally?)

What actions will we take?

- The best starting point for record design is to write down all the actions that you might carry out as a result of having the data, e.g. to answer question such as:
  - what proportion of the group were depressed at the start of the project?
  - what proportion of the group were depressed at the end of the project?
  - what interventions were used with those whose depression improved?
  - what interventions were used with those whose depression did not improve?

Collect only what you need

- PHCTs need to be careful not to collect more data than they need – identifying the questions they wish to answer is a good way of establishing what they really need.
- The test is, 'Are the data central to the project objectives?'

Accuracy

- The plan must consider what steps need to be taken to ensure accurate data (e.g. training, agreed protocols, suitable equipment).

Reliability

- Steps must also be taken to make sure that the data are reliable, that is that measurements by different workers or at different times produce the same results.

Validity

- Finally, you need to be sure that what you are measuring is a valid indicator of what you seek to measure.

DISCUSSION POINTS

- The following is an example of the data that one project decided to collect.
- You might wish to start a discussion on whether all the data are strictly necessary.

PRESENTER'S MATERIALS

OH 5.15 *Example 10:*

Data needed for pregnancy and its outcomes

- Demographic data: age, marital status, parity, education, occupation, social class, ethnic group, religion.
- Pregnancy history: present pregnancy, wanted, planned; previous abortions, stillbirths and live births; family spacing.
- Somatic characteristics: mother's height, weight and weight changes during pregnancy, blood group ABO, Rh.
- Behaviour: alcohol, smoking, drug addiction, medications, diet.
- Progress of the pregnancy: normal pregnancy, morbidity mainly related to pregnancy, and general disease, psychiatric disorder.
- Foetal health and growth: prenatal screening, procedures for detection of foetal abnormality and growth retardation.
- Outcome of pregnancy: normal live-born infant and type of birth, birth weight, period of gestation, abortive outcome, stillbirth, congenital anomalies.
- Delivery and labour: normal labour and delivery, complications, methods of delivery.
- Puerperium: normal, complications of puerperium.
- Postpartum care and examination.
- Perinatal period (foetal age 28 weeks to new-born through first week): normal, abnormal conditions originating in the perinatal period, perinatal mortality.

Source: Kark (1989), p 47

MONITORING/SURVEILLANCE

○○○ PURPOSE

- To explain:
  - the need for the effects and progress of a COPC project to be reviewed at intervals
  - the need to decide at intervals whether any changes are needed to the project.

!!! POINTS TO MAKE

- The next step in the plan is deciding how its progress will be monitored. Monitoring emphasises checking on day-to-day progress and deciding whether the plan needs to be changed. Evaluation emphasises assessing progress towards, or achievement of, the project objectives. In practice, the divide between the two is blurred.

- The next overhead outlines how the New River Family Health Centre (USA) monitored its prenatal care project.
- Show OH 5.16.

OH 5.16 Prenatal care – project monitoring

- **Monthly team meeting.**
- **Monthly statistical report.**
- **All cases of perinatal morbidity and mortality reviewed.**
- **Overdue and patients at high risk discussed to anticipate and prevent complications.**
- **Special topic presentations (e.g. genetic counselling).**

Source: Doyle in Nutting (1987), p 261

- The following is an example of how a CHD COPC programme was monitored for team compliance with the agreed protocols and activities.
- Show OH 5.17.

OH 5.17 *Example 11:* Compliance monitoring

CATEGORY	1	2	3
Number of persons in category	250	373	106
Percentage having at least one contact	95.6	81.2	66
Number of contacts per person			
Aim for year	3	2	1
Actual average	2.1	1.2	0.8

Categories

(1) Those in need of medication.
(2) Those in need of special counselling and surveillance.
(3) Those with no risk factors and smokers with no other risk factors.

Source: Kark (1989), p 185

BUZZ GROUP ACTIVITY

- This activity is designed to be done in practice-based groups of three to four.
- Show OH 5.18.

OH 5.18 Project monitoring

- How frequently will your project need to be monitored?
- Who will coordinate the monitoring?
- What sorts of issue are likely to be on the monitoring agenda?
- What monitoring data will be needed?

3 PHCT TASK
PLANNING THE INTERVENTION

○○○ PURPOSE

- To enable each PHCT to produce their intervention plan.

!!! POINTS TO MAKE

- Show OH 5.19.
- Explain that this gives the headings for their intervention plans. These are repeated in their Task Notes: *Intervention planning*.

OH 5.19 PHCT task – Planning your intervention

- **Review where you are now.**
- **Define your group.**
- **Write your objectives.**
- **Choose an intervention.**
- **Decide your criteria for intervention.**
- **Devise your protocols.**
- **Decide who does what and when.**
- **Devise your recording system.**
- **Devise your monitoring system.**
- **Decide staff training needs.**
- **Estimate resources.**

- The PHCTs cannot expect to produce a final version of their intervention plans in the workshop. There is too much detailed work (e.g. record design) and research (e.g. finding out about proven interventions). What they should aim to do is to identify all the questions that need answering, answer those which they can and allocate responsibilities for the remaining work.
- If there are enough people in a group, they may like to split the work up after an initial planning session.
- Agree with them how long they have.
- Remind them that they should produce:
  - a written plan in a form they can share with the rest of their PHCT
  - a flipchart version for reporting back to the full workshop.

PRESENTER'S MATERIALS

4 FEEDBACK ON PHCT TASK

!!! POINTS TO MAKE

- Ask each PHCT to report back, outlining their intervention plan.
- Ask them to highlight:
  - areas where more research is needed
  - areas where they have found methodological problems with their intervention
  - issues which they would like to discuss with the whole group.

SESSION 6

PRESENTER'S MATERIALS

PROJECT IMPLEMENTATION

Session 6

PRESENTER'S MATERIALS

SESSION AIMS

By the end of this session, participants should be able to:

- identify the ingredients of a well-run project
- identify the milestones for their project
- identify the tasks for their project
- plan a monitoring system for their project
- plan a project review system for their project.

Participants will have:

- produced a draft project plan with milestones and a task list.

SESSION STRUCTURE

1 WHAT MAKES PROJECTS WORK?

Presentation: Learning from the past
Activity: Experience of past projects
Presentation: The experience of others
Activity: Where the teams are now

2 PROJECT MANAGEMENT METHODS

Presentation: Milestones
Presentation: Sketching the project schedule
Presentation: Identifying tasks
Presentation: Project meetings
Presentation: Project reviews

3 PHCT TASK: WRITING A PROJECT PLAN

Presentation: Setting the task
Task: Writing a project plan

4 FEEDBACK ON PHCT TASK

Feedback: PHCT presentations

PRESENTER'S MATERIALS

SESSION CHECKLIST

Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overhead transparencies for *Project implementation*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Copies of Participants' Task Notes: *Project implementation*

1 WHAT MAKES PROJECTS WORK?

LEARNING FROM THE PAST

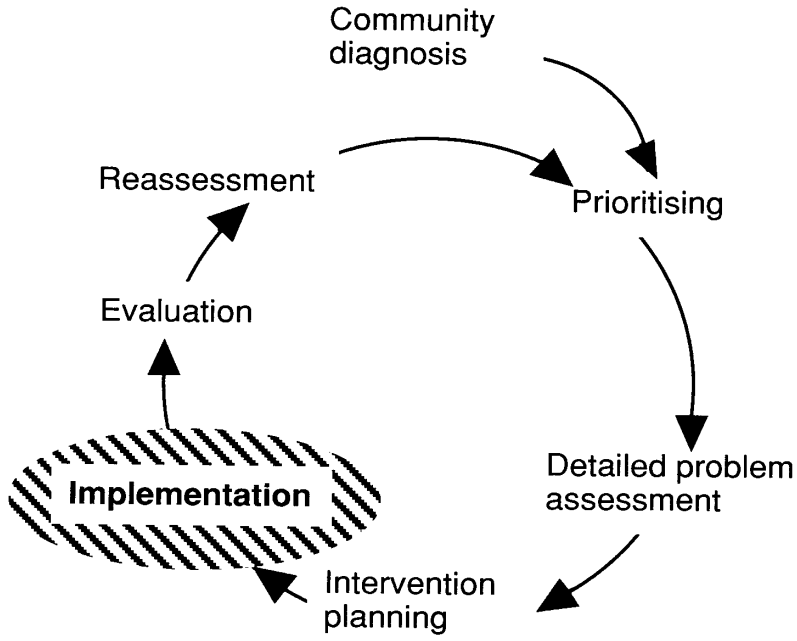
○○○ PURPOSE

- To enable participants to identify the ingredients of successful project management.
- To enable the PHCTs to establish the particular COPC management requirements of their practices.

!!! POINTS TO MAKE

- Remind your participants of where they are in the COPC cycle.
- Show OH 6.1.

OH 6.1 The COPC cycle



- They need a plan that can implement the COPC project they have devised. The method of producing and operating this plan is called *project management*.

PRESENTER'S MATERIALS

BUZZ GROUP ACTIVITY

Purpose for participants

- By recalling past successes and failures, to enable participants to recognise the importance of good project management.
- To give participants an opportunity to identify project management techniques which are relevant to their COPC programmes.

Purpose for you

- To help you gauge the emphasis to put on different sections of this session. For example, keep it very basic because their projects do not need too overt a management system, or push the participants to recognise that they need more structure than they believe.

!!! POINTS TO MAKE

- This activity should be done in practice-based groups of two to four.
- Show OH 6.2.

OH 6.2 Activity – What makes a project work?

- **Choose one or two past projects.**
- **Brainstorm:**
  - **what went well**
  - **what did not work.**
- **Identify how the project management system:**
  - **made things go well**
  - **prevented things going well.**
- **Identify five key feedback points for successful practice-based projects.**

- Explain the activity as follows.

Choose project to discuss

- PHCTs should recall one or two projects which have been implemented in their practices (e.g. a new computer system, a new building, the change to fundholding status, the start-up of a new clinic).

Brainstorm successes and problems

- For these projects, they should then brainstorm two lists:
  - things that went well
  - things that went badly or caused problems.

Identify the project management contributions

- For each list, they should then identify what within the project management structure and system either promoted the successes or provoked the problems.

Identify five key points

- Finally, they should identify five key points about successful project management in the practice context. They might think of these as ways of completing:

  Practice-based projects succeed when the management system ...

FEEDBACK

- Ask each group to feed back its five key points.
- Display these on a flipchart, keeping a score for repeat points, eg:

  Clear timetable ✓

  Clear responsibilities ✓✓

THE EXPERIENCE OF OTHERS

PURPOSE

- To enable participants to compare their own conclusions with those of other project managers.

!!! POINTS TO MAKE

- All successful projects seem to share certain key features. These are summarised on the next overhead.
- Show OH 6.3.

OH 6.3 Features of successful project management

- **Clear goals.**
- **Clear stages with milestones.**
- **Progress reviews.**
- **Adequate resources.**
- **Who does what is clear.**
- **Good information.**
- **Team commitment.**

PRESENTER'S MATERIALS

○○○ FOR YOUR GUIDANCE

- In presenting the points on the overhead, you need to:
  - reinforce those points which the participants have already identified for themselves. For example, if they have already put 'team commitment' on the flipchart in the previous activity, then you should point out that others agree this is important;
  - suggest that the points which are new to them are worth considering but without locking them into a rigid project management system which does not mesh well with their PHCT culture.

!!! POINTS TO MAKE

Clear goals

- A project needs clear goals so that:
  - everyone is working to the same end
  - everyone knows when they have got there.

Clear stages

- Most projects need breaking down into smaller stages. This helps people to understand what is important now. The successful completion of each stage also promotes a morale-boosting sense of progress.
- Stages work best when they have clear outcomes. These outcomes are called milestones, e.g.:

  Stage: *Develop protocols.* <— A process.
  Milestone: *Protocols ready for use.* <— A finished product.
  Deadline: *30 November.* <— A time limit.

Progress reviews

- When projects last more than, say, six months, there is a risk that the original project plan will become outdated. This can occur because of external changes (e.g. a change in FHSA priorities) or because of internal factors (e.g. a key worker is no longer available or progress on the project has revealed unexpected problems). Project reviews allow the whole team to stand back from the immediate project tasks and ask:
  - *Do we need to change the project goals?*
  - *Do we need to change the project methods and plan?*

Adequate resources

- If the resources allocated to a project are not adequate after all possible options have been considered, then the project will not work.
- Teams soon become demoralised if they find themselves committed to tasks without the resources to do them.

Who does what should be clear

- Projects are invariably team efforts, and goals and milestones can only be achieved if all the tasks are achieved. For example, a smoking-reduction programme would be in a mess if each team member thought that someone else was collecting the baseline data.
- For a project to succeed, every project task needs to be assigned to one or more team members.

Good information

- All primary care, including COPC programmes, requires a good system for sharing information. The patient records are a good information system in themselves. However, a new COPC programme might create new information needs which cannot be met through the PHCT's existing systems. This needs to be recognised and an appropriate information system created.

Team commitment

- Much project management methodology emphasises splitting up the total project into small tasks, each task normally involving only one individual. This under-emphasises the importance of a team commitment to a project. Each project needs its own way of building its team and keeping the team together.

WHERE THE TEAMS ARE NOW

BUZZ GROUP ACTIVITY

- This activity aims to encourage the teams to:
  - recognise their current good practice
  - identify areas for the development of project management in their practices.

!!! POINTS TO MAKE

- Ask the participants to work in the same practice-based groups that they used for the previous activity.
- Show OH 6.4.

PRESENTER'S MATERIALS

OH 6.4 Your project experience

- **Choose a recent or current project in your practice.**
- **Using OH 6.3, identify (if possible):**
  - **for each criterion, one way in which your project met that criterion**
  - **for each criterion, one way in which your project could meet that criterion better.**

- Collect feedback from the buzz groups. Display it on two flipchart sheets, one headed *Working now* and the other *Might work*.

2 PROJECT-PLANNING METHODS

PURPOSE

- This section looks at a few key methods which the PHCTs might consider when developing their implementation plans.

  (You may decide that this section is not needed by your participants.)

MILESTONES

PURPOSE

- To explain the purpose of milestones.
- To give guidance on choosing milestones.

!!! POINTS TO MAKE

- If the project is large or lengthy, it is best broken down into a number of staged targets, each of which provides a review point. These review points are called 'milestones'.
- Show OH 6.5.

OH 6.5 Milestones

- **State a goal to be achieved**
- **Do not imply a method of reaching the goal**

Examples

'Protocols ready for use'

'Computer system ready to accept COPC data'

'Detailed assessment complete'

- It is important to avoid milestones which imply or state how they are to be achieved, e.g.:

  – *When Mary has finished the computer system design.*

  What happens if someone else does the work?

  – *Find data by reading patient records.*

  What happens if you find a simpler way?

PRESENTER'S MATERIALS

HOW TO CHOOSE MILESTONES

- Show OH 6.6.

OH 6.6 How to choose milestones

- **Important achievements.**
- **Natural stages – do not invent them.**
- **Steps of comparable size and duration.**
- **Not too many – at most ten on a small project.**

DISCUSSION POINTS

- Ask participants to suggest some milestones for their programmes. Identify, with the participants, how well they reflect:
  - important achievements
  - natural stages, i.e. not chosen just because they want a milestone at a particular time.
- Check that their milestones do not imply a solution method. If they do, ask them to rephrase in a way which avoids this.

IDENTIFYING TASKS

PURPOSE

- To produce a list of all the tasks to be done. Participants have a task-listing sheet in their *Task Notes*.

!!! POINTS TO MAKE

- OH 6.7 shows the start of the planning process.
- Show OH 6.7.

OH 6.7 Task identification

Milestone	Tasks for this milestone
Community diagnosis complete	1 First draft
	2 Research
	3 Second draft
	etc.
Prioritisation	1
	2
	3
	etc.
etc.	

- The purposes of this list are to:
  - identify all the tasks so that nothing is overlooked
  - give a realistic estimate of how long the task will take in elapsed days
  - produce a complete list of tasks for sharing with the team.

PROJECT MEETINGS

○○○ PURPOSE

- To establish the role of project meetings.
- To set out good practice for project meetings.

  (You might discuss with your participants whether COPC project meetings should always be an integral part of routine practice meetings.)

!!! POINTS TO MAKE

- Show OH 6.8.

OH 6.8 Project meetings – purposes

- **Monitor progress.**
- **Foresee problems.**
- **Agree actions.**
- **Agree changes to the plan.**
- **Promote communication.**
- **Promote team work.**

PRESENTER'S MATERIALS

- Project team meetings are essential. Without them, team members become isolated and can lose commitment to the project goals.
- Team meetings must be purposeful and business-like.
- At the end of a meeting, everyone should:
  - be clear on what has been achieved
  - be clear as to where there have been problems
  - be in agreement on action over those problems
  - have shared in anticipating problems on the next stage of work.

RUNNING THE MEETINGS

- Show OH 6.9.

OH 6.9 Project meetings – running

- **Issue an agenda.**
- **Issue a project progress report.**
- **Agree the time for each agenda item.**
- **Keep discussion relevant, positive, decisive.**
- **Record what, who, by when.**

- The coordinator should prepare the agenda and progress report for the meeting.
- The chair can be taken by the coordinator, but it can also rotate around the team.
- The chair's job is to see that:
  - time is shared between items in proportion to their importance
  - action is agreed on every problem, even if that action is to refer it to a small group to resolve
  - for each item discussed, the minutes should record:

    the action needed

    who is to do it

    by when.
- After the meeting, the project manager should, at a minimum, circulate the minutes. It may also be necessary to update the schedule and/or task lists and circulate them.

PROJECT REVIEWS

PURPOSE

- To establish the need for project reviews.
- To establish how to run a project review.

!!! POINTS TO MAKE

- Show OH 6.10.

OH 6.10 Project reviews – purposes

- **To revisit the project goals:**
  - **are they still relevant?**
- **To review the project methodology:**
  - **is it still the best way of achieving the goals?**
- **To revisit the use of resources:**
  - **do we have other calls on the resources?**
  - **should some team members do more?**
  - **should some do less?**

- In addition to routine project team meetings, it is worth having occasional project review meetings. These might be held once every six months.
- Project meetings look at how to get the tasks done. Project reviews ask, 'Are these still the right tasks?'
- A project review involves going back to the project objectives and asking:
  - are these goals still appropriate?
  - have we learnt anything which requires a change of goal?
  - have we learnt anything which requires a change in project methods?
- Outcomes of a project review might include:
  - the goals and methods are fine; if so, no changes are needed
  - the goals need changing; if so, new goals are agreed
  - the method needs changing; if so, new methods are devised
  - the project should be ended; for example, if the project is not meeting its objectives (say, because of lack of compliance or a drastic reduction in resources), then it might be ended.
- Project meetings need to be crisp and business-like. Project reviews need to be reflective and relaxed. It makes sense therefore for reviews:
  - to have more time set aside than project meetings
  - to use a different venue
  - to include a chance for more informal exchange (e.g. a lunch).

PRESENTER'S MATERIALS

3 PHCT TASK

WRITING A PROJECT PLAN

○○○ PURPOSE

- To ensure that the PHCTs have identified:
  - realistic milestones
  - the tasks needed to reach each milestone.

!!! POINTS TO MAKE

- Show OH 6.11.

OH 6.11 Planning your project

1 **Decide the milestones for your project.**
2 **Draw up a list of all the tasks.**
3 **Put the milestones and tasks on a task sheet.**
4 **Estimate how long each stage will take.**
5 **Present the task list to the full workshop.**

The task

- To produce:
  - a list of milestones
  - a list of tasks associated with each milestone
  - an estimate of how long each stage will take.

The method

- The workshop should split up into practice-based groups for this task.
- Remind participants that they have their objectives – they wrote them under 'Planning an intervention'.
- If participants' projects are large and detailed, they should do this exercise on part of the project only – say, the part between two milestones.
- They should use the blank task-listing sheets which are in their *Task Notes.*

Report back

- For the report-back session, the PHCTs should produce a flipchart version of their project plan to present to the whole group.

Finally

- Agree with participants how long they have for this task.

4 FEEDBACK ON PHCT TASK

PURPOSE

- To enable the PHCTs to get feedback from each other on their project plans.
- To enable the PHCTs to raise problems for discussion.

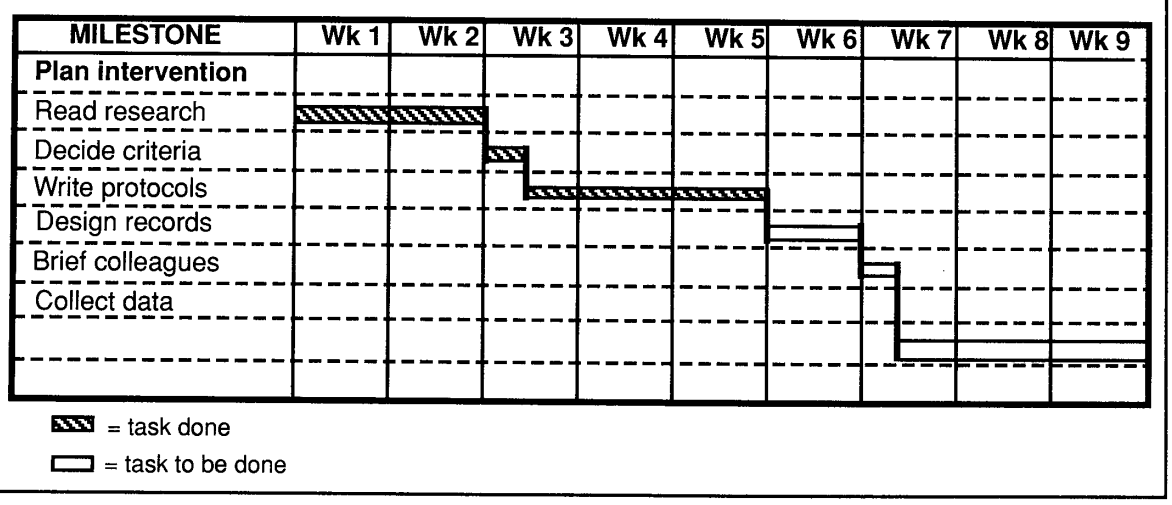
!!! POINTS TO MAKE

- Ask each group to present their milestone list and task list.
- Check that milestones are:
  - important outcomes
  - natural outcomes
  - of comparable size and duration
  - not too many.
- Ask the group what problems they had with milestones.
- Check that the task list is:
  - sensibly detailed: neither too many small tasks nor too few large ones
  - clear.

BEYOND THE TASK LIST

You may like to mention to participants that, once the task list is complete, the schedule can be converted into a Gantt chart. An example for the intervention planning stage of a COPC project is shown in OH 6.12.

OH 6.12 Sample Gantt chart



PRESENTER'S MATERIALS

EVALUATION

Session 7

PRESENTER'S MATERIALS

SESSION AIMS

By the end of this session, participants should be able to:

- define evaluation and explain why evaluation is necessary in COPC programmes
- apply key evaluation terms to the their COPC programmes
- identify appropriate evaluation measures in their COPC programmes
- draw up an evaluation plan for their COPC programmes.

SESSION STRUCTURE

1 EVALUATING A COPC PROGRAMME

Presentation: What is evaluation?

Presentation: Why evaluate?

Presentation: General guidelines

Presentation: Evaluation frameworks

Presentation: Asking the right questions

Presentation: Process measures

Presentation: Effectiveness measures

Activity: On the use of the four measures

Presentation: Data collection issues

Presentation: Writing an evaluation plan

Presentation: Terminology: effectiveness, efficiency and cost

2 PHCT TASK: WRITING AN EVALUATION PLAN

Presentation: Setting the task

3 FEEDBACK ON PHCT TASK

Feedback: Presentations from the teams

PRESENTER'S MATERIALS

SESSION CHECKLIST

Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overhead transparencies for *Evaluation*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Copies of Participants' Task Notes: *Evaluation*

1 EVALUATING A COPC PROGRAMME

WHAT IS EVALUATION?

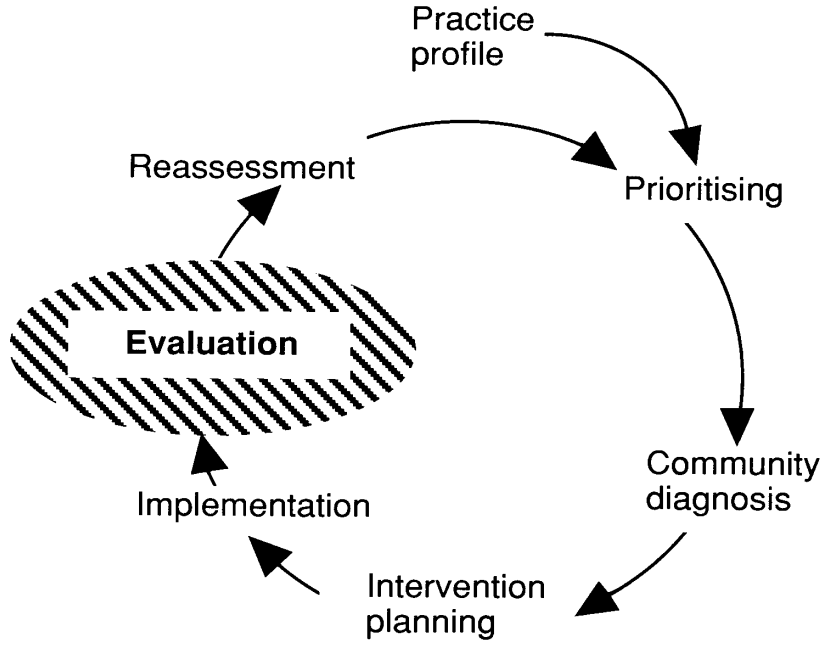
○○○ PURPOSE

- To present a definition of evaluation, explore the reasons for evaluation, and describe some general principles of evaluation.

!!! POINTS TO MAKE

- Show OH 7.1.

OH 7.1 The COPC cycle



- Remind participants of where they are in the COPC cycle:
  - they have completed their intervention plan and worked out how they will run it
  - the final step (in the workshop) is to plan how their evaluation will be done.
- Show OH 7.2.

OH 7.2 Evaluation

The critical and objective assessment of the degree to which a service fulfils stated goals.

- In the COPC context, the 'stated goals' are the objectives set when planning the intervention.
- In a typical PHCT-sized COPC programme, there will not be an elaborate evaluation team. In this context, it may be unclear just what 'objective assessment' means. Since each team member probably has several roles, whose viewpoint can be said to be 'objective'? (There is no answer to this; it is simply a problem for PHCTs to watch for.)
- Distinguish between monitoring and evaluation.

Monitoring

Monitoring is a process carried out throughout the COPC programme in order to adjust its day-to-day operation. It is therefore formative in its aim. It also serves as the basis of the evaluation.

Evaluation

Evaluation tends to be summative. It relates objectives and planned activities to the process of the programme and to outcomes. It occurs at the end of the programme and there may also be intermediate evaluations.

Despite these distinctions, the boundary between what is monitoring and what is evaluation is often blurred.

DISCUSSION POINTS

- Ask the participants to identify a few things which they see as 'monitoring' and a few which they see as 'evaluation'. Explore any problems which they have with this distinction.
- Ask the participants how they think they can keep their evaluation process objective.

WHY EVALUATE?

PURPOSE

- To identify the benefits that the teams will derive from their evaluations.

!!! POINTS TO MAKE

- Show OH 7.3.

OH 7.3 Evaluation purposes

- **To ask 'was it worthwhile?'**
- **To ask 'what worked and what did not?'**
- **To ensure that resources are used efficiently.**
- **To provide feedback to the team.**
- **To identify new areas of work.**
- **To justify the use of resources.**

Who wants to know?

- Although the overhead presents a fixed list of benefits, different stakeholders in COPC projects will have different interests. Team members may have different concerns from the community (e.g. the team may be concerned about how worthwhile the diversion of resources to COPC was). The community may value the COPC activity without being concerned about its precise effects or its opportunity costs.

Worthwhile?

- The essential question is: 'Was it worthwhile?' This has many aspects such as: worth it in terms of job satisfaction; worth the diversion of resources; worth it for what was learnt; worthwhile for the patients. Critically, though, the use of resources will be central: was this the best way to use the resource? Could we have got more benefit for the practice and the patients if we had used the resource differently?

What worked and what did not?

- Evaluation helps to tell you whether the process you used worked. Did our questionnaire yield good data? Did the right people attend the clinic? Was the computer a good way of storing and analysing the data? Were the outcomes valued by the patients?

Feedback

- The project planning section has shown how regular project meetings can be used to give feedback to the team. In addition to this feedback (which will often relate to short-term issues), the team needs to know what they finally achieved. The evaluation is part of this.

New work areas

- Most projects raise as many questions as they answer. At the end of a COPC programme, the team will have a new view of their initial community diagnosis and will probably have lots of ideas for new projects.

PRESENTER'S MATERIALS

GENERAL GUIDELINES

○○○ PURPOSE

- To demonstrate the key principles behind COPC evaluation.

!!! POINTS TO MAKE

- Show OH 7.4.

OH 7.4 Evaluation guidelines

- **Keep it simple.**
- **But rigorous.**
- **Measure the effect on the population.**
- **Ask the right questions.**
- **Use proxy questions where needed.**
- **Do not expect 100% success.**

Simple

- 'Evaluation' is a term which can conjure up images of huge teams, masses of data and large computers. The majority of the COPC resource must go into clinical work. The effort devoted to evaluation must be
  - small compared to the clinical work
  - congruent with what might be learnt from the evaluation.

Rigorous

- Despite the simplicity, there is no point in conducting an evaluation which is not credible. Measurements must have been taken according to established principles (e.g. blood pressure); scales used must be proven ones (e.g. for depression); calculations done must be accurate.

Measure the effect on the population

- The aim of COPC is to produce an improvement in the group's health. The evaluation must therefore look at the end-state of the group, not just at those who attended for treatment. In this sense, the evaluation is a repeat of the initial community diagnosis after the 'treatment' of COPC.
- Although the evaluation must produce population data, there may well be a need to subdivide the data into other groups, such as 'high risk' and 'attenders', so as to find out whether the programme had differential take-up and effect.

The right questions

- It is easy to omit to ask the right questions. An evaluation will only answer the questions you ask.

Example 1

In a maternal and child health programme, the mean population indicators showed that the project had been a success (e.g. the mean week of gestation in which the first visit occurred improved from 24.6 (before) to 21.8 (after)). Only when the project asked about differential take-up was it found that on some indicators the outcome had deteriorated (e.g. the percentage who made contact by the 20th week of pregnancy had improved for average risk patients (from 61.0 to 66.7 per cent) whereas the rate for high risk had declined (from 54.1 to 48.3 per cent)).

Source: Nutting (1987), p 348

Proxy measures

- In practical terms, not all questions can be answered. Sometimes this means asking a question which is a reasonable indicator for the unanswerable question. For example, within the time scale of a COPC programme, you cannot hope to reduce deaths through lung cancer. You can, though, measure the reduction in smoking which is a good proxy for future lung cancer deaths.

Do not expect 100 per cent

- You should not expect to achieve 100 per cent of your goals nor be disappointed if you do not. In general, to reach 100 per cent would be to set very low targets. Reasonable, sensible targets contain an element of challenge and risk.

EVALUATION FRAMEWORKS

PURPOSE

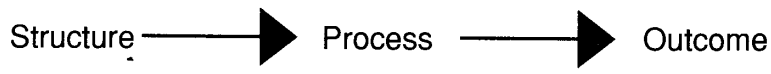
- To introduce two simple evaluation frameworks. Participants might take ideas from each. Their function at this stage is to help participants to reflect on the theoretical structure behind their COPC objectives.

!!! POINTS TO MAKE

DONABEDIAN'S MODEL

- Show OH 7.5.

OH 7.5 Donabedian's model



- One way of thinking about your COPC programme is to regard it as consisting of structure, process and outcome. Each is then evaluated.

PRESENTER'S MATERIALS

Structure

- The structure is the fixed things which help you to carry out the process: buildings, equipment, computer programmes.
- It also includes the staff – permanent and any taken on specially for the COPC project.
- Structure questions include:
  - how well did the equipment meet our needs?
  - did the computer give us the data we needed?
  - did we have the right staff with the right skills?

Process

- The process is what you do, i.e. the activities of your COPC programme (e.g. examining patients, counselling them, meeting a community group). We look at process in more detail later on, but process questions include:
  - how many patient contacts per doctor, per nurse, etc?
  - how much of each intervention was undertaken?
  - what did the patients think of their initial interviews?
- Process measures are often used to supplement areas where we suspect that the outcome data will be weak.

Outcome

- The outcome is all the effects on the patients, the practice and the staff which the programme had. Some of these are knowable (e.g. health state changes; people's views). Others are unknowable (e.g. did the practice manager leave because the COPC programme did not give him/her a big enough role?).
- If you use this model, your evaluation will attempt to measure – and perhaps relate – structure, process and outcome.
- The following is part of the outcome data from the Kiryat Yovel CHAD programme.
- Show OH 7.6.

OH 7.6 *Example 2:* **Changes in the prevalence of hypertension in men in the family practice (CHAD) and control populations**

	FAMILY PRACTICE		CONTROL	
	1970	1975	1970	1975
Age standardised prevalence rate of hypertension	24.1%	14.5%	20.4%	16.0%
Change 1970–1975	-9.6%		-4.3%	
Number of men who changed categories 1970–1975				
Moved out of hypertension category *a*	35		80	
Moved into hypertension category *b*	13		49	
Odds ratio *a*:*b**	2.7		1.6	
p	0.001		0.004	
Difference between the two populations in their odds ratios, controlling for age	1.7			
p	0.094			

* Odds ratio *a*:*b* expresses tendency to move out of hypertension category

Source: Kark (1989), p 188

- In this example, the control population consisted of people living in areas adjacent to the project. Control groups are difficult to arrange in practice-based COPC since a within-practice control group is usually impractical. Other options include:
  - nearby practices
  - regional data
  - national survey data
  - before and after data within the practice.
- Whatever form of control group is used, there will always be some uncertainty as to whether observed differences were due solely, partly or not at all to the COPC programme.

MAXWELL'S MODEL OF SERVICE QUALITY

While Maxwell did not put forward this model as an evaluation model, it does provide a comprehensive way of thinking about a COPC programme. Its six headings are all relevant to COPC and can be used by a practice to evaluate their programme from six different perspectives.

- Show OH 7.7.

PRESENTER'S MATERIALS

OH 7.7 Maxwell's model – Dimensions of service quality

- **Access.**
- **Relevance to community.**
- **Equity.**
- **Social acceptability.**
- **Effectiveness.**
- **Efficiency and economy.**

- This is a somewhat more didactic model, since its imposes certain values, whereas Donabedian's is purely structural.
- If you adopt Maxwell's model, you may find that you have inadvertently added a new set of objectives to your programme. Since Maxwell suggests that you look at access, relevance to community, equity and social acceptability, you are pushed into considering whether to build each of these into your objectives. You can, of course, take just those aspects that you consider to be relevant to your programme.

ASKING THE RIGHT QUESTIONS

○○○ PURPOSE

- To get participants to think about what questions they want the evaluation to answer before they decide on the evaluation data and methods.
- To ensure that evaluation is considered throughout the COPC planning stages, and especially when working on the detailed problem assessment and the intervention planning.

!!! POINTS TO MAKE

- We have already emphasised the importance of asking the right questions. One way to make sure that your project and its evaluation ask the right questions is to sketch out what you think your report will say. You can do this by listing:
  - the sort of descriptive health state statements you would expect the report to contain
  - the sort of findings that you expect to report
  - the tables you expect to present
  - the graphs you expect to present
  - the statistics you expect to present.
- Show OH 7.8.

OH 7.8 Preparing your report

- **State relationship to project objectives.**
- **List possible health statements.**
- **List possible findings.**
- **Draw up dummy tables and possible statistical calculations.**
- **Draw up dummy graphs.**
- **List the type of conclusions you might make.**

- Then PHCTs can ask:
  - what questions do we want these data to answer?
  - do the questions and data match?
  - what data are missing?
  - what data are superfluous?
- You can then adjust your evaluation plan and its data collection to make sure that they match the questions you really want to answer.

- In the following example, the project was concerned with the quality of prenatal care. Ideally the project wanted to know about the quality of the care *received*. This is difficult to measure. Their results relied on process measures of the care given.
- Show OH 7.9.

OH 7.9 *Example 3:* **Prenatal care evaluation data**

	BEFORE	AFTER
Mean week of gestation in which prenatal care was started	24.6	21.8
Mean number of prenatal visits	5.8	7.4
Prenatal workup rate	23.5%	37.2%
Pregnancy assessment rate	11.8%	57.8%
Anaemia screening rate	43.1%	64.7%
Postpartum follow-up rate	28.4%	48.0%

Source: Nutting (1987), p 348

- Were these the 'right' questions? To what extent would these data (only an extract, though, from the full data) provide the answers the team wanted?

PRESENTER'S MATERIALS

PROCESS MEASURES

PURPOSE

- To encourage participants to identify when to use process measures and when outcome measures.

!!! POINTS TO MAKE

Reasons to consider process measures

- The small-scale groups in practice-based COPC will often mean that quantitative outcome evaluation results are not statistically significant. Where this is the case, process measures may be important in providing a proxy for measures of outcomes (e.g. immunisation rate is a proxy for reduced rate of infectious disease).
- Even where the quantitative results are valid, there may be a long wait for them. Process measures can be obtained more quickly and so are valuable in guiding the operation of the project.

Picking the right process measures

- Process measures tend to look at activity. Any proposal to use process measures must be able to justify the measures chosen. PHCTs should ask:
  - does this measure activity for activity's sake?
  - does this tell us anything that adds to our quantitative measures?
  - how are we going to use our process measures once we have them? What actions depend on these measures?
- Typical process measures would look at:
  - the PHCT views of the programme and its activities. How enjoyable was the process? What effects did it have on the team? How well planned was it? What was the effect on job satisfaction? What did we learn as individuals from the programme?
  - patient views of the programme. What was the quality of the information and the communication? How well explained were the activities that involved patients?
  - how did we do against the planned timetable?
  - the number and type of activities performed. How many interventions did we carry out? How many visits? How long did we spend talking to patients?

Process instruments

- These include:
  - clinical measures* such as: percentages of patients with bp taken; percentage of these with hypertension confirmed; percentage of weights recorded
  - contact measures (e.g. how many times each patient was seen)
  - intervention measures (e.g. how many counselling sessions with each patient)
  - observations using a checklist
  - questionnaires* completed by the team (e.g. a questionnaire to measure the team's views of the project's impact on their other work)
  - questionnaires* completed by patients (e.g. a questionnaire on exercise)
  - patient data recording (e.g. a daily diet record)
  - patient diaries (e.g. a diary to help patients identify what precipitates heavy drinking)

* These methods could also be used to measure outcomes.

EFFECTIVENESS MEASURES

○○○ PURPOSE

- To introduce participants to the main categories of effectiveness which they might measure.
- To provide a framework within which they can check whether their objectives are sufficient or need additions.

!!! POINTS TO MAKE

- Show OH 7.10.

OH 7.10 Effectiveness measures

- **Changes in risk factors.**
- **Changes in morbidity.**
- **Changes in knowledge/attitudes.**
- **Changes in mortality.**

Changes in risk factors

- Your programme might be seeking to reduce risk factors (e.g. less smoking, lower alcohol intake, better housing and/or to control them as in treatment of hypertension).

PRESENTER'S MATERIALS

Changes in morbidity

- Your programme might be seeking to reduce morbidity (e.g. lower levels of depression, less frequent asthma attacks).
- As measures you could use:
  - quality of life measures
  - frequency of visits to the practice
  - frequency of referral to hospital (e.g. for asthma).
- Show OH 7.11.

OH 7.11 *Example 4:*
Change in morbidity measured over time

Period	Haemoglobin below 10 gm/ml at any time during pregnancy (% pregnant women)
1958–59	12.0
1964–66	8.8
1970–71	3.3
1975–76	1.6

Source: Kark (1989), p 135

Changes in knowledge/attitudes

- Your programme might be seeking to change knowledge, e.g.:
  - on dangers of smoking
  - on the risks of drinking and driving.
- Your programme might be seeking to change attitudes, although such an objective would almost certainly be accompanied by other more tangible objectives. For example, you might be seeking to make the use of contraceptives more acceptable to teenagers. If that is your objective, you probably also have objectives related to reduction in unwanted pregnancies and reduction in sexually transmitted diseases.
- Under 'attitudes', remind the participants that they may wish to measure:
  - attitude change within the team
  - attitude change within the community.
- Attitudes are difficult to measure for many reasons, including:
  - lack of ways of classifying them

- reluctance of patients to say exactly what they feel
- tendency of patients to learn the right answers (e.g. over diet) and tell you what they think you want to hear.

- Sometimes you have to accept a proxy measure of attitudes.
- Measures of attitude and satisfaction may only be possible with the help of a third party with whom the patients may be more open and honest.

Changes in mortality

- Your programme might be seeking to reduce mortality – although it will almost never be possible to demonstrate this within the scale of a practice-based COPC programme.

BUZZ GROUP ACTIVITY

- This activity aims to encourage the PHCTs to think as widely as possible about the range of effectiveness measures they might use.

!!! POINTS TO MAKE

- Divide the participants into practice-based buzz groups.
- Show OH 7.12.

OH 7.12 Types of measure

- **Identify which of your COPC objectives are effectiveness measures.**
- **Classify these into:**
  - **changes in risk factors**
  - **changes in morbidity**
  - **changes in knowledge/attitudes**
  - **changes in mortality.**

- Discuss the results.
- If they do not have objectives under all four headings, does that lead them to think that they need any further objectives under other headings? *Note:* this is not meant to pressure them into having more objectives – it is just a check to make sure they have not overlooked something that is important to them.
- If any group only has attitude change objectives, probe this one further.

PRESENTER'S MATERIALS

DATA COLLECTION ISSUES

○○○ PURPOSE

- To review some aspects of data collection that impact on evaluation.

!!! POINTS TO MAKE

- Show OH 7.13.

OH 7.13 Data collection issues

- **Ensure consistency and accuracy.**
- **Standardise measurement methods.**
- **Use standard rating scales.**
- **Use proven questionnaires or validate your own.**
- **Train interviewers and other data collectors.**
- **Test analysis and evaluation method.**
- **Build into practice routines.**
- **Decide who will coordinate data collection.**

Ensure consistency and accuracy

- Your evaluation will only be credible if, among other things:
  - your measurements are consistent over the whole programme
  - your measurements are comparable with those of other workers
  - your measurements are accurate.

Standardise measurement methods

- For each measure to be used in your objectives or your evaluation, you need to agree:
  - how the measure is to be taken
  - how the measure is to be recorded.

Use standard rating scales

- Where possible, you should use established rating scales. A variety of works are available to track down tests. (See the *Glossary* and *References and Book List*.)
- If you have to invent your own scales, consult your FHSA or DHA for advice on sources of expert assistance.

Use proven questionnaires or validate your own

- As with rating scales, wherever possible you should use proven questionnaires. Designing a good questionnaire is difficult and time-consuming. Avoid it if you can.
- If you do decide to create your own questionnaires, you will need to pilot them to make sure that they can be understood by the respondents and that the answers make sense to you.
- Remember that if you design your own questionnaires, it may then be difficult to compare your results with those of other workers.

Train interviewers and other data collectors

- Data collectors will need training, even if they are experienced. This will be especially true of interviewers. Untrained interviewers are prone to introducing many sources of error and bias into their work.

Test your analysis and evaluation method

- Finally, try to do a test run on your data analysis and evaluation method. For example, fill in 25 records with dummy data and then try to answer all your evaluation questions. This can sometimes reveal that you have forgotten to collect a critical piece of information.

Build into practice routines

- COPC programmes are part of the routine care that the practice delivers. Data collection should therefore be part of the practice routine – not something extra.

Testing data collection methods

- Once the programme has started, data collection methods can be tested and adjusted as needed.

The need for expert help

- Some guidance on statistical methods is given in *Tool box 1: Data analysis methods*. Most projects, though, will need to consult a statistician when designing their analyses.
- Much of the statistical work can be done using the computer program Epi-info.

WRITING AN EVALUATION PLAN

PURPOSE

- Participants have already made a project plan in the project management session. If they have completed the plan for *all* their project, then it will cover the evaluation as well as the implementation.
- To give participants a chance to reflect on whether they have all the necessary evaluation tasks in that plan.

PRESENTER'S MATERIALS

!!! POINTS TO MAKE

- Show OH 7.14.

OH 7.14 Evaluation plan

- **Who is it for?**
- **What questions will the report answer?**
- **When will the data collection cut-off date be?**
- **Who will analyse the data?**
- **What facilities or expertise will be needed?**
- **Who will write the report?**
- **When will the report be ready?**

Who is it for?

- The most important question is: 'Who is the report for?'. Once you know that, then you know whom to ask about what the report should address. (If the report is only for the PHCT, then you have probably decided all the issues in your COPC planning.)

What questions will the report answer?

- Once the audience is clear, the next most important issue is the list of questions, e.g.:
  - what was the baseline measure of depression in the subgroup?
  - what was the same measure for the group after two years of the programme?
  - at the baseline, what were the proportions of the group reporting: not having sex, having sex with no protection, having sex with protection? What were the same proportions after one year of the programme?

Other issues

- The other issues on the overhead are important, but not difficult. However, the teams will have to make decisions about them:
  - when will the data collection cut-off date be?
  - who will analyse the data?
  - what facilities or expertise will be needed?
  - who will write the report?
  - when will the report be ready?

TERMINOLOGY: EFFECTIVENESS, EFFICIENCY AND COST BENEFIT ANALYSIS

○○○ PURPOSE

- To introduce some technical terms used in evaluation.
- To remind the participants of the range of terminology for measuring effect.

  (You should use your own judgement as to whether to present this section or to just refer participants to the *Glossary*.)

!!! POINTS TO MAKE

- Most COPC projects can be evaluated against fairly simply clinical criteria. Occasionally, it may be necessary to use more sophisticated measures of effectiveness such as the ones which follow.
- Show OH 7.15.

OH 7.15 Measuring effectiveness – Terminology

Non-cost related

- **Effectiveness.**
- **Efficacy.**

Cost-related

- **Efficiency.**
- **Cost minimisation analysis.**
- **Cost effectiveness analysis.**
- **Cost utility analysis.**
- **Cost benefit analysis.**
- **Opportunity cost.**

Non-cost related

Effectiveness

- Effectiveness is a measure of the degree to which an intervention achieves its objective in practical use (i.e. under field conditions). For example, aspirin is an effective treatment for headache; trepanning is not.

Efficacy

- Efficacy is a measure of the capacity of an intervention (under ideal laboratory conditions) to produce a desired effect.

Cost related

Efficiency

- Efficiency is a measure of the comparative costs of different interventions in achieving the desired objective in practical use.

Cost minimisation analysis

- This is used to compare two or more methods of carrying out the same process (e.g. day surgery and in-patient treatment for hernia). Because the process is the same, costs can be directly compared.

Cost effectiveness analysis

- Cost effectiveness analysis is used when the outcomes are expected to vary, but they can be expressed in a common unit (e.g. a range of treatments for hypertension). The cheaper a method is for a given effect, the more cost-effective it is said to be.

Cost utility analysis

- Cost utility analysis is used to compare treatments for different diseases (e.g. reduction in blood pressure versus hip replacement). In this analysis, the common measure will be the patients' subjective assessment of their well-being.
- One such measure is Quality Adjusted Life Year (QALY). Thus if scheme A costs £5000 per patient and delivers 2.5 QALYs; and scheme B costs £6000 per patient and delivers 2 QALYs:

$$\text{Utility of scheme A} = \frac{5000}{2.5} = £2000/\text{QALY}$$

$$\text{Utility of scheme B} = \frac{6000}{2} = £3000/\text{QALY}$$

So, scheme A is to be preferred since it has a lower cost utility.

Cost benefit analysis

- Cost benefit analysis attempts to put a money value on all the benefits and disbenefits that come from a proposed action. Thus a positive value might be put on 'feeling better' or a negative value put on the scaring effect of an operation. It is a controversial method and not usually within the resources of a COPC programme.

(For more detail on costing measures, see Robinson R (1993, 11 Sept–9 Oct))

Opportunity cost

- Opportunity cost is a measure of what else you could do with the same resource. If a nurse is employed for 20 hours a week on a COPC programme, that nurse is not employed on something else.
- Opportunity cost is a very important concept for any COPC programme since any PHCT initiative will divert resources from some other work.

NOTE

- All these measures must deal only with changes attributable to the intervention and not to other factors.

PRESENTER'S MATERIALS

2 PHCT TASK
WRITING AN EVALUATION PLAN

○○○ PURPOSE

- For PHCTs to produce a first draft of their evaluation plans.

!!! POINTS TO MAKE

- Show OH 7.16.

OH 7.16 Small-group task – Evaluation plan

Issues

- **Who is it for?**
- **What questions will the report answer?**
- **When will the data collection cut-off date be?**
- **Who will analyse the data?**
- **What facilities or expertise will be needed?**
- **Who will write the report?**
- **When will the report be ready?**

Format

- **Present your plan on a flipchart sheet.**

- Remind participants that the overhead shows the checklist for an evaluation plan. It is repeated in the *Participants' Task Notes.*
- Ask them to write the first draft of their plan.
- Suggest that they spend most of their time on:
  - who the plan is for
  - what questions the evaluation will answer.
- If they have enough time, participants could sketch out a draft of their report showing the sort of sections, tables, graphs, statistics, etc. which they expect it to contain.

3 FEEDBACK ON PHCT TASK

!!! POINTS TO MAKE

- Ask each group to present their evaluation plan.
- Ask the participants to try to think of questions which they would expect the evaluation to answer.
- Ask the group producing the plan:
  - to say whether they do or do not expect to be able to answer those questions
  - for the questions which they do expect to answer, to explain how their evaluation will answer them.
- If time permits, ask each group to outline what they think they might do once they have their evaluation reports:
  - what decisions might they make?
  - what actions might they take?

○○○ FOR YOUR GUIDANCE

- The purpose of the two questions in the last bullet point above is to make sure that PHCTs do not design evaluation for its own sake. They need to have a good use for all the data which they collect.

PRESENTER'S MATERIALS

CHANGING BEHAVIOUR

Session 8

PRESENTER'S MATERIALS

SESSION AIMS

By the end of this session, participants should be able to:

- explain why behaviour change is important to a COPC programme
- explain why behaviour change is difficult
- list the conditions needed for behaviour change
- explain the impact of locus of control on behaviour change
- list and apply the steps in behaviour change
- explain the importance of self-efficacy on behaviour change and identify ways to increase self-efficacy
- explain the effect of environmental issues on behaviour change
- plan and implement a behaviour change programme with a patient.

NOTE ON USE OF THIS SESSION

This session on 'Changing behaviour' is not part of the COPC cycle and is not essential to the workshops for planning COPC. However, the skills and knowledge in it are important in many interventions. You will need to discuss with your participants if and when they need this session.

NOTE ON ETHICS

You may, in this session, be challenged about the ethics of changing a person's behaviour. It will become clear, as the session progresses, that we only discuss how to help people make changes which they have chosen for themselves. No part of this session is concerned with coercion or manipulation of patients.

SESSION STRUCTURE

1 THE NATURE OF BEHAVIOUR CHANGE

Presentation: Why is behaviour change difficult?
Presentation: The conditions for change
Presentation: Health locus of control
Presentation: Stages in behaviour change
Presentation: The need for self-efficacy
Presentation: Environmental influences

2 IMPLEMENTING BEHAVIOUR CHANGE

Presentation: Introduction
Presentation: Step 1: Decision making
Presentation: Step 2: Goal setting
Presentation: Step 3: Monitoring
Presentation: Step 4: Intervention
Presentation: Step 5: Evaluation
Presentation: Step 6: Maintenance and relapse

3 PHCT TASK: PLANNING A BEHAVIOUR CHANGE

Presentation: Setting the task

PART 4: FEEDBACK ON PHCT TASK

Feedback: PHCT presentations

PRESENTER'S MATERIALS

SESSION CHECKLIST

Before you start this session, check that you have prepared or have available the following.

- [ ] Worked through this *Guide* in detail
- [ ] Large room for the full-group sessions
- [ ] Small rooms for small-group work – one room per PHCT plus rooms for any other groups such as the FHSA
- [ ] The overhead transparencies for *Changing behaviour*
- [ ] An overhead projector
- [ ] Spare bulb for the projector
- [ ] Screen
- [ ] Flipchart stand and pad – check for clean pages
- [ ] Flipchart pens – check that they work
- [ ] Blu tack
- [ ] Copies of Participants' Task Notes: *Changing behaviour*

1 THE NATURE OF BEHAVIOUR CHANGE

WHY BEHAVIOUR CHANGE IS IMPORTANT

PURPOSE

- To introduce behaviour change skills.

  Some public health programmes can impose benefits on people without them having to change (e.g. the provision of clean water). Invariably COPC projects require some behaviour change on the part of the patient. Unless the PHCT has the skills to assist in that behaviour change, the goals of the COPC programme will not be achieved.

!!! POINTS TO MAKE

- Knowledge of 'correct' health behaviour does not always produce that behaviour, e.g.
  - many smokers know the risks of smoking but do not stop smoking
  - drivers who do not wear seat belts may well be fully aware of what will happen to an unrestrained driver in an accident
  - people who are overweight may be aware of the implications for their health but take no effective steps to reduce their weight.
- Knowledge and behaviour can be out of step for many reasons.
- Show OH 8.1.

OH 8.1 Why behaviours may persist

- **Reinterpreting data in personal terms.**
- **Rewards of present behaviour.**
- **Benefits too long term.**
- **Social pressure.**
- **Belief that change will have no effect.**
- **Belief that 'I cannot change'.**

PRESENTER'S MATERIALS

Reinterpreting data in personal terms

- It is possible for a person to reinterpret established facts in a way which makes those facts irrelevant to that person (e.g. an anorexic may deny the benefits of a nutritious diet: 'It wouldn't be good for me').

Rewards of present behaviour

- The present behaviour must be rewarding in some way, otherwise it would be easy to change. That reward inhibits change. For example, the smoker gets pleasure from the immediate effects of smoking; this reward is large enough to overcome the disbenefits of coughing or shortness of breath.

Benefits too long term

- Many risky health behaviours have no pressing immediate ill effects. Heavy drinking is, to the drinker, pleasurable. The long-term risk of disease is too far away to motivate a change in behaviour now.

Social or environmental pressure

- The individual may find it difficult to change behaviour in a way which requires him/her to stand out from the group. If a person's work group always has lunch in the pub and the convention is that alcoholic drinks are the norm, to refrain from going to the pub or from drinking alcohol is difficult.

Belief that change will have no effect

- An individual may agree that brushing one's teeth reduces dental decay and maintains gums, but may argue that 'In my case, it won't make any difference – my family have always had bad teeth'.

Belief that 'I cannot change'

- Finally, even if all the other arguments are overcome, a person may still maintain that he/she is unable to change. 'I haven't got the will power'; 'I've tried to give up smoking three times already'.

What all this demonstrates is that telling people what is good for them is not an effective health change strategy. This session looks at other, more effective ways of changing behaviour.

DISCUSSION POINT

- Ask the group for examples of:
  - people who have resisted help with behaviour change
  - the reasons that these people have given.

THE CONDITIONS FOR CHANGE

○○○ PURPOSE

- To introduce the four conditions which are necessary for behaviour change to take place.

!!! POINTS TO MAKE

- Show OH 8.2.

OH 8.2 Conditions for change

- **Want to change.**
- **Believe you can change.**
- **Believe change will have the desired effect.**
- **Know how to change.**

Source: Jacob & Plamping (1989), p 81

Want to change

- This session deals with helping people change who want to change. Perhaps therefore we should talk here about 'wanting enough to change'.

Believe you can change

- If a person is convinced that he/she is incapable of change, then no change will occur. However, their belief may be tied to the amount of change to be attempted. A person may believe that he/she could not stop drinking, but might believe that he/she could have two alcohol-free days a week.

Believe change will have the desired effect

- Change requires effort; that effort will not be expended unless the patient believes that the promised outcome will be delivered. An overweight patient who is tired and breathless may not reduce food intake and increase exercise unless he/she believes that he/she will feel better as a result.

Know how to change

- Although knowledge alone will not effect change, change needs knowledge. This might be knowledge of the disease itself (e.g. How many beers is one unit?), or knowledge of how to plan and implement change (e.g. What should I do in the first week? How can I stop my pals getting me back into bad habits?).

PRESENTER'S MATERIALS

HEALTH LOCUS OF CONTROL

PURPOSE

- To enable participants to apply the term 'health locus of control'.

!!! POINTS TO MAKE

- Show OH 8.3.

OH 8.3 Health Locus of Control (HLOC)

High — Low

Internal HLOC

High — Low

External HLOC

Internal HLOC

- If someone believes that their own behaviour will affect their health, then they have a high internal HLOC. If a person believes that, whatever they do, it will make no difference to their health, then they have a low internal HLOC.
  - Mary has been told that her blood pressure is too high. She has asked for advice on diet and already enrolled at the local keep-fit class. Clearly, Mary believes that she can get her blood pressure down. Mary has a high internal HLOC.
  - Jack has also been told that his blood pressure is too high. 'So what,' he said, 'My father was always fussing about his blood pressure and he still died of heart disease. It's just one of those things.' Jack has a low internal HLOC.
- Some people are fatalistic about life and see health outcomes as just a matter of chance.
  - Alice smokes 20 cigarettes a day. She knows about cancer and cigarettes, but points out that some smokers never get cancer, yet some non-smokers die of lung cancer. 'If it's going to get you, it will.' Alice has a low internal HLOC.

External HLOC

- There are some people who look to the PHCT to keep them healthy.
  - Bill smokes, drinks heavily and is overweight. He has no intention of changing any of these habits, but he is always in the surgery expecting the doctor to cure his many health problems. 'That's what you are here for: to put me right.'

General points

- There is no 'correct' HLOC which people should have. A person living in poverty and bad housing, caring for a bed-ridden relative might rightly have a low internal HLOC. Similarly, a person who has just been run down by a runaway bus and needs urgent surgery will have a high external HLOC.
- The overall point about HLOC is that it tells you what the patient believes to be true. It tells you nothing about whether that belief is valid or not.
- In most cases, it will not be possible for a PHCT to make any significant shift to a patient's HLOC. Despite this, *understanding* the nature of a patient's HLOC may help in deciding how to approach and help the patient generally.

DISCUSSION POINTS

- Ask the group to give examples of:
  - patients with high and low internal HLOC
  - patients who refuse to make any efforts to improve their own health.
- Ask what the group sees as the implications for COPC in these cases.

STAGES IN BEHAVIOUR CHANGE

PURPOSE

- To introduce the Prochaska & DiClemente model of behaviour change.

!!! POINTS TO MAKE

- Show OH 8.4.

OH 8.4 Stages in behaviour change

1 Pre-contemplation

2 Contemplation

3 Action

4 Maintenance

5 Relapse

Source: Prochaska & DiClemente (1982), p 83

FOR YOUR GUIDANCE

- The stages can be illustrated by the example of someone giving up smoking.
- Here you need only clarify the stages; they will be dealt with in more detail in Section 2 on planning a change programme for a patient.

PRESENTER'S MATERIALS

!!! POINTS TO MAKE

Pre-contemplation

- At this stage, the person is not aware that he/she has a problem.
- Others, though, might be pointing out the problem.

Contemplation

- The smoker begins to recognise that he/she has a problem.
- He/she thinks about the problem – is it bad enough to need action? What action might I take? Who could help?
- In this stage, the smoker might discuss his/her problems with others, including those who have previously been smokers.

Action

- The action stage is when the attempt to change behaviour takes place.
- It can include: seeking advice; joining a support group; using a nicotine patch; keeping charts of progress.

Maintenance

- Once the smoker has reached the desired level of performance (say, zero smoking), he/she has to keep to that level.
- This may involve special strategies for recognising a high risk situation (e.g. 'When I go to the pub with the bowls team, there's always a lot of smoking') and designing strategies for dealing with them (e.g. 'When the game is finished, I will remind the team that they must not let me have a cigarette even if I ask for one in the pub').

Relapse

- Despite a patient's best efforts, relapses do occur and patients need to be warned that this can happen.

THE NEED FOR SELF-EFFICACY

○○○ PURPOSE

- To introduce the concept of self-efficacy and its value in health behaviour change.

!!! POINTS TO MAKE

Self-efficacy

- Self-efficacy is the belief in your own ability to effect change. Patients with low self-efficacy will find it hard to make changes because they lack confidence in their capacity to determine what happens to them.

- Self-efficacy is closely related to self-confidence and self-esteem.
- Where patients have low self-efficacy, it may be necessary to help them raise it. This can be done as follows.

Vicarious experience

- Trying to help the patient remember or recognise someone else who made the change. 'If they did it, then so can I.'

Verbal persuasion

- This can involve:
  - showing confidence in the patient: 'I'm sure you can do it'
  - trying to help the patient recognise past successes. 'If you were able to train for that new job, then you must have a lot of determination.'

Successful practice

- Success breeds confidence. It is particularly important that a person with low self-efficacy does not have further experiences that will reinforce his/her poor self-image.
- Ambitious goals will not be achieved; instead they add to the patient's record of failure. Setting realistic, achievable goals will ensure successful practice and boost self-efficacy.

Feedback

- Getting physical feedback which tells you that you are doing something right increases self-efficacy (e.g. the 'feel good' factor in exercise which fuels the desire for more exercise).

ENVIRONMENTAL INFLUENCES

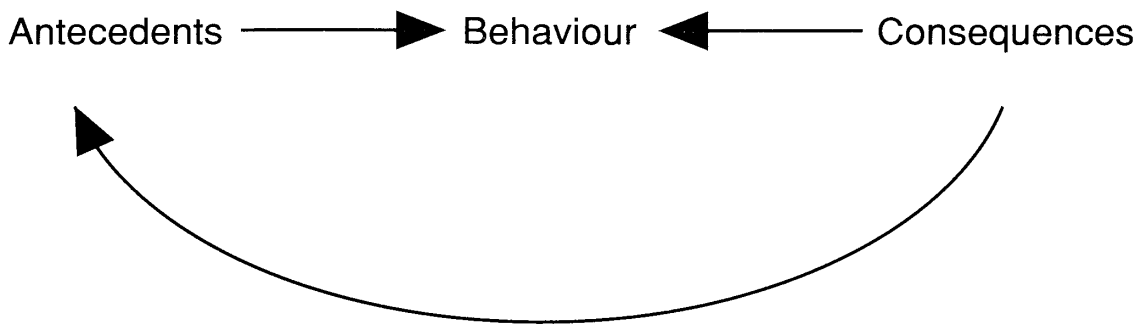
○○○ PURPOSE

- To introduce the importance of environmental influences on behaviour.

!!! POINTS TO MAKE

- Show OH 8.5.

OH 8.5 The influence of environment on behaviour



Source: Jacob & Plamping (1989), p 85

Antecedents (or cues)

- Antecedents are those events that trigger the behaviour, e.g.:
  - keeping the tea and biscuits on the same shelf
  - joining a group of smokers at a work break, rather than a group of non-smokers
  - buying a newspaper at a sweets-and-news stand rather than a news-only stand.

Consequences

- The consequences are the outcome of the behaviour. These will be pleasurable (the intake of smoke, the sweetness of the biscuit with the cup of tea). Hence they reinforce the antecedents. 'If I get pleasure (the sweet taste of the biscuit) when I make a cup of tea, then I will do so again.' Note that although consequences are an outcome of behaviour, they also influence behaviour. That is why, in OH 8.5, there is an arrow pointing from consequences to behaviour.
- We are discussing behaviours that people wish to change. This can make all *antecedent —> behaviour <— consequence* sequences seem bad. In fact, desired behaviours follow the same pattern. We need the good consequence to reinforce our behaviour pattern. For example, a parent praises (desired consequence) good school work in a child, thereby reinforcing the child's will to work hard at school.
- Consequences are a form of reward. They can be tangible (e.g. allowing yourself a meal out after a week of not smoking) or intangible (e.g. praise from your family). They can also be internal (e.g. feeling good about your lost 8 lb) or external (e.g. the doctor praising you for losing 8 lb).
- Early rewards in behaviour change are likely to be tangible and external. If the change is to become permanent and self-maintained, the rewards are likely to become intangible and internal.

2 IMPLEMENTING BEHAVIOUR CHANGE

INTRODUCTION

PURPOSE

- To provide an overview of the six steps in behaviour change.
  (The six steps are then dealt with in more detail in the subsequent sections.)

!!! POINTS TO MAKE

- Show OH 8.6.

OH 8.6 Behaviour change steps

1 Decision making
2 Goal setting
3 Monitoring
4 Intervention
5 Evaluation
6 Maintenance/relapse

- The overhead sets out the six steps in a behaviour change programme.
- This section takes the group through these six steps, showing how they can use them with patients.

Individuals v groups

- Most of the rest of this session refers to work with individuals. Behaviour change can also be very effective in groups – sometimes more effective. Practices that are able to organise group sessions should be encouraged to do so.

STEP 1: DECISION MAKING

PURPOSE

- To explain how to help patients make a decision to change behaviour. This process corresponds to the precontemplation and contemplation stages of the Prochaska and DiClemente model.

PRESENTER'S MATERIALS

!!! POINTS TO MAKE

- Show OH 8.7.

OH 8.7 Decision-making aims

- **To help patient make a commitment to change.**
- **To increase self-efficacy.**
- **To increase internal HLOC.**

To help patient make a commitment to change

- At this stage, the patient may be unaware of the need to change, or have made no commitment to change. For example, the patient may have been identified as at high risk in a CHD programme and you may just be starting to discuss the implications of this with the patient.

To increase self-efficacy

- Some patients will have problems in making a commitment because they have low self-efficacy. Where this is the case, you need to boost their self-efficacy through such things as:

  – showing that you care for them, value them and accept them, for example, by asking for their opinions and ideas. 'In what situations do you think you find you do not need to smoke?' 'Why do you think this is so?'

    This is called using your 'referent power'. The patient may try to get you to make all the decisions ('You know best, doctor'). You should resist this since it supports the patient's low self-efficacy.

  – challenging the patient's low self-perception in order to build up their self-confidence. For example, a patient may say, 'I haven't any will-power. I can never stick at anything.' You might challenge this by pointing out things which they have achieved which show persistence (e.g. bringing up children, caring for an elderly relative or succeeding in a job).

  – showing that you have high expectations of them. 'I'd expect someone like you to be very successful in keeping to a new diet.' 'You're just the sort of person who I would expect to make a good job of cutting down smoking.' The point here is that people tend to rise to others' expectations of them. It is the reverse of 'give a dog a bad name'.

    You need to balance this need for confidence in the patient with the need to set very small goals at the start. You need to show confidence in the patient in what you say, but should not set targets based on that level of confidence.

  – providing positive role-models. This is not easy to do with individual patients since you may not know who they know. It can be done in group work. The idea is to highlight someone whom the patient might identify with and wish to emulate.

To increase internal HLOC

- A low HLOC falls into two parts:
  - feelings of inadequacy; these are aspects of self-efficacy and have been covered above
  - a patient's belief that he/she is in some way different from others; this aspect is dealt with here.
- Some patients simply believe that whatever they do (and perhaps whatever you do in the way of treatment), it will have no effect. 'I've just got weak teeth'; 'All my family get heart disease'. You have to counter this by appropriate reasoned argument, e.g.:
  - showing the patient case histories of others with the same problem, explaining how the actions they took contributed to their improved health state
  - giving the patient more information about the prognosis of the disease in cases like his/hers. 'True, your blood pressure won't get back to what it was when you were 20, but I am sure that you can get it down to ... by .... Then you won't have all this trouble with breathlessness and tiredness.'
- As with self-efficacy, it is important to get the balance right between using your expert power ('I know what the cause of your ulcers is') and your referent power ('Why do you think you find it difficult to lose weight?'). The more you can use your referent power (as opposed to your expert power), the more you will boost the patient's HLOC.

STEP 2: GOAL SETTING

○○○ PURPOSE

- To show participants how to help their patients set behaviour change goals. (The principles here are just the same as participants met when they used 'ARMPITS' to set their COPC objectives.)

!!! POINTS TO MAKE

- Start by reminding the group of 'ARMPITS'. For behaviour change, the 'S' stands for 'specific' and not 'supported by team' as it was in the previous sessions.
- Show OH 8.8.

OH 8.8 Goal setting

A Appropriate

R Realistic

M Measurable

P Positive

I Important to the patient

T Time-related

S Specific

- Once a patient has decided that he/she wants to make a health change, the next task is to agree a short-term goal or goals.

Appropriate

- The initial goals are likely to be very small steps (e.g. one less drink on one day next week; ten minutes' exercise next week). Initially, these goals may seem too trivial to be worthwhile. It is your job to keep the long-term goal in view (e.g. getting down to 21 units of alcohol a week; stopping smoking) and make sure that the tiny goals are appropriate steps towards that goal.

Realistic

- You have seen how difficult people find making changes. Too big a goal invites failure, whereas most of your COPC patients will desperately need success. So the goal must be something the patient can achieve with his/her current internal HLOC and self-efficacy:
  - *not*: 'Take ten minutes' exercise each day' *but:* 'Walk to work one day next week'.
  - *not*: 'Only one spoon of sugar in each cup of tea' *but:* 'One sugar-free drink one day next week'.

Measurable

- Both you and the patient need to be able to know if the goals are being achieved – they need to be measurable:
  - *not*: 'Cut down smoking next week' *but:* 'Reduce to 20 cigarettes a day next week'.
  - *not:* 'Eat fewer biscuits' *but:* 'One tea break without a biscuit next week'.

Positive

- Try not to count the undesired behaviour; this can be depressing. Instead, count the desired behaviour.
  - 'One alcohol-free day' instead of 'Six days with alcohol'.
  - 'One lunch without chips' rather than 'Eat chips four days out of five'.

Important to the patient

- You are not setting the goals: the patient is, with your help. While your expert knowledge is needed to decide whether the short-term goal is appropriate to the long-term goal, the patient must decide whether the goal is worth bothering with.
- You must help the patient find something that he/she will feel pleased about. 'Suppose you had a good week next week, what would that mean?' 'What would "progress" mean to you?'

Time related

- Make sure that the patient agrees by when the goal is to be achieved.
- 'Reach one alcohol-free day per week' could take for ever. 'One alcohol-free day per week by the end of February' is a very clear, time-related target.

Specific

- Patients need to avoid goals like 'Eat more salads'. What is 'more': one lettuce leaf?

STEP 3: MONITORING

PURPOSE

- To demonstrate how to help patients monitor the progress of their behaviour change.

!!! POINTS TO MAKE

- Show OH 8.9.

OH 8.9 Monitoring

- **Establish baseline.**
- **Design the records.**
- **Measure the positive behaviour.**
- **Keep same measure throughout programme.**

Introduction

- Once the patient has committed himself/herself to a goal, he /she needs to be able to measure progress towards that goal.
- The starting point is the baseline measure, just as it was when you carried out your community diagnosis. That was a community baseline; this is a baseline for one patient.

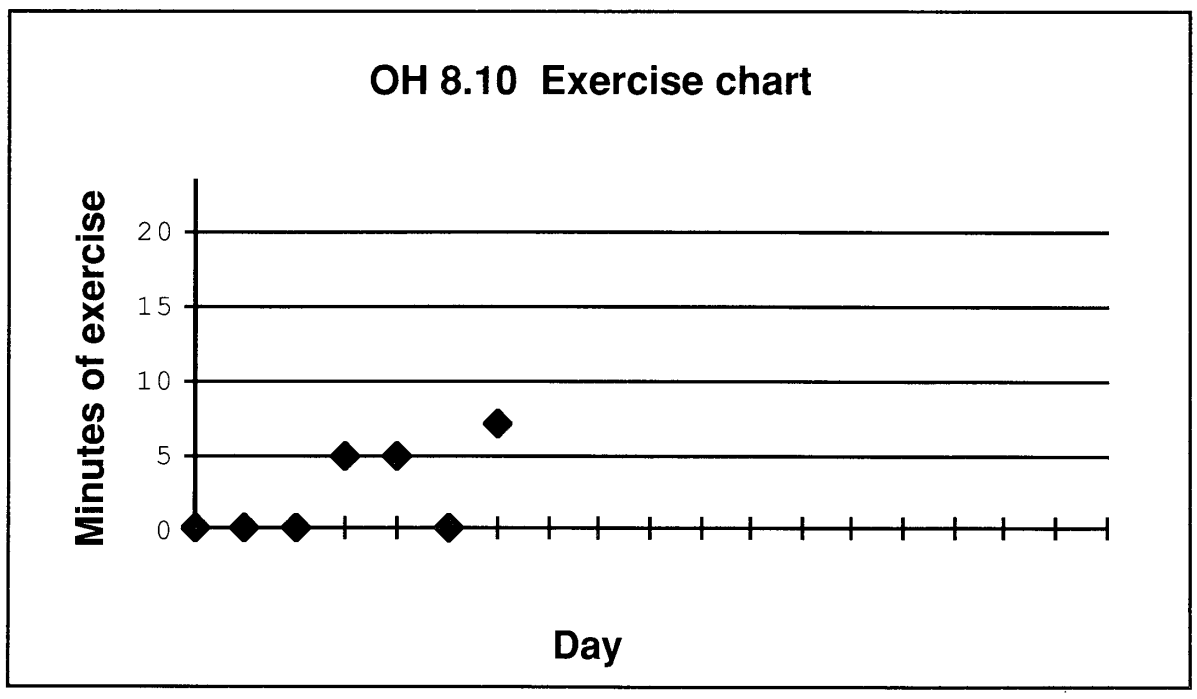
PRESENTER'S MATERIALS

Establish baseline

- The patient needs to know now what his/her current health behaviour is. Before attempting any change, the patient should record the relevant behaviour for a few days to a week, e.g.:
  - cigarettes smoked per day
  - dietary intake
  - exercise taken.
- The exact form of this recording will be determined by the recording format.
- Note that while the recording system will go on to emphasise the positive, desired behaviour, the baseline must record the exact level of desired and undesired behaviour.

Design the records

- The records are going to be kept by the patient so they need to be simple and clear.
- The records should enable the patient to record success, e.g.:
  - minutes of exercise taken each day
  - sugar-free drinks taken each day
  - number of waking hours in the day when I did not smoke.
- Try to find a clear visual display that helps to show progress to the patient.
- Show OH 8.10 as an example.



Measure the positive behaviour

- Make sure that the patient is recording success. If the goals are positively expressed, then this should follow automatically:
  - *Goal:* Ten minutes' exercise per day.
  - *Measure:* Number of minutes' exercise on each day.

Keep same measure throughout programme

- It is important that the same measuring and recording system is used throughout the programme. If this is not done, the patient may lose sight of progress. So, even though the first goals may be tiny, you need to keep the long-term goal in mind when agreeing the measuring and recording system.

STEP 4: INTERVENTION

○○○ PURPOSE

- To show participants how to plan a behaviour change intervention.

!!! POINTS TO MAKE

- Remind the participants that, by this stage, the patient will have identified the antecedents in his/her behaviour pattern:

  Antecedent ⟶ **Behaviour** ⟵ **Consequence**

  e.g. 'I always smoke if I go into a pub'
- The task now is to decide how to tackle the link between the antecedents and the consequences.
- Show OH 8.11.

OH 8.11 Tackling antecedents and consequences

Antecedents

- **Avoid them**
- **Change them**

  (i.e. establish new cues).

Consequences

- **Establish effective consequences.**

Avoiding antecedents

- For some patients, avoiding the antecedents may help to break the behaviour pattern. If a patient always smokes when going to the pub, finding another social activity – especially one where smoking is prohibited – may be the answer.

Changing the antecedents

- A patient who always goes to work by car could arrange to go to work with a colleague who walks. The new cue ('go to work with colleague') triggers the behaviour 'walk'.

Establish effective consequences

- Any new behaviour pattern must have satisfying consequences, otherwise it will not be sustained, e.g.:
  - a patient might give up smoking. If he/she gets no satisfaction out of that, then relapse is quite likely. However, if the consequences of not smoking include enjoying sport more and finding that food tastes better, then the new behaviour pattern is more likely to be sustained.
  - you will need to discuss rewards with the patient. Initially, these may be rewards that the patient gives himself/herself (e.g. 'If I have two drink-free days this week, I will buy myself that CD I want'). Later, the rewards are more likely to be intrinsic to the changed health state (e.g. feeling better or looking more attractive).
- What you are jointly seeking is something that:
  - the patient would voluntarily choose
  - initially, at least, a reward that the patient can receive daily or weekly (e.g. spouse cooks dinner as a reward for that day's exercise)
  - offers social reinforcement so that the patient is not dependent on his/her resources only. For example, the family agree to provide praise and rewards in response to the improvements which they can see on the recording chart. Keeping the chart in a public place (e.g. in the kitchen) helps remind the family of the need for social reinforcement.

STEP 5: EVALUATION

○○○ PURPOSE

- To explain the need to review, with the patient, the patient's progress.

!!! POINTS TO MAKE

- You and the patient will need to review progress from time to time.
- Use the patient's own recordings for this, supplementing them with your own expert assessment of the patient's health state. Let the patient lead. 'I'm glad that you feel you are making progress; your blood pressure's down too.'
- Use the reviews to amend the programme if you and the patient think a change is needed. This could be to:
  - make the programme more relevant to a change in the patient's needs
  - make the goals more realistic
  - make the goals more demanding.

STEP 6: MAINTENANCE AND RELAPSE

○○○ PURPOSE

- To explain why relapses in behaviour change will occur and how to respond to them.

!!! POINTS TO MAKE

- Relapses can occur. If the patient is aware of this, the patient may be more willing to continue trying.
- The commonest triggers of relapse are shown on OH 8.12.
- Show OH 8.12.

OH 8.12 Relapse triggers

- **An event that triggers a low emotional state.**
- **Interpersonal problems.**
- **Social pressure.**

An event that triggers a low emotional state

- Unexpected, unwelcome events such as accidents, burglaries or job loss can make anyone feel low. At such times, we are more likely to relapse into familiar patterns of behaviour. If a patient returns to the familiar, this is very likely to include the old behaviour in the COPC programme.

Interpersonal problems

- Family rows or problems with people at work have the same effects as unwelcome events.

Social pressure

- Social pressure is most likely to trigger a relapse when the pressure catches the patient unawares. For example, the patient goes away on business for a few days and finds that most of the business takes place in restaurants and bars. Drink and diet programmes may well suffer relapse under this pressure.
- Your role in all cases of relapse is to:
  - accept the relapse as normal and not as an indication of weakness on the patient's part.
  - help the patient to talk the relapse through and so see what he/she can learn from it. Does the experience suggest that a change is needed to the programme?
  - help the patient re-establish short-term targets.

PRESENTER'S MATERIALS

3 PHCT TASK: PLANNING A BEHAVIOUR CHANGE PROGRAMME

○○○ PURPOSE

- To practise the skills of planning behaviour change.

  (Since planning behaviour change can only be done in relation to a real patient, this task cannot be part of the practices' COPC plans.)

!!! POINTS TO MAKE

- Show OH 8.13.

OH 8.13 Small-group task – Planning behaviour change

- **Work in groups of twos or threes.**
- **Think of two patient types for whom behaviour change is appropriate.**
- **Decide what you should do to improve the patient's self-efficacy and internal HLOC.**
- **Plan a behaviour change programme, including goals and records.**
- **Present your programme back to the group on a flipchart.**

The groups

- Try to make sure that the groups are multi-functional (e.g. nurse, GP and health visitor).

The patient/patient behaviour

- The task probably works best if the groups think of particular patients.
- They should only choose cases who are likely to respond to an offer of a COPC intervention. Do not pick the hopeless or totally fatalistic.

Plan the programme

- This can only be done in a limited sense since a *real* plan includes patient negotiation.

The output

- A change plan on a flipchart to present to the full group.

4 FEEDBACK ON PHCT TASK

!!! POINTS TO MAKE

- Ask each group to present their behaviour change plan.
- Ask them:
  - which parts they found most difficult or have least confidence in
  - whether this is because there is no real patient to negotiate with.
- Try to concentrate the discussion on:
  - the realism of the goals and how well the goals meet the ARMPITS criteria
  - the simplicity and clarity of the recording
  - the likely effectiveness of the new consequences in the intervention – will the consequences really motivate the patient to keep trying?

PRESENTER'S MATERIALS

TOOL BOX 1

DATA ANALYSIS METHODS

PRESENTER'S MATERIALS

DATA ANALYSIS METHODS

Averages – the mean

Represents: The average of a group of numbers. Unless the data have some untypically high or untypically low items, this is a reliable measure.

Calculate by: $\bar{x} = \frac{\Sigma x_i}{n}$

Where: $x_1, x_2, x_3, \ldots x_n$ are the items of data

n = the number of items of data.

Averages – the median

Represents: The middle item of a group of numbers when they are arranged in order. When the data have some untypically high or untypically low items, this can be a better measure to use than the mean.

Calculate by: Putting the data into order. The median is the middle item, i.e. the $\frac{(n+1)}{2}$ th item.

Where: n = the number of items of data.

Averages – the mode

Represents: The commonest item of a group of numbers. It is usually used when the data are in categories or a small number of classes (e.g. the modal blood group is O).

Calculate by: Find the category with the most members. That is the modal value.

Measures of spread – standard deviation

Represents: A measure of how much the data spread out around their mean.

Use for:

(a) comparing two sets of data to see whether one is more variable than the other – see coefficient of variation below

(b) for finding confidence intervals – see below

(c) for establishing whether a result is statistically significant – see below.

Calculate by: $s = \sqrt{\frac{\Sigma(x - \bar{x})^2}{n - 1}}$

or by: $s = \sqrt{\frac{\Sigma x^2 - (\Sigma \bar{x})^2 / n}{n - 1}}$

The latter formula is easier to use since it avoids having to subtract the mean from each item of data.

Standard error of sample mean

Measures: When you take samples of data from a population, you expect their means to vary. The standard error is a measure of how much variation you can expect in the means.

Use for: (a) calculating confidence intervals – see below

(b) tests of significance – see below.

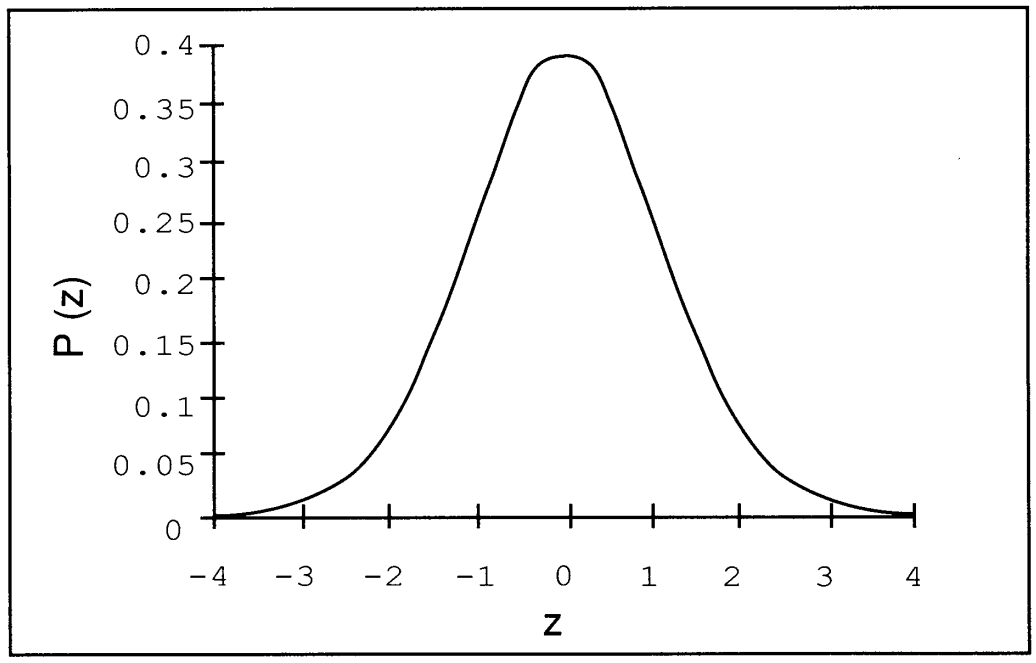
Calculate by: $= \frac{s}{\sqrt{n}}$

Where: s = sample standard deviation

n = number of items in the sample.

Normal distribution

Describes: Samples taken from a population in which an attribute is randomly distributed all tend to have the same shape: that of the *normal distribution* (see diagram below). Attributes such as weight and height are usually normally distributed.



Purpose: You can convert your data into *standard normal* form, that is into a *normal distribution* with mean 0 and standard deviation 1. This then allows you to find how statistically significant your sample mean is from the estimated population mean.

Calculate by: $z = \frac{x - \mu}{s/\sqrt{n}}$

Where: z = standard normal variable

x = your sample mean

μ= your estimate of the population mean

s = sample standard deviation

n = number of items in the sample.

PRESENTER'S MATERIALS

Confidence intervals for means (large samples)

Purpose: Once you have your sample mean, the confidence interval tells you the likely range within which the true population mean lies.

Calculate by: $\bar{x} \pm (z' \times s/\sqrt{n})$

Where: $\bar{x}$ = your sample mean

s = your sample standard deviation

n = the number of items in your sample; n must be > 30.
If $n \leq 30$, then use the small-sample method below.

z' depends on the degree of confidence that you require, with:

95% confidence: $z' = 1.96$

99% confidence: $z' = 2.58$.

Confidence intervals for means (small samples)

Purpose: To find the likely range within which the true population mean lies when you only have the mean of a small sample ($n \leq 30$).

Calculate by: $\bar{x} \pm (t' \times s/\sqrt{n})$

Where: $\bar{x}$ = your sample mean

s = your sample standard deviation

n = the number of items in your sample

t' depends on the degree of confidence that you require and on something called 'degrees of freedom'. The number of degrees of freedom is n - 1. You look up your value of t' in a t-distribution table, using a combination of the number of degrees of freedom and the degree of confidence that you want.

Significance tests of means – one-tailed test

Tells you: Whether the sample you have shows that the mean of the population is significantly larger (or smaller if you put μ - x below) from its previously assumed value.

Calculate by: $$z = \frac{x - \mu}{s/\sqrt{n}}$$

where:

x = sample mean

μ = assumed population mean

s = sample standard deviation

n = sample size.

If $z > 1.64$, then the difference is statistically significant at the 5% level.

Sample sizes for tests of means

Population size	95% confidence interval	90% confidence interval
	Sample size	Sample size
50	44	42
100	80	73
150	108	97
200	132	114
250	152	130
300	169	143
350	183	153
400	196	162
450	207	169
500	217	176
600	234	187
700	248	195
800	260	202
900	269	208
1000	278	213
1500	306	229
2500	322	238
3000	341	248
4000	351	254
5000	357	257

Source: *Audit Matters* No. 5, Summer 1993, Mid Glamorgan Medical Audit Advisory Group, pp 1–2

Chi-squared test

Use for: Comparison for data in categories where you wish to:

(a) compare observed numbers with expected numbers

(b) test whether one variable is dependent on another in a contingency table.

For (a)

Calculate by: $$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where: O_i = the ith observed value

E_i = the ith expected value.

Look up: χ^2 in a Chi-squared table, taking into account the number of degrees of freedom.

If the expected values where calculated without using the sample values, the number of degrees of freedom = n - 1, where n = the number of pairs of values. If you had to use the sample data to find the expected values, then finding the degrees of freedom is more complex.

Warning: If the degrees of freedom turn out to be 1, then you will need to use Yate's correction on your data.

Pearson Product Moment Correlation

Purpose: To find out whether pairs of numbers (e.g. height and weight) vary together or entirely independently of each other.

Calculate with:

$$r = \frac{n\Sigma xy - \Sigma x \Sigma y}{\sqrt{(n\Sigma x^2 - (\Sigma x)^2)(n\Sigma y^2 - (\Sigma y)^2)}}$$

Where: x and y are the data pairs

n = the number of data pairs.

Interpretation: To find out whether your value of r is significantly different from zero, calculate:

$$t = r\frac{\sqrt{n-2}}{1-r^2}$$

which has a t-distribution with n - 2 degrees of freedom. You can then use the t-distribution table to find out the level of significance.

PRESENTER'S MATERIALS

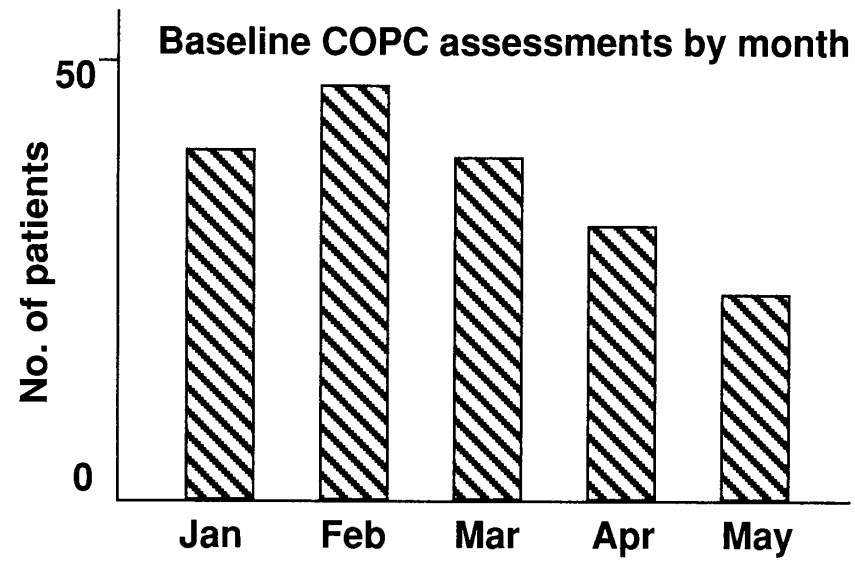
TOOL BOX 2

DATA DISPLAY METHODS

PRESENTER'S MATERIALS

DATA DISPLAY METHODS

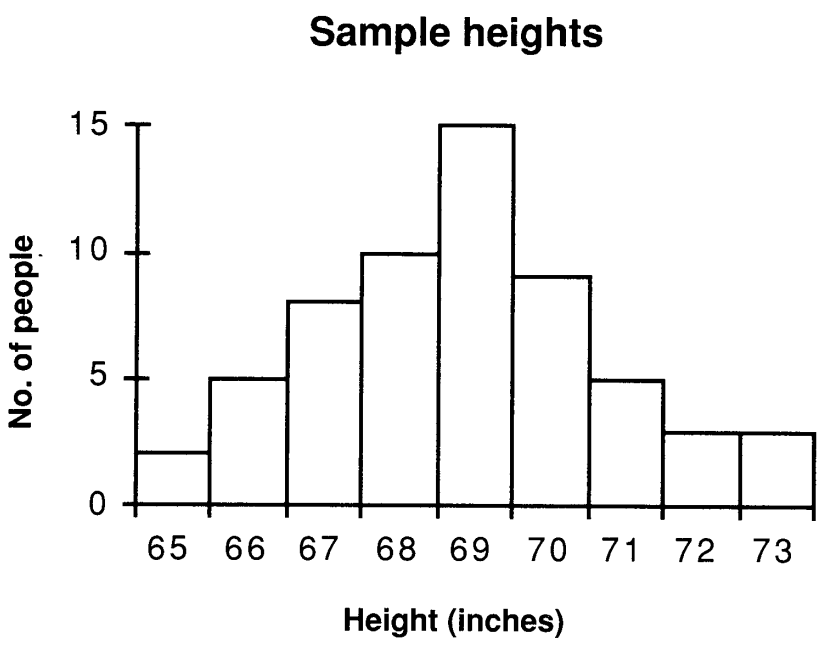
Bar charts



Use for:

- Displaying the frequency of data which come in categories (e.g. months, skin types, blood groups).

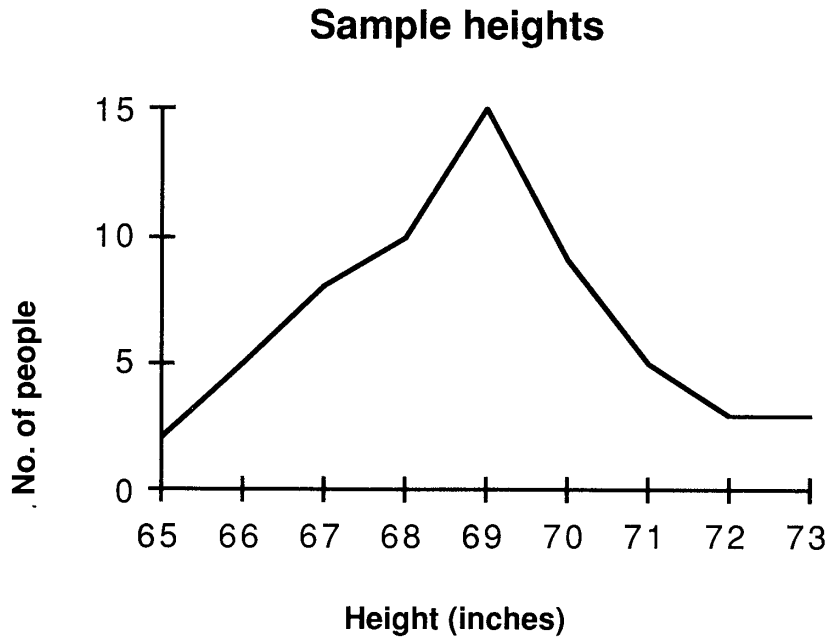
Histograms



Use for:

- Displaying frequencies of data where the variable is numerical but comes in blocks (called 'classes') (e.g. 65.5 to 66.5). There should be no gaps between the classes. Histograms are used for continuous data such as weights, heights and blood pressure.

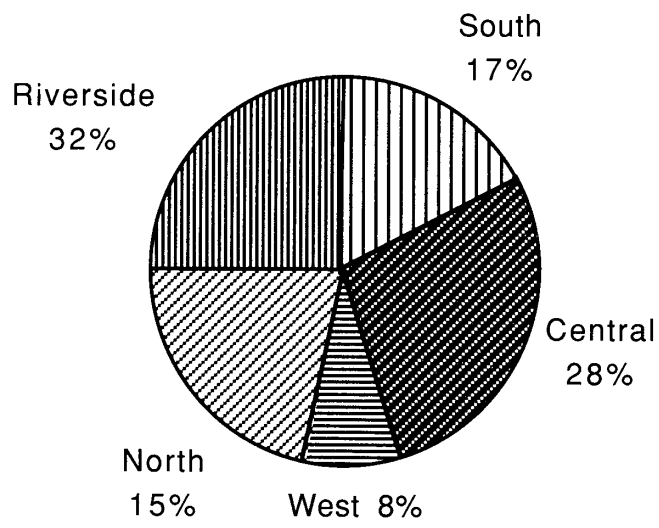
Line graphs



Use for:

- Displaying frequencies of data where the variable is numerical but has not been divided into classes (e.g. weights, heights, blood pressure).

Pie charts



Use for:

- Displaying relative frequencies of data where the variable comes in categories (e.g. housing type, social class).

PARTICIPANTS' MATERIALS

PREPARATORY WORK

PARTICIPANTS' MATERIALS

WORKSHOP OVERVIEW

The COPC workshop offers you, as a member of your primary health care team (PHCT), the chance to reflect on your local community and its health problems, and to explore the application of COPC to one of these problems.

Most of the work is practical and based on *your* data for *your* community or practice list. This work is carried out by your PHCT as a group, aided by a facilitator.

The group work falls into three main phases:

1 Producing a profile (community diagnosis) of your community and its health state. This will include the identification of the main health problems of your community. These health problems are each potential subjects for your COPC programme.

2 Selecting one of these health problems for detailed assessment during the rest of the workshop.

3 Developing your COPC plan around your selected health problem.

PREPARATION

To get the most out of this workshop you need to bring as much relevant information about your community and practice list as possible. You will need this for the first two phases of the workshop.

It is very important that you and your team do not select a single health problem before you come to the workshop. The workshop process requires your PHCT to review all the major health problems, typically around 5–6 , as part of the COPC process.

The following is the sort of information which you should consider bringing.

INFORMATION ON THE COMMUNITY (OR PRACTICE LIST)

Environment

- This should give a general view of the setting in which the practice lies and the population lives, e.g.:
  - physical location
  - topographical features
  - transport
  - physical description of surgery
  - local employment
  - housing
  - local environmental risk factors.

Data on factors in this list will tend to be available by ward, not practice.

Community characteristics

- This should cover:
  - age/sex breakdown
  - socio-economic status
  - educational status
  - ethnic minorities – numbers and special needs
  - deprivation indices
  - unemployment rates.

Some data on factors in this list will be available by ward, not practice.

State of health

Morbidity

- This might cover:
  - blood pressure
  - cholesterol level
  - chronic diseases (e.g. cancer)
  - low birth weight*
  - teenage conception rates*
  - pregnancy termination rates*
  - infectious disease notifications*
  - specialist referral rates

- practice registers (e.g. diabetes, hypertension)
- hospital admission rates.

(*These data may only be available by ward rather than by practice.)

Mortality

- This should cover:
  - standardised mortality ratios (SMRs) for all causes together; these might be available at ward level
  - SMRs for specific causes (e.g. CHD, lung cancer); these will be available at district level.
- However, SMRs may be of limited value since they do not relate to the practice population and sometimes at the electoral ward level.

Behaviour/risk factors

- This might cover:
  - sexual behaviour
  - smoking behaviour
  - alcohol consumption
  - dietary patterns
  - exercise patterns.

Health services

Within the practice

- Services within the practice should cover:
  - GPs
  - nurses
  - health visitors
  - other medically allied professions
  - administrative staff
  - special interests
  - complementary therapies.
- Practice turnover rate.

Outside the practice

- Services outside the practice should cover:
  - health services (e.g. hospital and community)
  - voluntary services.
- When interpreting the data, it is important to consider how representative the practice population is of the wards in which they live.

INFORMATION SOURCES

The following are some of the sources from which you might extract the pre-workshop information.

Practice computer or other practice information

- This will give some data on the whole practice population; other data will relate to attenders only. For example, you will be able to find the ages of all your patients, but not their exercise habits. Care has to be taken in extrapolating from these data to the whole of your practice population.
- Despite these reservations, your computer may yield valuable data on:
  - disease incidence
  - prescribing patterns
  - differential use of services (e.g. by age, sex or ethnic group).
- Patient views.

Annual reports

- While the data in your annual report will have been largely derived from those in your computer, the reports may well contain valuable analysis which can be extracted for your community diagnosis (e.g. you may have already looked at differential uptake of immunisation).

Practice leaflets

- Part of your diagnosis should involve thinking about what you offer your patients. Your practice leaflets will remind you of the services your staff offer.

Audit reports

- Your audit reports may give valuable community diagnosis data. The audit's value will depend on the type of audit. For example, disease and process audits will be highly relevant to your community profile; case audits (because they are not necessarily representative of the whole practice list), less so.
- Patient views.

Commissioning agencies

Health Boards, joint commissioning agencies, Family Health Service Authorities (FHSAs), District Health Authorities (DHAs)

- Contacts: probably the Director of Information and/or the Public Health Directorate.
- Data available include:
  - Director of Public Health's Annual Reports
  - special studies
  - hospital and community activity data.

Local authority

Most of the information that is available from local authorities is also available from FHSAs and DHAs. Where it is not, the following sources should be contacted.

- Contacts: Housing, Social Services and Environmental Health Departments.
- Data available include:
  - local census data for the local authority area on:

    economic activity

    industry of employment

    patterns of travel to work

    number and size of households.
  - local census data are also available at ward level covering such things as:

    population of 65 and over

    elderly people living alone

    population under five years of age

    one-parent families

    unskilled workers

    unemployed people

    households lacking basic amenities

    population born outside the UK.

GENERAL APPROACH TO INFORMATION SOURCES

- There are two first ports of call for information:
  - for wider population data, the first place to call is the DHA
  - for practice activity data, the first place to call is the FHSA
  - even if these sources do not have the data, they will be able to direct PHCTs to other sources.

PARTICIPANTS' TASK NOTES

THE COMMUNITY DIAGNOSIS

Session **2**

PARTICIPANTS' MATERIALS

PHCT TASK

PREPARING YOUR COMMUNITY DIAGNOSIS

INSTRUCTIONS

- You should complete this task in a group with the rest of your PHCT colleagues who are at the workshop.
- You will be assisted by a facilitator.
- The purpose is to prepare a community diagnosis in two formats:
  - as a full community diagnosis on paper, which you can share with the rest of your practice
  - as a summary on a flipchart to present back to the full workshop.
- Use the headings in the community diagnosis contents checklist on pages 3–5.
- Try to describe your community and your practice as you would to an outsider – do not omit things just because they are obvious.
- Put down as much as you can while you are at the workshop.
- Make a note of information that:
  - you will collect later from your practice (e.g. computer searches)
  - you need but cannot think of a source.
- Report back to the full group. Your report back should:
  - outline your community diagnosis
  - comment on what you have learnt from this task and on how useful you have found it
  - take 15–20 minutes.

After the workshop

- When you go back to your practice at the end of the workshop, you will be able to refine your community diagnosis by consulting more detailed data.
- Keep all your workshop notes and presentation material as the basis for your fuller community diagnosis.

COMMUNITY DIAGNOSIS CHECKLIST

Environment

- This should give a general view of the setting in which the practice lies, e.g.:
  - physical location
  - topographical features
  - transport
  - physical description of surgery
  - local employment
  - housing
  - local environmental risk factors.

Data on factors in this list will tend to be available by ward, not practice.

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  - infectious disease notifications*
  - specialist referral rates
  - practice registers (e.g. diabetes, hypertension)
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(*These data may only be available by ward rather than by practice.)

Mortality

- This should cover:
  - standardised mortality ratios (SMRs) for all causes together
  - SMRs for specific causes (e.g. CHD, lung cancer).
- SMRs should be available at district level and may be available at ward level. You will have to consider how well district or ward figures match your practice list.
- It is important to stress that, since most of these data will not be available at practice level, they may be misleading.

Behaviour

- This might cover:
  - sexual behaviour
  - smoking behaviour
  - alcohol consumption
  - dietary patterns
  - exercise patterns
  - drug taking/substance abuse
  - suicide/depression.

Health service system

Within the practice

- Services within the practice should cover:
  - GPs
  - nurses
  - health visitors
  - other medically allied staff
  - administrative staff
  - special interests
  - complementary therapy.
- Practice turnover rate.

Outside the practice

- Services outside the practice should cover:
  - health services (e.g. hospital and community)
  - voluntary services (e.g. meals on wheels).

Health problem list

- Finally, list the major health problems in your practice.
- In the prioritising session, this list will be reduced to one problem which will be the PHCT's COPC topic.

Health problem list

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

INFORMATION SOURCES

Practice computer

- This will give some data on all the practice; other data will relate to attenders only (e.g. you will be able to find the ages of all your patients, but not their exercise habits). Care has to be taken in extrapolating from these data to the whole of your practice population.
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- Data available include:
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    economic activity

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    patterns of travel to work

    number and size of households.
  - local census data are also available at ward level, covering such things as:

    population of 65 and over

    elderly people living alone

    population under five years of age

    one-parent families

    unskilled workers

    unemployed people

    households lacking basic amenities

    population born outside the UK.

    (Pickin & St Leger 1993, p 193)

General approach to information sources

- There are two first ports of call for information:
  - for wider population data, the first place to call is the health authority
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  - even if these sources do not have the data, they should be able to direct PHCTs to other sources.

PARTICIPANTS' TASK NOTES

PRIORITISING

Session **3**

PARTICIPANTS' MATERIALS

PHCT TASK
WORKING OUT YOUR PRIORITIES

INSTRUCTIONS

- Complete this task in your practice group.
- Place a copy of the grid (see below) on to a flipchart sheet.
- Put your health problems at the tops of the empty 'project' columns.
- Work across the table. Discuss each potential project under each heading in turn. Use the question list on page 3 to help in this.
- Allocate it a score in each box on the grid from 0 (very good fit for the COPC project) to 4 (very poor fit).
- Decide what weight to give to each criterion.
- Total all your weighted scores for each health problem.
- Decide which health problem you are going to tackle – it may not be the one with the highest score.
- Prepare a report back containing the following:
  - the completed grid on your flipchart sheet
  - a five-minute account of how you did your scoring
  - an explanation of which health problem you chose as the top priority and why
  - if you changed the criteria, an explanation of why
  - a list of any issues which you would like the full group to discuss.

OH 3.2 Prioritising grid

CRITERION	PROJECT					
Prevalence/incidence						
Severity of problem						
Effective intervention						
Acceptability/feasibility						
Community involvement						
Cost and resources						
TOTAL SCORE						

QUESTION LIST

Prevalence

- Does the disease affect a lot of people?

Severity

Mortality

- What is the mortality rate? (5–10 year figures)
- What is the case fatality rate?

Morbidity/disability

- Does the disease seriously affect quality of life?
- Is the disease a big drain on PHCT resources?

Effective intervention

- Is there a proven intervention?

Acceptability/feasibility for the PHCT?

- Is this project too big for us?
- Do we have/can we gain the skills for it?
- Do we all want to do it?
- Does it fit with DHA/FHSA priorities?
- Are we likely to succeed?
- Can we find time to do more?

Community involvement

- Is community involvement needed for your project?
- What are the benefits to the community?
- What are the benefits to the PHCT?

Costs and resources

- How much staff time will be needed?
- What staff skills will be needed?
- What equipment will be needed?
- What other resources (including training) will be needed?
- Where might extra resources come from?

PARTICIPANTS' TASK NOTES

DETAILED PROBLEM ASSESSMENT

Session 4

PARTICIPANTS' MATERIALS

PHCT TASK

WRITING THE DETAILED PROBLEM ASSESSMENT

INSTRUCTIONS

- This task is for completion in your practice groups.
- Use the checklist on page 3 to remind you of points to consider.
- Use the headings below to organise your assessment:
  - the health problem
  - definition of the group for intervention
  - characteristics to be measured
  - definition of how the measurements are to be taken
  - data collection methods
  - record formats
  - plan of analysis with dummy tables.
- The 'dummy tables' heading refers to working out how you will analyse your data even before you collect any. This helps you to decide:
  - are we collecting the right data?
  - are any of the data not needed for the analysis? If so, you do not need to collect them.
  - are there any data missing which the analysis needs? If so, add them to your data collection plans.

  An example of a dummy table appears on page 4.
- Your full assessment should be in a form for sharing with your full PHCT (i.e. including those people who have not attended the workshop).
- You should also prepare a flipchart summary for presentation to the full workshop.

DETAILED PROBLEM ASSESSMENT CHECKLIST

Definition of the group

- Well defined.
- Identifiable.
- Contactable.
- Sufficiently stable.

Characteristics to be measured

- Valid indicators of current health status.
- Valid measures of any health status change.
- Correlates of health status in the community.
- Measures accepted by other workers.

Definition of the measures

- All the team must be measuring the same thing.
- Measurements must be consistent between observers.
- Measurements must be consistent over time.

Methods of data collection

- Questioning patients (e.g. discussion on smoking habits).
- Questioning a person close to the patient (e.g. asking a parent about an infant).
- Self-administered questionnaires.
- PHCT-administered questionnaires.
- Patient diaries.
- Observation of patient (e.g. blood pressure).
- Data from the practice records.

Records

- The records should ensure that all relevant data are kept secure.
- Data are accessible for clinical work, COPC evaluation and continued surveillance.
- The recording methods should be simple and not prone to error.
- The skill and time needed to record data should be minimised. This makes people more willing to do it and less likely to make mistakes.
- Your existing system should be used or extended where possible.
- The recording format should permit easy analysis.

Piloting

- Describe how you would pilot your detailed problem assessment method.

Dummy table example

Smoking status	Baseline *n*	Baseline %	After 1year n_1	After 1 year %
Current				
Light	*a*	$a \times 100/n$	a_1	$a_1 \times 100/n_1$
Moderate	*b*	$b \times 100/n$	b_1	$b_1 \times 100/n_1$
Heavy	*c*	$c \times 100/n$	c_1	$c_1 \times 100/n_1$
Ex-regular	*d*	$d \times 100/n$	d_1	$d_1 \times 100/n_1$
Never smoked	*e*	$e \times 100/n$	e_1	$e_1 \times 100/n_1$
Total	***n***	**100**	n_1	**100**

PARTICIPANTS' TASK NOTES

INTERVENTION PLANNING

Session **5**

PARTICIPANTS' MATERIALS

PHCT TASK
PLANNING YOUR INTERVENTION

INSTRUCTIONS

- This task is designed to be done by the PHCT as a group.
- The purpose is to produce the intervention plan for your COPC project.
- Use the following headings for your plan:
  - review where you are now
  - define your group
  - write your objectives
  - choose an intervention
  - decide your criteria for intervention
  - devise your protocols
  - decide who does what and when
  - devise your recording system
  - devise your monitoring system
  - staff training needs
  - resources.
- You cannot expect to produce a final version of your intervention plan in the workshop. There is too much detailed work (e.g. record design) and research (e.g. finding out about proven interventions).
- Aim to identify all the questions that need answering; answer those that you can and allocate responsibilities for the remaining work to be done later.
- If there are enough people in your group, you may like to split the work up after an initial planning session.
- You should produce:
  - a written plan in a form you can share with the rest of your PHCT
  - a flipchart version for reporting back to the full workshop.

OBJECTIVES CHECKLIST

Your objectives should be:

A Appropriate
R Realistic
M Measurable
P Positive
I Important enough
T Time related
S Supported by the team

PARTICIPANTS' TASK NOTES

PROJECT IMPLEMENTATION

Session 6

PARTICIPANTS' MATERIALS

PHCT TASK
WRITING YOUR PROJECT PLAN

INSTRUCTIONS

- Work in your practice-based groups for this task.
- The purpose is to produce a project plan with:
  - realistic milestones
  - a list of tasks associated with each milestone
  - an estimate of how long each stage will take.
- Use the following steps to devise your plan:
  1. Decide the milestones for your project (see 'Milestone guidelines' below).
  2. Draw up a list of all the tasks between the milestones.
  3. Work out the time needed for the tasks.
  4. Put the milestones and tasks on to a task sheet – see the format on page 3.
  5. Decide who will do each task. This may be a role (e.g. health visitor) rather than a person at this stage. Put the role or person's name in the last column of the task sheet. Add the date by which the task needs to be completed.
- If your project is large and detailed, you may wish to do this exercise on part of the project only – for example, the part between two milestones.

Report back

- For the report-back session, you should produce a flipchart version of the task sheet to present to the whole group.

MILESTONE GUIDELINES

- State a goal to be achieved.
- Do not imply a method of reaching the goal.
- Milestones should be:
  - important outcomes
  - natural outcomes.
- Stages between them should be
  - of comparable size and duration
  - neither too frequent nor too infrequent – at most 10 on a small project.

TASK SHEET

Milestone	Tasks	Time needed	By when	Who

PARTICIPANTS' TASK NOTES

EVALUATION

Session 7

PARTICIPANTS' MATERIALS

PHCT TASK
WRITING YOUR EVALUATION PLAN

INSTRUCTIONS

- This task is designed for completion by the PHCT group.
- The purpose is to produce a first draft of your plan for evaluating your COPC project.

Consider

- Who is it for?
- What questions will the report answer?
- When will the data cut-off date be?
- Who will analyse the data?
- What facilities or expertise will be needed?
- Who will write the report?
- When will the report be ready?

Contents

- Recall the project objectives.
- List possible health statements you might hope to make at the end of the programme.
- List possible findings you might hope to report.
- Draw up dummy tables you might hope the report will contain.
- Draw up dummy graphs you might hope the report will contain.
- Draw up dummy statistics tables you might hope the report will contain.
- List the type of conclusions you might hope to report.

Format

- On a flipchart sheet for presentation to the full group.

PARTICIPANTS' TASK NOTES

CHANGING BEHAVIOUR

Session **8**

PARTICIPANTS' MATERIALS

PHCT TASK

PLANNING A BEHAVIOUR CHANGE PROGRAMME

- Pair yourself with another participant from a different professional area. It does not matter whether or not you both work in the same practice.
- The purpose is to plan a behaviour change programme, including goals and records, for each of two patients.
- Think of two patient types for whom behaviour change is appropriate.
- The task probably works best if you think of particular patients.
- You should only choose patients who are likely to respond to an offer of a COPC intervention. Do not pick hopeless or totally fatalistic people.
- Plan a behaviour change programme, including goals and records, for each of the two patients.
- Use the behaviour change checklist below.
- Decide what you would do in each case to improve the patient's self-efficacy and internal HLOC.
- This task can only be done in a limited sense, since a *real* plan includes patient negotiation.

The format

- Two change plans, each on a flipchart to present to the full group.

BEHAVIOUR CHANGE CHECKLIST

Step 1: Decision making

This step is about patients deciding that they wish to change. You will have to assume that this stage has been completed.

Step 2: Goal setting

A Appropriate
R Realistic
M Measurable
P Positive
I Important to the patient
T Time related
S Specific

Step 3: Monitoring

- Establish baseline.
- Design the records.
- Measure the positive behaviour.
- Keep same measure throughout programme.

Step 4: Intervention

- Antecedents
  - avoid them
  - change them

  i.e. establish new cues.
- Consequences
  - establish effective consequences.

Step 5: Evaluation

- Review progress from time to time with the patient.
- Use the patient's own records for the review.
- Amend the programme if you and the patient think a change is needed. This could be to:
  - make the programme more relevant to a change in the patient's needs
  - make the goals more realistic
  - make the goals more demanding.

Step 6: Maintenance and relapse

- Accept.
- Talk through with the patient. Can the patient learn from the relapse?
- Is a change of programme needed?
- Help the patient establish new short-term targets.

PARTICIPANTS' MATERIALS

GLOSSARY

Case fatality rate

The proportion of cases of a specified condition which are fatal within a specified time, i.e.

$$\frac{\text{No. of deaths from a disease in a given period}}{\text{No. of diagnosed cases of that disease in the period}} \times 100$$

(Last 1988)

Community-oriented primary care

COPC is a *continuous process* by which *primary health care* is provided to a *defined community* on the basis of its *assessed health needs* by the planned *integration* of *public health* with primary care practice.

Cost benefit analysis

Cost benefit analysis attempts to put a money value on all the benefits and disbenefits that come from a proposed action. Thus a positive value might be put on 'feeling better' or a negative value put on the scaring effect of an operation. It is a controversial method at the best of times and not usually within the resources of a COPC programme.

Cost effectiveness analysis

Cost effectiveness analysis is the ratio of a measured unit of output to costs. It is used to compare two or more different ways of achieving the same output. The cheaper or more effective the method, the more cost-effective it is said to be.

Cost minimisation analysis

Compares the cost of two or more methods of carrying out the same process (e.g. day surgery and in-patient treatment for hernia). Because the process is the same, costs can be directly compared.

Cost utility

Cost utility is the ratio of costs to a weighed set of effectiveness measures. In health, a commonly used effectiveness measure is Quality Adjusted Life Year (QALY). Thus if scheme A costs £5000 per patient and delivers 2.5 QALY, and scheme B costs £6000 per patient and delivers 2 QALY:

$$\text{Utility of scheme A} = \frac{5000}{2.5} = £2000/\text{QALY}$$

$$\text{Utility of scheme B} = \frac{6000}{2} = £3000/\text{QALY}$$

So, scheme A is to be preferred since it has a lower cost utility.

Effectiveness

Effectiveness is a measure of the degree to which an intervention achieves its objective in practical use.

Efficacy

Efficacy is a measure of the capacity of an intervention to produce a desired effect under laboratory conditions.

Efficiency

Efficiency is a measure of the comparative costs of different interventions in achieving the desired objective in practical use.

Epidemiology

The study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to the control of health problems.

(Last 1988)

Evaluation

A process that attempts to determine as systematically and objectively as possible the relevance, effectiveness and impact of activities in the light of their objectives. Several varieties of evaluation can be distinguished (e.g. evaluation of structure, process and outcome).

(Last 1988)

Incidence

Incidence refers to the number of new cases occurring in a period of time. It is defined by:

$$\text{Incidence rate} = \frac{\text{No. of new cases in period}}{\text{No. at risk in period}}$$

Monitoring

1 The performance and analysis of routine measurements, aimed at detecting changes in the environment of health status of populations. Not to be confused with surveillance. To some, monitoring also implies intervention in the light of observed measurement.

2 Ongoing measurement of performance of a health service or a health professional, or of the extent to which patients comply with or adhere to advice from health professionals.

3 In management, the continuous oversight of the implementation of an activity that seeks to ensure that input deliveries, work schedules, targeted outputs and other required actions are proceeding according to plan.

(Last 1988)

Opportunity cost

Opportunity cost is a measure of what else you could do with the same resource. If a nurse is employed for 20 hours a week on a COPC programme, that nurse is not employed on something else. The costs of that 'something else' are the opportunity cost.

Predictive value

In screening and diagnostic tests, the probability that a person with a positive test is a true positive (i.e. does have the disease) is referred to as the 'predictive value of a positive test'. The predictive value of a negative test is the probability that a person with a negative test does not have the disease. The predictive value of a screening test is determined by the sensitivity and specificity of the test, and by the prevalence of the condition for which the test is used.

(Last 1988)

Prevalence

Prevalence refers to how much of the disease there is. It is measured by:

$$\text{(Point) prevalence rate} = \frac{\text{No. of persons with the disease at a point in time}}{\text{Total population}}$$

$$\text{(Period) prevalence rate} = \frac{\text{No.of persons with the disease during a period of time}}{\text{Total population at mid-point of time}}$$

Prevention

The goals of medicine are to promote health, to preserve health, to restore health when it is impaired, and to minimise suffering and distress. These goals are embodied in the word 'prevention', which is easiest to define in the context of levels, customarily called primary, secondary and tertiary.

An epidemiological interpretation of the distinction between primary and secondary prevention is that primary prevention is aimed at reducing incidence of disease and other departures from good health, secondary prevention aims to reduce prevalence by shortening the duration and tertiary prevention is aimed at reducing complications.

Primary prevention can be defined as the protection of health by personal and community-wide effects (e.g. preserving good nutritional status, physical fitness and emotional well-being, immunising against infectious diseases, and making the environment safe).

Secondary prevention can be defined as the measures available to individuals and populations for the early detection and prompt and effective intervention to correct departures from good health.

Tertiary prevention consists of measures available to reduce or eliminate long-term impairments and disabilities, minimise suffering caused by existing departures from good health, and to promote the patient's adjustment to irremediable conditions. This extends the concept of prevention into the field of rehabilitation.

(Last 1988)

Rate

A rate is a measure of the frequency with which an event occurs in a defined population. The use of rates rather than raw numbers is essential for comparing the experience of different populations at different times or places. The components of a rate are the numerator, the denominator, a specified time in which events occur and usually a multiplier which converts the rate from an awkward fraction or decimal to a whole number (e.g. rate equals a number of events in a specified period over average percentage population during the period x 100).

The crude rate is the ratio of all cases : population.

The specific rate is the ratio of all cases in an age band : all people in that age band.

The standardised rate compares two populations, adjusting the data to take account of the age profile of each population.

Relative risk

The ratio of the risk of disease or death among the exposed to the risk among the unexposed; this usage is synonymous with risk ratio but the term is sometimes used synonymously with odds ratio.

Reliability

The degree of stability exhibited when a measurement gets repeated under identical conditions (e.g. between observers or the same observer on two different occasions). Reliability refers to the degree to which the results obtained by a measurement procedure can be replicated. Lack of reliability may arise from differences between observers or instruments or from instability of the attribute being measured.

Risk

The probability that an event will occur (e.g. that an individual will become ill or die, within a stated period of time or age).

Risk factor/marker

An aspect of personal behaviour or lifestyle, an environmental exposure or an inherited characteristic which is known to be associated with a particular health condition. The term risk factor is rather loosely used in the following ways:

1 An exposure that is associated with an increased probability of a specified outcome such as disease, not necessarily a causal factor (risk marker) (e.g. age, sex).
2 An exposure that increases the probability of occurrence of disease (determinant).
3 A determinant that can be modified by intervention thereby reducing the probability of disease (modifiable risk factor).

Sensitivity, specificity and predictive value

The sensitivity of a test is the proportion of those with a disease who are correctly identified.

The specificity of a test is the proportion of those without a disease who are correctly identified.

The predictive value is the proportion of test positives or test negatives that are true.

Example

Test result	Disease present	Disease absent	Totals
Positive	5	2	7
Negative	1	92	93
Totals	6	94	100

$$\text{Sensitivity} = \frac{\text{True positives}}{\text{Those with disease}} = \frac{5}{6} = 83\%$$

$$\text{Specificity} = \frac{\text{True negatives}}{\text{Those without disease}} = \frac{92}{94} = 99\%$$

$$\text{Positive predictive value} = \frac{5}{7} = 71\%$$

$$\text{Negative predictive value} = \frac{92}{93} = 98.9\%$$

Surveillance

Ongoing scrutiny, generally using methods distinguished by their practicability, uniformity, and frequently their rapidity, rather than by complete accuracy. Its main purpose is to detect changes in trend or distribution in order to initiate investigative or control measures.

(Last 1988)

Validity

An expression of the degree to which a measurement measures what it is intended to measure. Several varieties are distinguished, including construct validity, content validity and criterion validity.

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PARTICIPANTS' MATERIALS

SELECTED OVERHEADS & EXAMPLES

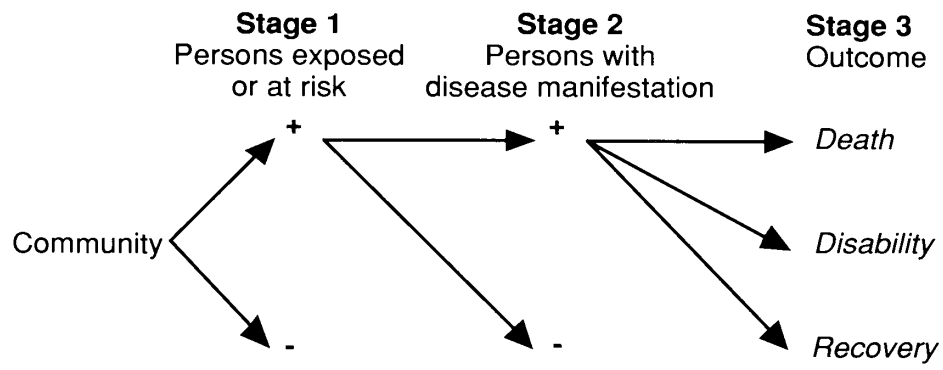
SESSION 1: INTRODUCTION TO COPC

OH 1.1 Workshop aims

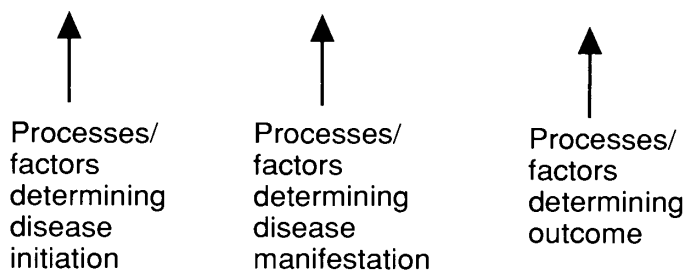
- **To find out about COPC and its application in general practice.**
- **To compare COPC with your current work.**
- **To identify a potential COPC programme for your practice.**
- **To write a draft programme plan.**

OH 1.5 Natural history of disease in the community

(a) Distribution of health and disease



(b) Factors determining distribution



OH 1.6 Epidemiology – definition

Epidemiology is the study of the distribution and determinants of health and disease in populations. It provides a basis for the planning and evaluation of health services.

OH 1.8 Levels of prevention

• Primary	(a) Health promotion (b) Immunisation	} Before any pathological change
• Secondary	(a) Early diagnosis (b) Medical treatment	} Preventing symptomatology
• Tertiary	(a) Reduce disability (b) Rehabilitate	} Preventing further deterioration

OH 1.9 *Example:* Levels of prevention of CHD

PREVENTION STAGE	ACTIVITY
• Primary	Promoting exercise, non-smoking, healthy diet
• Secondary	Screening for breast cancer Treating hypertension
• Tertiary	Treating congestive cardiac failure

OH 1.11 CHAD* programme

Case-finding and treatment of:

Coronary heart disease	Cerebrovascular disease		Peripheral vascular disease
Hypertension	Hyperlipidaemia	Diabetes	Obesity

and

survey of community distribution of:

Systolic BP	Diastolic BP	Serum cholesterol	Weight–height index	Serum glucose

and

their modification if necessary by:

Dietary changes	Stopping cigarette-smoking	Exercise	Medical treatment

using:

CHAD clinic in family practice	Community health education

and

evaluation of the programme by:

Checking compliance with the programme by the health centre and the community	Measuring change in distribution of risk factors

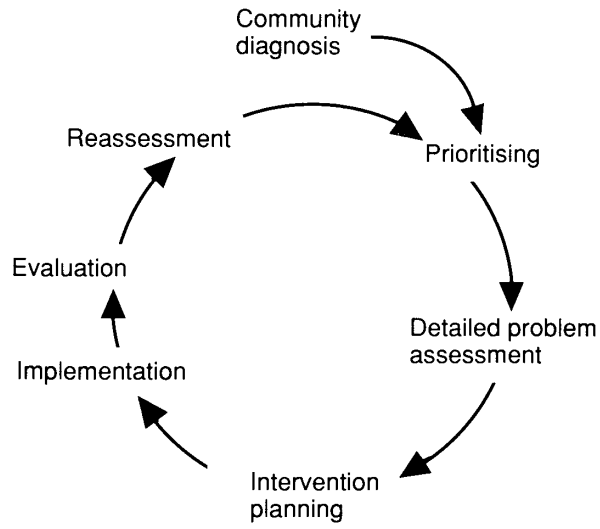
* Community syndrome of hypertension, atherosclerotic diseases and diabetes

Source: Kark *Source: Kark (1989), p 165*

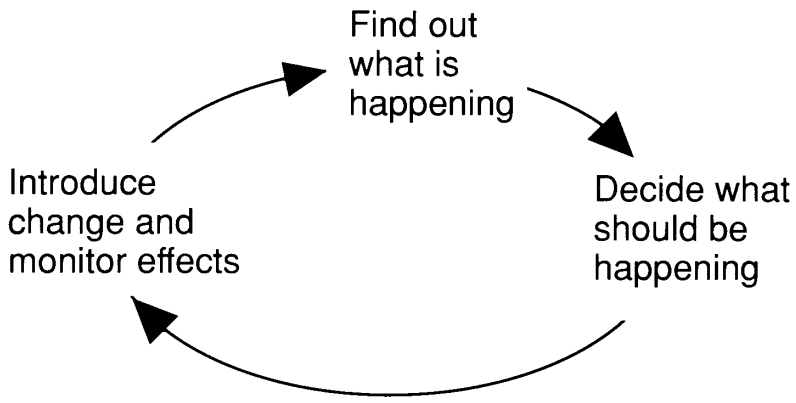
OH 1.12 Community-oriented primary care (COPC)

COPC is a continuous process by which PHC is provided to a defined community on the basis of its assessed health needs by the planned integration of public health with PC practice

OH 1.13 The COPC cycle



OH 1.14 The audit cycle



Source: Hughes & Humphrey (1990), p 5

OH 1.15 COPC features

- **Works with a defined group.**
- **Provides primary clinical care.**
- **Has defined programmes.**
- **Interests itself in all factors that affect health.**
- **Is concerned with the total natural history of a disease and all levels of prevention.**
- **Involves a multi-disciplinary team.**
- **Involves the community.**
- **Uses epidemiological methods.**
- **Is an integral part of PHC work.**

OH 1.17 The 'high-risk' strategy

Advantages

- Intervention appropriate to individual recipient.
- Subject more likely to be motivated.
- PHCT members are motivated.
- Cost-effective.
- Favourable benefit : risk ratio.

Disadvantages

- Costs and problems of screening.
- Limited potential for health of total population.
- Socially/behaviourally inappropriate.

OH 1.18 Population strategy

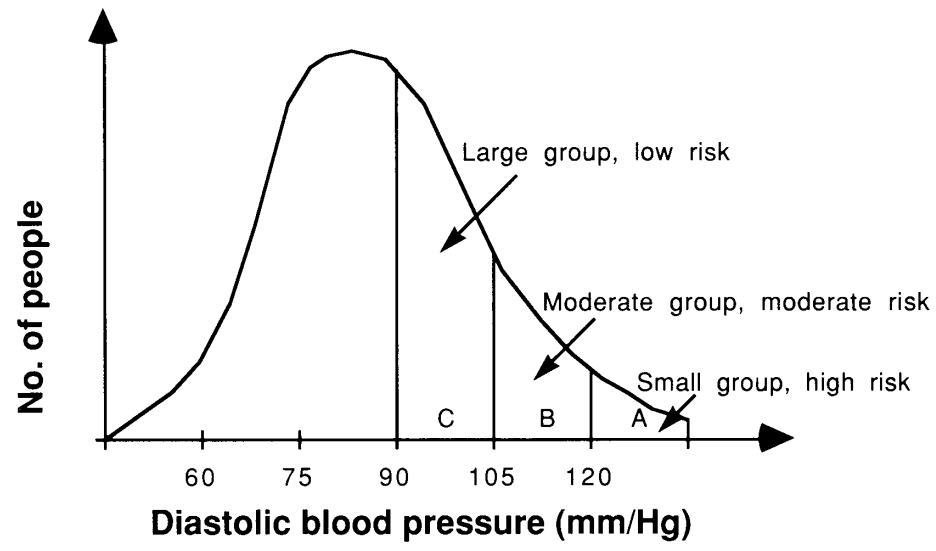
Advantages

- Radically effective.
- Large potential benefits for population.
- Behaviourally appropriate.

Disadvantages

- Small benefit to individuals – the prevention paradox.
- Poor motivation of subjects.
- Poor motivation of PHCT members.
- Benefit : risk ratio may give concern.

OH 1.19 Blood pressure distribution



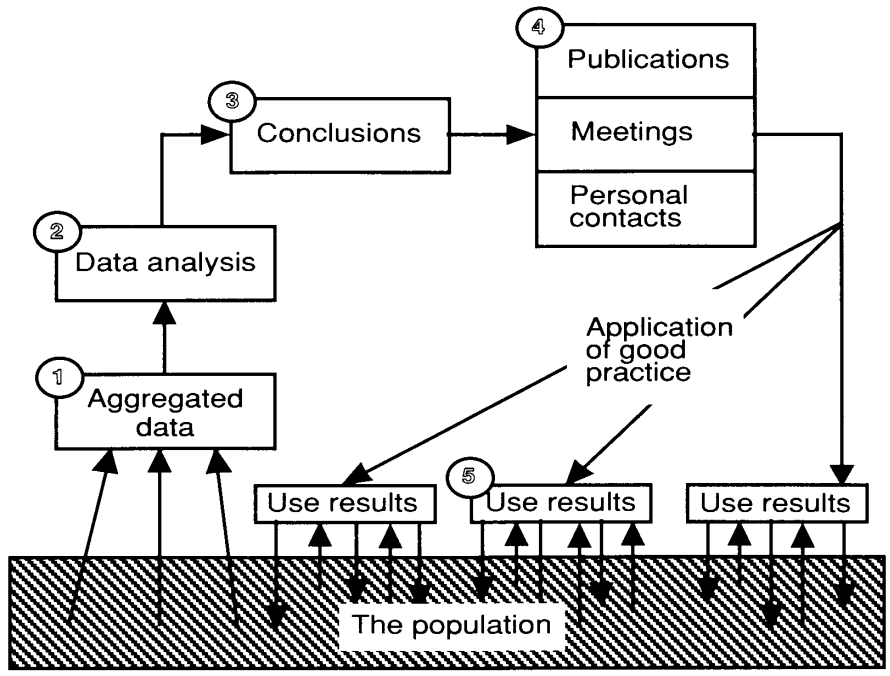
Source: Padfield (1988)

OH 1.21 Clinical use of epidemiology

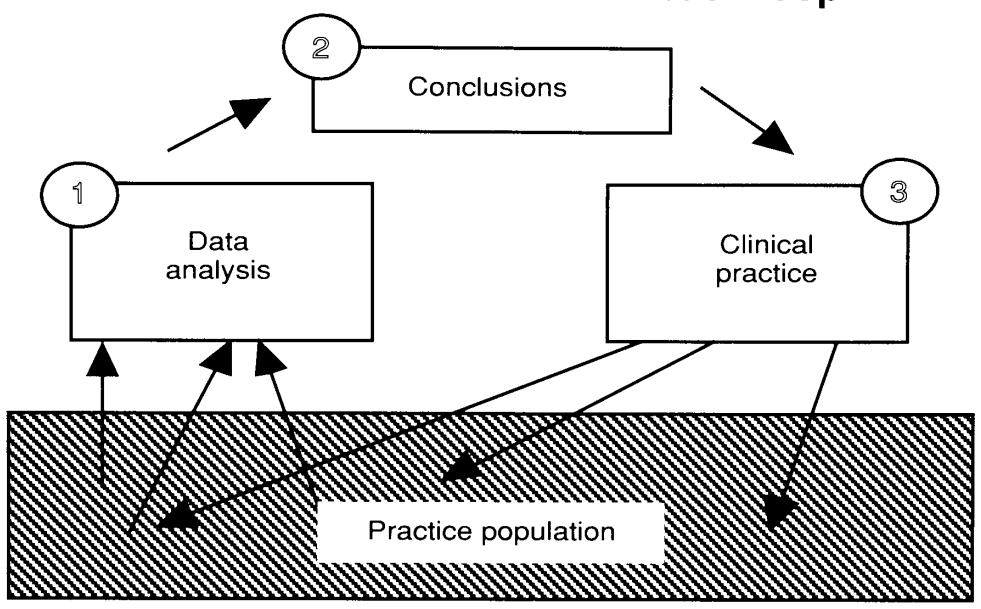
- **Contributes to the care of individuals.**
- **Is pragmatic.**
- **Its purpose is to benefit a particular community.**
- **The data which are collected are used both for clinical care and for epidemiological purposes.**
- **Can stimulate the community to become more active in the promotion of its own health.**

Source: Abramson, Kark & Palti (1983), pp 255–7

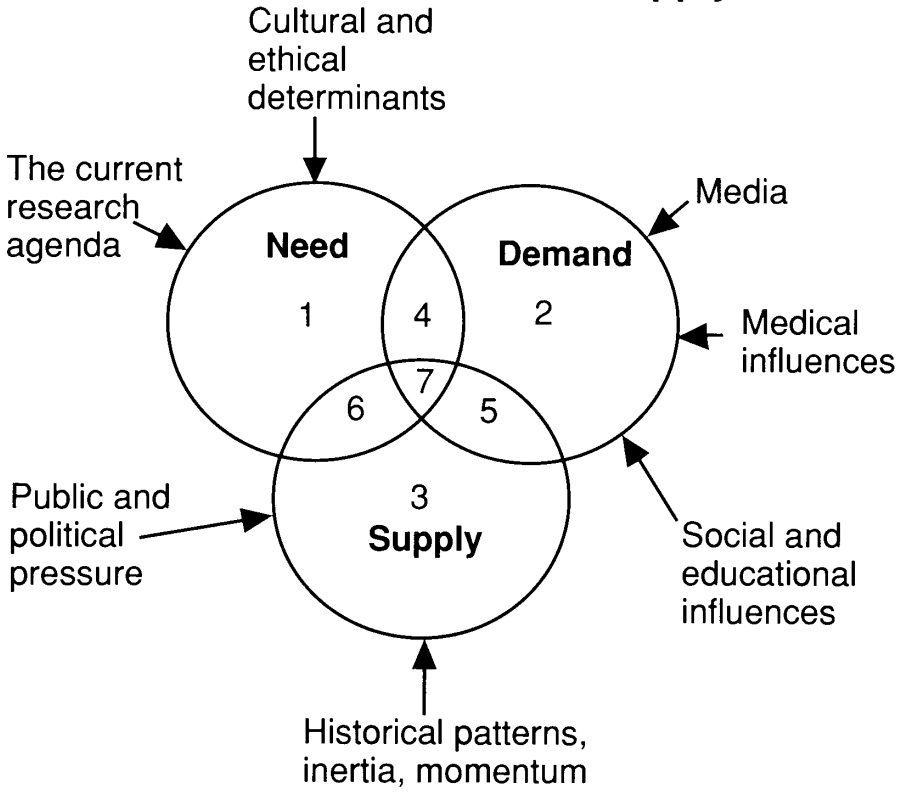
OH 1.22 The long feedback loop



OH 1.23 The short feedback loop



OH 1.24 Need, demand and supply



Source: Stevens & Gabbay (1991), p 21

OH 1.26 Why COPC?

- Emphasises the whole team's responsibility for the health of the defined population.
- Offers a better understanding of the practice population and its health needs.
- Provides more control of the workload.
- Extends audit.
- Addresses the prevention paradox.

OH 1.27 The prevention paradox

'A large number of people at a small risk may give rise to more cases than a small number of people who are at a high risk.'

Source: Rose (1992), p 24

OH 1.28 The nature of primary health care

- Accessible.
- Affordable.
- Acceptable.
- Includes: promotion, prevention, treatment and rehabilitation.
- Involves the community.
- May involve continuing surveillance of the population's health.

OH 1.29 Population-based medicine

- Deals with populations as well as individuals.
- Diagnoses the state of health of the community.
- Uses outreach and planned programmes.
- Provides anticipatory care.
- Involves continuing surveillance of the population's health.
- Sees potential for prevention in every consultation.
- Needs epidemiological skills.

The complementary functions of clinical and epidemiological skills

Clinical (individual)	Epidemiological (population group)
Examination of a patient Interview and examination of individuals by history taking, physical and psychological examinations, laboratory, X-ray and other special techniques.	**Survey** State of health of community and families, using psychological testing and special facilities for such investigations.
Diagnosis 1. Usually of a patient. Differential diagnosis to determine main causes of patient's complaint.	**Community diagnosis** 1. Usually problem-oriented. Differential distribution of a particular condition in the community and the causes of this distribution.
2. Appraisal of health status of a 'well' person, such as a pregnant woman, well children, periodic health examinations of adults.	2. Health status of the community as a whole or of defined segments of it (e.g. health of expectant mothers, growth and development of children, birth and death rates).
Treatment 1. According to diagnosis and depending on resources of patient and medical institutions.	**Treatment** 1. According to the community diagnosis and depending on resources of the health service system.
2. Intervention usually follows on the patient seeking care for illness or advice about health.	2. Intervention on basis of survey findings often before any illness notified or recognised.
Continuing observation Evaluation of patient's progress and sometimes for further diagnostic work-up.	**Continuing surveillance** Surveillance of health state of community and ensuring continuing action. Evaluation of intervention programmes.

Source: Adapted from Kark (1989), p18

(Full text of abbreviated OH 1.30)

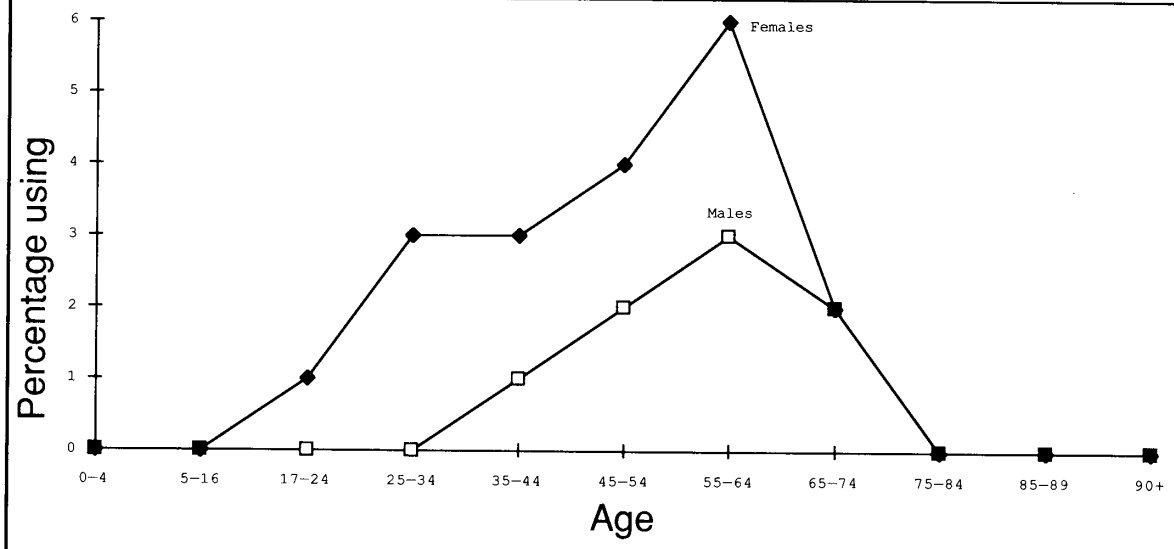
SESSION 2: COMMUNITY DIAGNOSIS

OH 2.2 Why a community diagnosis?

- To know your practice.
- To identify all major health problems.
- As the basis for selecting your COPC priority.
- To ensure that you do not overlook potential resources.
- To ensure that you take a population-based view.
- To ensure that you do not inadvertently plump for an 'obvious' project.

OH 2.5 Antidepressant use

Age group	0–4	5–16	17–24	25–34	35–44	45–54	55–64	65–74	75–84	85–89	90+
Males	0	0	2	4	6	13	14	8	0	0	0
Base	366	1301	779	809	870	819	556	432	228	44	11
Percent	0	0	0	0	1	2	3	2	0	0	0
Females	0	0	9	21	24	33	31	10	0	0	0
Base	349	948	616	754	808	793	550	534	453	103	45
Percent	0	0	1	3	3	4	6	2	0	0	0



Source: Part of a COPC plan prepared by a Wiltshire practice at a COPC workshop

OH 2.6 Dumbiedykes community consultation

- Remember the 50–75 year olds who are very well represented in Dumbiedykes (e.g. more home helps).
- Start a crèche or play group run by middle-aged/elderly to help unite the old and the young.
- Get a bus into the estate.
- Create multiple small play areas (dog-free zones).
- Increase the use of the community rooms, both in the high flats and in Viewcraigs Street. The residents' associations could plan these activities according to the needs of the community.
- Housing department official to come to the community room regularly.
- Regular citizens' advice in a community room.
- Outreach health promotion courses for specific groups (e.g. carers, the stressed, the unfit, or even a first-aid class) were thought to be useful.
- Counselling service – individual or group-based – could be developed by Mental Health Development Officer (Social Work) or a health visitor or counsellor.
- A number of taster (one-off) classes on a range of topics to assess potential interest.
- Various specific recommendations to improve the running of Mackenzie Medical Centre and other practices.
- Chemist to help more – collecting and delivering prescriptions.
- Hold an information day as 'it is finding out about services that is difficult'.
- Feed local needs assessment to Lothian Health Purchasing Unit via the locality group of GPs.
- Inform all residents about Dial-a-bus, taxi cards and other initiatives which help deal with the difficult physical environment.
- Have community notice-board.

Source: Dumbiedykes Health: A Community Appraisal (1993), pp 18–19

OH 2.7 The community diagnosis checklist

- General description of environment.
- Community characteristics.
- Health service system:
  - within the practice
  - outside the practice.
- State of health:
  - morbidity
  - mortality
  - behaviour.
- Health problem list – maximum of 6.

OH 2.8 Information sources

Inside the practice

- Practice computer
- Annual reports
- Practice leaflets
- Audit reports

Outside the practice

- Local census data
- Local education authority
- FHSA
- DHA

SESSION 3: PRIORITISING

OH 3.2 Prioritising grid

CRITERION	PROJECT					
	A	B	C	D	E	F
Prevalence/incidence						
Severity of problem						
Effective intervention						
Acceptability/feasibility						
Community involvement						
Cost and resources						
TOTAL SCORE						

OH 3.3 Prevalence/incidence

$$\text{Incidence rate} = \frac{\text{Number of new cases in period}}{\text{Number at risk in period}}$$

$$\text{(Point) prevalence rate} = \frac{\text{Number of persons with the disease at a point in time}}{\text{Total population}}$$

OH 3.4 Severity

Morbidity

- Does the disease seriously affect quality of life?
- Is the disease a big drain on PHCT resources?
- Is the disease a big drain on community resources?

Mortality

- Mortality rates – what are they?
- What is the case fatality rate?

OH 3.5 Effective intervention

- A disease for which there is no proven intervention must score low.
- A disease for which there is a proven and effective intervention must score high.

OH 3.6 Feasible for the PHCT?

Consider:

- Is this project too big for us?
- Do we have/can we gain the skills for it?
- Do we all want to do it?
- Does it fit with DHA/FHSA priorities?
- Are we likely to succeed?
- Can we find time to do more?

OH 3.7 Community involvement

- Is community involvement needed for your project?
- What are the benefits to the PHCT?
- What are the benefits to the community of its involvement?

OH 3.8 Resources

- How much staff time will be needed?
- What staff skills will be needed?
- What equipment will be needed?
- What other resources (including training) will be needed
- Where might extra resources come from?

OH 3.9 Prioritising grid

CRITERION	PROJECT					
	Coughs and colds	Postnatal depression	Carers	Asthma	Smoking	Cancer
Prevalence/incidence	3	3	3	3	3	3
Severity of problem	1	3	3	3	3	3
Effective intervention	1	3	3	3	2	1
Acceptability/feasibility	1	3	2	2	3	2
Community involvement	1	2	3	2	2	2
Costs and resources	3	2	2	2	2	2
TOTAL SCORE	10	16	16	15	15	13

SESSION 4: DETAILED PROBLEM ASSESSMENT

OH 4.2 Detailed problem assessment

What

- A description of where your group is now:
  - what the health problem is
  - who is in the group
  - the extent of the health problem.

Why

- As a base from which to:
  - plan
  - implement
  - evaluate

  your COPC project.

Example 1

For an ischaemic heart disease reduction project, the team had to establish for 40–50 year old people their:

- blood pressure
- smoking status
- cholesterol level (selective)
- family history
- past medical history
- exercise
- obesity (BMI)
- diet (e.g. salt and alcohol intake)
- employment status.

Example 2

On a COPC project tackling antidepressant use, the target group was chosen as:

- women aged 24–45 years.

Example 3

On the same antidepressant project, the numbers involved were identified from the computer as:

- number of women aged 24–45 years = 1562
- number currently on antidepressants = 45.

OH 4.3 Detailed problem assessment – content

- **Definition of the group.**
- **Characteristics to be measured.**
- **Definition of the measures.**
- **Methods of data collection.**
- **Records.**

OH 4.4 Defining the group

The group must be:

- **well defined**
- **identifiable**
- **contactable**
- **sufficiently stable.**

OH 4.5 Activity – Defining the group

Look at the examples in your handouts.

How well do these meet the criteria below?

- **a well-defined group**
- **identifiable**
- **contactable**
- **sufficiently stable.**

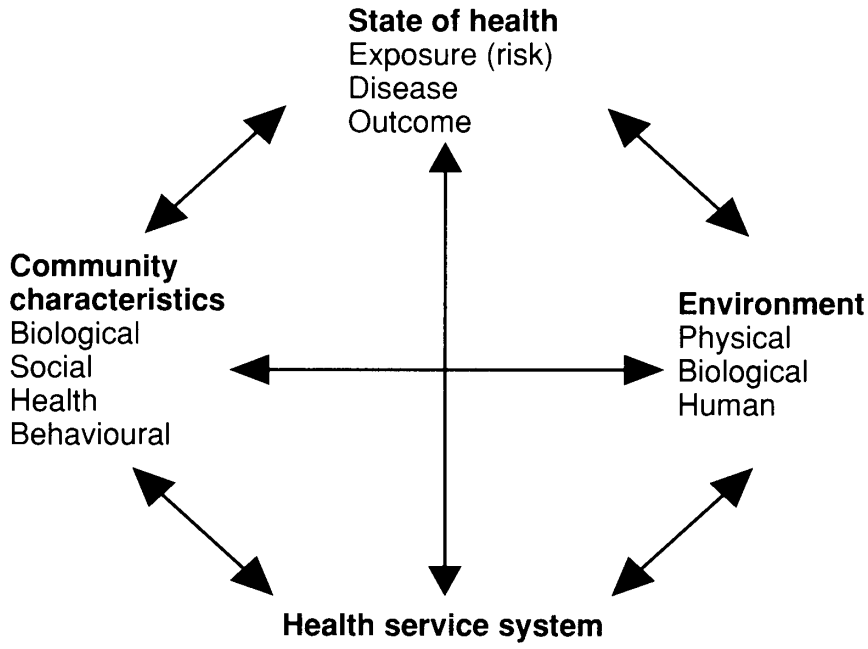
Examples 4–6

- In a project to improve the health of diabetics, the group was defined as those patients who, on the computer, were listed as having diabetes. *(Nutting & Garr 1989, p 10)*

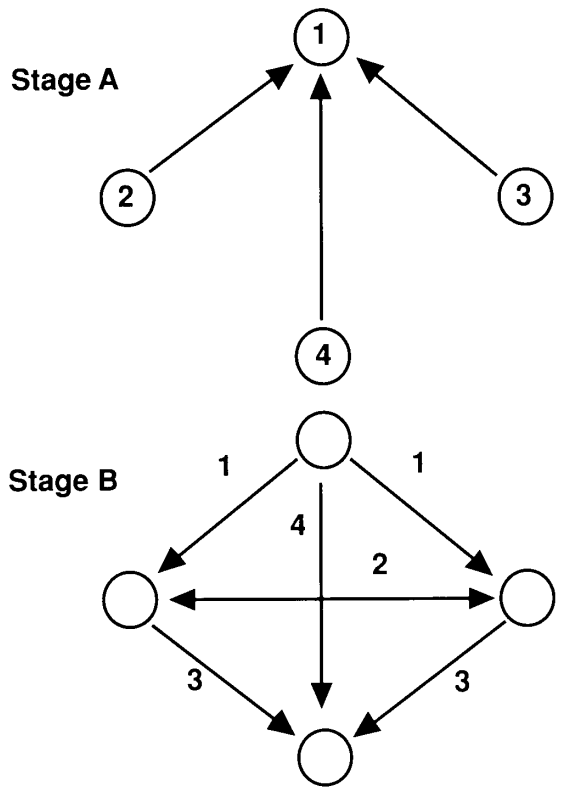
- Another project identified that black males aged 29–40 probably included a large number of undiagnosed hypertension cases. The defined group was all those black males on the computer aged 29–40. *(Nutting & Garr 1989, p 17)*

- In a project on adolescent health, the group was all the children in three year-groups in one school. *(Practice at a Wiltshire COPC workshop)*

OH 4.6 The health model



OH 4.7 Using the health model



OH 4.8 Health model example

Health problem: *Asthma in childhood – cough/wheeze/shortness of breath*

State of health

Exposure (risk): *Allergens (e.g. house dust mite, cigarette smoke), inheritance*

Disease: *Asthma*

Outcome: *Symptomatic episodes, surgery attendances, admissions*

Community characteristics

Biological: *Prevalence of atopy, racial mixture*

Social: *Attitudes to asthma (e.g. teachers')*

Health: *Knowledge/ understanding of disease*

Behavioural: *Smoking*

Environment

Physical: *Air pollution (SO_2), factories, traffic*

Biological: *Respiratory pathogens*

Human: *Domestic environment*

Health service system

Prescribing practice
Availability of nebulisers in the community
Asthma management clinic

OH 4.9 What to measure

- **Valid indicators of current health status.**
- **Valid measures of any health status change.**
- **Correlates of health status in the community.**
- **Measures accepted by other workers.**

Example 7: Baseline measures

In a COPC project to improve the health of 1,000 school pupils through a reduction in behavioural risk factors, the PHCT planned to use a practice-devised questionnaire with all the pupils to establish the current exposure to risk factors. This questionnaire covered:

- smoking behaviour
- family smoking
- sexual activity
- height and weight
- eating habits
- exercise habits.

Source: Practice at Wiltshire COPC workshop

Example 8: Baseline measures

In a New Mexico project to reduce deaths in young children from gastro-enteritis, the baseline data were established by examination of practice records. The data were:

Infant population: 236

Indices of infant gastro-enteritis

Factor	*Rate*
Infant deaths due to gastro-enteritis	22 (9.3%)
Mean episodes of gastro-enteritis per infant	2.5
Mean outpatient visits per infant	3.2
Hospital admissions per 100 infants	126
Hospital days per 100 infants	884

Source: Nutting & Garr (1989), p 24

OH 4.11 The need for rigour

Reliability

- **Everyone must be measuring the same thing.**
- **Measurements must be consistent within and between observers.**
- **Measurements must be consistent over time.**

Validity

- **Measurements must reflect the state of the health problem and/or the intervention – measure what is wanted.**

Example 9

A project to reduce smoking would need a baseline measure which produces consistent results. Instead of PHCT members making judgements on the severity of a person's smoking, a precise scale could be used, e.g.

- current
  - light: 0–9 cigarettes a day
  - moderate: 10–19 cigarettes a day
  - heavy: 20 or more cigarettes a day
- ex-regular
- never regularly smoked.

Example 10: Taking blood for cholesterol measurement

- Allow 5–10 minutes to lapse before taking blood sample.
- Avoid prior stasis by removing cuff or tourniquet *before* blood is withdrawn.
- Avoid haemolysis by removing needle from syringe *before* transferring blood into collecting tube. Do not shake sample.
- Transport blood sample to laboratory on the same day if possible. If not, store in fridge for transport the following day.
- The effect of diet on blood cholesterol is not immediate, taking days rather than hours. It is therefore not necessary to take a fasting blood sample for screening purposes, although a fasting lipid profile should be taken for diagnostic purposes.
- Cholesterol assessment should be delayed for three months following major illness such as myocardial infarction and major surgery; and delayed for one month after minor illness.
- Posture affects measurement due to intravascular fluid shifts (e.g. a person moving from a supine to standing position, or vice versa, can increase his/her cholesterol level by 15 per cent).
- If repeat tests for cholesterol are needed, it is wise to do these around the same time of day (i.e. morning, afternoon or evening) as there is a small diurnal variation in level.

Source: Priest & Speller (1991), pp 73–4

Example 11
The use of the Dundee Risk Disk to assess risk of death from CHD.

Example 12
The use of a validated questionnaire to assess mental state in the Heeley Green COPC project.

OH 4.12 Main data collection methods

- **Data may exist in practice records.**
- **Questioning patient (e.g. discussion on smoking habits).**
- **Observation of patient (e.g. blood pressure).**
- **Questioning a person close to the patient (e.g. asking a parent about an infant).**
- **Self-administered questionnaires.**
- **PHCT-administered questionnaires.**
- **Patient diaries.**

Example 13
In an ischaemic heart disease project, data were collected by inviting the target group (40 and 50 year old people) to a health check. The invitation itself was a birthday card.

Example 14
In a project to identify and prevent depression, a self-administered questionnaire was used.

OH 4.14 The need for good records

- **Relevant data are trapped.**
- **Data are accessible for clinical work, COPC evaluation and continued surveillance.**
- **Recording is simple and not prone to error.**
- **The skill needed to record data is minimised.**
- **Existing systems are used where possible.**
- **Recording format should permit easy analysis.**

PARTICIPANTS' MATERIALS

SESSION 5: INTERVENTION PLANNING

OH 5.3 Where are you now?

- What are you doing about the problem now?
- What are you achieving?
- What changes/improvements do you want to make?

OH 5.4 Objectives

Should be:

A Appropriate
R Realistic
M Measurable
P Positive
I Important enough
T Time-related
S Supported by the team

Example 1: A set of COPC objectives

The Glyncorrwg ischaemic heart disease programme

1 All persons 20–64 years of age to have a blood pressure measurement every five years.

2 Persons 20–39 years of age whose blood pressure exceeded systolic 165 or diastolic 100 mm/Hg (mean of three separate readings) to be placed in the treatment group.

3 Persons 40–64 years of age whose blood pressure exceeded systolic 180 or diastolic 105 mm/Hg (mean of three separate readings) to be placed in the treatment group.

4 Persons in the treatment group to have a follow-up visit every three months.

5 Treatment has the following specific objectives: no smoking, reduction of pressure to the range below 160–180 systolic and 90–100 diastolic, and weight reduction to within 10 per cent above desirable weight level.

Source: Adapted from Nutting (1987), p 252

OH 5.7 Choosing an intervention

Primary prevention

- **The risk factors must be known and modifiable.**
- **The risk markers must be known.**

Primary, secondary and tertiary prevention

- **The proposed intervention must be accepted/state-of-the-art.**

OH 5.8 *Example 2:* Risk factors

The following are the risk factors used in a CHD COPC project.

FACTOR	BORDERLINE	HIGH
Systolic BP (mm/Hg)	140–159	160+
Diastolic BP (mm/Hg)	90–94	95+
Serum cholesterol (mg/100ml)	200–239	240+
Serum glucose (mg/100ml)	180 or possible diabetes mellitus	Diabetes mellitus
Relative weight	10–19% above standard weight	20+% above standard weight

Source: Kark (1989), p 169

Example 3: The following is an example of a pre-term delivery risk scale

Score	Constant risk	Score	Variable risk	Score	Gest week
1	Low economic level Sole caretaker for children One previous abortion Short pregnancy interval		Employment outside the home Complaints of tiredness Weight gain > 2 kg or < 1/2 kg Husband called up for army duty > 2 weeks		
2	Single-parent family Two consec. abortions Age < 18 or > 37		Smoking > 10 cig./day BP > 140/90 or inc > 30 mm /Hg Strenuous work		
3	Very low economic level Height < 150 cm Weight < 45 kg Three consec. abortions		Travelling long distances daily Monthly weight loss > 2 kg First trimester bleeding High fever Stress, fears		
4	Pre-term delivery in past Abortion after 12 weeks		Pylonephritis or other UTI Cervical dilation > 3 cm Cervical effacement 50-80% Uterine contractions Head engaged Breech position Serious illness in family Death in family Sudden financial problems		
5	Uterine abnormality Systemic disease More than one abortion late in pregnancy History of mental illness Myoma		Effac. of cervix > 80% Hydramnion Bleeding in the second trimester Acute mental illness Anaemia Toxaemia		
10	Cervical incompetence Two pre-term deliveries		Diabetes Multiple pregnancy Pregnancy with IUD Placenta praevia		

(Source: From the programme for prevention of pre-term delivery at Beit Shemesh, Israel)

Example 4

- Randall *et al* (1992) looked at the implications of setting varying thresholds when using cholesterol measures and Dundee risk scores in CHD prevention.

- With varying thresholds, varying numbers would fall into the group requiring 'special care'. These numbers are illustrated in the table below. The median cholesterol level was between 4 and 5.

- The table shows that as the cut-off level rises, the number of patients requiring special care falls. With a preset of 8 (nearset of 6), the proportion requiring special care is 31.8 per cent, which is a large workload for a practice. To get the special care group down to around 15 per cent, a preset of 20 (nearset of 16) is needed.

- As the cut-off level rises, so does the risk that a patient who needs special care will fall outside the special care group. For example, with a preset of 12 (nearset of 8):

  - 40.7 per cent of smokers of 20 or more cigarettes a day
  - 33.9 per cent of those with systolic BP ≥ 180 mm/Hg
  - 37.9 per cent of those with total cholesterol concentration ≥ 10 mmol/l

would be allocated to the general advice group, not the special care group.

Cholesterol measurement	Nearset (preset) 16 (20)	12 (16)	8 (12)	6 (8)	4 (6)
No. (%)	980 (20.6)	1219 (25.6)	1794 (37.7)	2155 (45.3)	3813 (80.1)
Special care No. (%)	734 (15.4)	831 (17.5)	1074 (22.6)	1512 (31.8)	2112 (44.4)

Source: Randall et al (1992)

Example 5

Test result	Disease present	Disease absent	Totals
Positive	5	2	7
Negative	1	92	93
Totals	6	94	100

$$\text{Sensitivity} = \frac{\text{True positives}}{\text{Those with disease}} = \frac{5}{6} = 83\%$$

$$\text{Specificity} = \frac{\text{True negatives}}{\text{Those without disease}} = \frac{92}{94} = 99\%$$

$$\text{Positive predictive value} = \frac{5}{7} = 71\%$$

$$\text{Negative predictive value} = \frac{92}{93} = 98.9\%$$

OH 5.10 *Example 6:* **Intervention levels**

The following are the intervention levels used in treating anaemia in pregnancy in a COPC project.

HAEMOGLOBIN LEVEL (per 100 ml)	**TREATMENT**
12 gm and over	**No treatment**
11 gm	**1 iron tablet daily**
10 gm	**3 iron tablets daily**
Over 10 gm	**Hematocrit and full blood count. Treatment according to the nature of the anaemia**

Source: Kark (1989), p 134

OH 5.11 The intervention plan

- **Activities and protocols to be used.**
- **Who does what and when.**
- **Records to be kept.**
- **Monitoring system.**

Example 7 – see OH 5.12

- This is an example of a protocol which:
  - assigns respiratory infections to three stages of severity
  - ensures all workers use the same criteria for determining the stage of a child's illness
  - ensures all workers prescribe consistent treatment.
- A child's stage of disease is defined as the highest stage for which one or more symptoms is present.
- In the project, it was important that all health workers identified Stages 1 to 3 in the same way. To ensure this, the team drew up the protocol shown in OH 5.12.
- For any protocol, a sensible degree of detail must be set. Too little detail will give a useless protocol which delivers no standardisation. Too much detail will weigh team members down and lead to a reluctance to use the protocol.

OH 5.12 Respiratory infections protocol

INFORMATION GATHERING	STAGE I	STAGE II	STAGE III
Subjective			
How long has it been present?	< 5 days	5–7 days	≥ 7 days
Is there coughing?	Yes/No		
Does he cough so hard he passes out or turns blue?	No		Yes
Does he indicate that his ear hurts?	No		Yes
Is there pus in his ear?	No		Yes
Does he have a sore throat?	No	Yes	
Is he throwing up – after coughing only?	No		Yes
– after each feeding?	No		Yes
Objective			
Temperature: [ ] age 0–6 months	< 100°		≥ 100°
[ ] age 6 months to 2 years	< 100°	100°–101°	≥ 101°
[ ] age 2–4 years	< 101°	101°–102°	≥ 102°
Respiratory rate	< 32/min	32–40/min	≥ 40/min
Are there retractions present?	No		Yes
Is there flaring of the nostrils?	No		Yes
Is there grunting when he breathes out?	No		Yes
Is there wheezing present when he breathes out?	No		Yes
Is the baby lethargic?	No		Yes
Does he have a stiff neck?	No		Yes

ASSESSMENT	TREATMENT PLAN
[ ] Well child	Do educational task A
[ ] Respiratory infection stage I	Treat as below; do educational task A and follow up in 5 days; refer to clinic if not better
[ ] Respiratory infection stage II	Treat as below; do educational task A and follow up in 24 hours; refer to clinic if not better
[ ] Respiratory infection stage III	Refer to clinic rightaway
[ ] No sickness – medicine given to be kept on hand	

TREATMENT	
1 Fever or headache Use acetaminophen drops	[ ] 0–6 months – Acetaminophen drops 0.3 cc every 4 hrs [ ] 6–12 months – Acetaminophen drops 0.6 cc every 4 hrs [ ] 12–18 months – Acetaminophen drops 0.9 cc every 4 hrs [ ] 18 months–2 yrs – Baby aspirin 75 mg – 1 tablet for each yr of age, every 4 hrs
2 Runny or stuffy nose: Saline nose drops. 1 drop in each side every 3–4 hrs	
3 Coughing Use Glyceryl Gualacolate Cough Syrup	DO NOT GIVE TO BABIES LESS THAN 6 MONTHS OLD [ ] 6 ms–2 yrs – 1/2 teaspoonful 3 times a day [ ] 2 yrs–4 yrs – 1/2 teaspoonful 4 times a day
4 Sore throat	[ ] Throat culture – label with name, date, number and village and send to disease control lab within 24 hrs
5 Educational task A	Encourage fluids Other

Source: Nutting in Nutting (1987), p 301

Example 8 – An alcohol intervention protocol

0: Abstainer
Assess other risk factors.

1: ≤ 14 units (women); ≤ 21 units (men)
Discuss safe limits. Where appropriate, remind patient of occasions when it would be prudent not to drink at all (i.e. before driving, when taking certain medications, or during pregnancy).
Check vulnerability and exposure, by finding out, for example, occupation and any problems related to intoxication.
Assess in relation to other presenting factors.

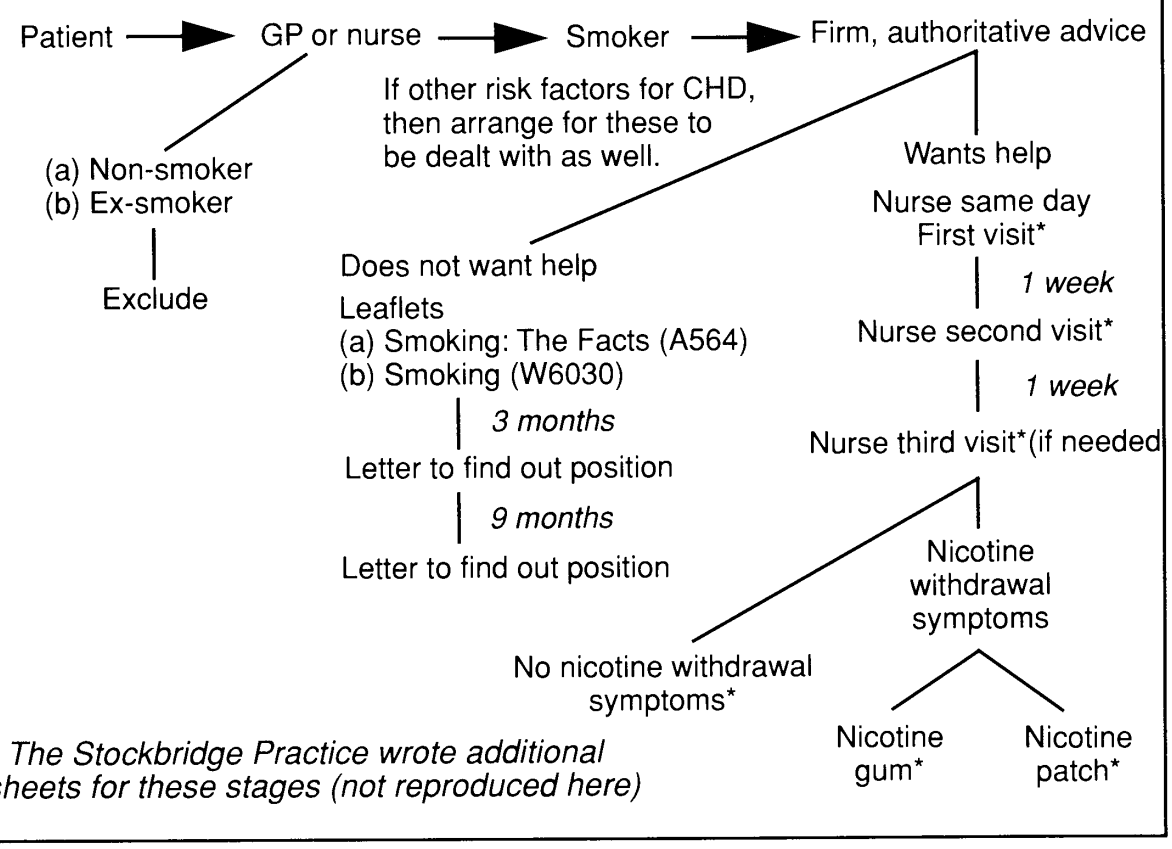
2: 15–24 units (women); 22–34 units (men)
As 1.
Explain to the patient that he/she may be drinking more than is advisable and should consider cutting down.
Assess other health risks/harm.
Explore health beliefs and desire for action.
Agree realistic target/action and invite back for further support.
Provide health education materials to support action.

3: 25–34units (women); 35–49 units (men)
Advise importance of cutting down in order to avoid harm.
Possible blood test.
As 2.

4: 35 units or over (women); 50 units or over (men)
Explain health risks. Indicate urgency of situation.
Possible laboratory tests (check practice protocol on alcohol).
Assess for problems relating to heavy drinking or intoxication.
Assess presence of other risk factors.
Explore beliefs and readiness for action.
May need specialist intervention.

Source: Priest & Speller (1991), pp 88–9

OH 5.13 *Example 9:* Stockbridge Practice smoking-reduction pathway



** The Stockbridge Practice wrote additional sheets for these stages (not reproduced here)*

5.14 Intervention records

- **Dual purpose:**
  - **for patient treatment**
  - **for COPC monitoring and evaluation.**
- **When are the data needed?**
- **What actions will you take?**
- **Collect only what you need.**
- **Must be accurate.**
- **Must be reliable.**
- **Must be valid.**

OH 5.15 *Example 10:*

Data needed for pregnancy and its outcomes

- Demographic data: age, marital status, parity, education, occupation, social class, ethnic group, religion.
- Pregnancy history: present pregnancy, wanted, planned; previous abortions, stillbirths and live births; family spacing.
- Somatic characteristics: mother's height, weight and weight changes during pregnancy, blood group ABO, Rh.
- Behaviour: alcohol, smoking, drug addiction, medications, diet.
- Progress of the pregnancy: normal pregnancy, morbidity mainly related to pregnancy, and general disease, psychiatric disorder.
- Foetal health and growth: prenatal screening, procedures for detection of foetal abnormality and growth retardation.
- Outcome of pregnancy: normal live-born infant and type of birth, birth weight, period of gestation, abortive outcome, stillbirth, congenital anomalies.
- Delivery and labour: normal labour and delivery, complications, methods of delivery.
- Puerperium: normal, complications of puerperium.
- Postpartum care and examination.
- Perinatal period (foetal age 28 weeks to new-born through first week): normal, abnormal conditions originating in the perinatal period, perinatal mortality.

Source: Kark (1989), p 47

OH 5.16 Prenatal care – project monitoring

- **Monthly team meeting.**
- **Monthly statistical report.**
- **All cases of perinatal morbidity and mortality reviewed:**
- **Overdue and patients at high risk discussed to anticipate and prevent complications.**
- **Special topic presentations (e.g. genetic counselling).**

Source: Doyle in Nutting (1987), p 261

OH 5.17 *Example 11:* Compliance monitoring

The following is an example of how a CHD COPC programme was monitored for team compliance with the agreed protocols and activities.

CATEGORY	1	2	3
Number of persons in category	250	373	106
Percentage having at least one contact	95.6	81.2	66
Number of contacts per person			
Aim for year	3	2	1
Actual average	2.1	1.2	0.8

Categories

(1) Those in need of medication.
(2) Those in need of special counselling and surveillance.
(3) Those with no risk factors and smokers with no other risk factors.

Source: Kark (1989), p 185

OH 5.18 Project monitoring

- **How frequently will your project need to be monitored?**
- **Who will coordinate the monitoring?**
- **What sorts of issue are likely to be on the monitoring agenda?**
- **What monitoring data will be needed?**

OH 5.19 PHCT task – Planning your intervention

- **Review where you are now.**
- **Define your group.**
- **Write your objectives.**
- **Choose an intervention.**
- **Decide your criteria for intervention.**
- **Devise your protocols.**
- **Decide who does what and when.**
- **Devise your recording system.**
- **Devise your monitoring system.**
- **Decide staff training needs.**
- **Estimate resources.**

SESSION 6: WRITING A PROJECT PLAN

OH 6.3 Features of successful project management

- Clear goals.
- Clear stages with milestones.
- Progress reviews.
- Adequate resources.
- Who does what is clear.
- Good information.
- Team commitment.

OH 6.5 Milestones

- State a goal to be achieved
- Do not imply a method of reaching the goal

Examples

'Protocols ready for use'

'Computer system ready to accept COPC data'

'Detailed assessment complete'

OH 6.6 How to choose milestones

- Important achievements.
- Natural stages – do not invent them.
- Steps of comparable size and duration.
- Not too many – at most ten on a small project.

OH 6.7 Task identification

Milestone	Tasks for this milestone
Community diagnosis complete	1 First draft
	2 Research
	3 Second draft
	etc.
Prioritisation	1
	2
	3
	etc.
etc.	

OH 6.8 Project meetings – purposes

- Monitor progress.
- Foresee problems.
- Agree actions.
- Agree changes to the plan.
- Promote communication.
- Promote team work.

OH 6.9 Project meetings – running

- Issue an agenda.
- Issue a project progress report.
- Agree the time for each agenda item.
- Keep discussion relevant, positive, decisive.
- Record what, who, by when.

OH 6.10 Project reviews – purposes

- To revisit the project goals:
  - are they still relevant?
- To review the project methodology:
  - is it still the best way of achieving the goals?
- To revisit the use of resources:
  - do we have other calls on the resources?
  - should some team members do more?
  - should some do less?

OH 6.11 Planning your project

1 Decide the milestones for your project.
2 Draw up a list of all the tasks.
3 Put the milestones and tasks on a task sheet.
4 Estimate how long each stage will take.
5 Present the task list to the full workshop.

OH 6.12 Sample Gantt chart

MILESTONE	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9
Plan intervention									
Read research	▨	▨							
Decide criteria			▨						
Write protocols			▨	▨	▨				
Design records						▨			
Brief colleagues						▨	▨		
Collect data						▨	▨	▨	▨

▨ = task done

□ = task to be done

PARTICIPANTS' MATERIALS

SESSION 7: EVALUATING A COPC PROGRAMME

OH 7.2 Evaluation

The critical and objective assessment of the degree to which a service fulfils stated goals.

OH 7.3 Evaluation purposes

- **To ask 'was it worthwhile?'**
- **To ask 'what worked and what did not?'**
- **To ensure that resources are used efficiently.**
- **To provide feedback to the team.**
- **To identify new areas of work.**
- **To justify the use of resources.**

OH 7.4 Evaluation guidelines

- **Keep it simple.**
- **But rigorous.**
- **Measure the effect on the population.**
- **Ask the right questions.**
- **Use proxy questions where needed.**
- **Do not expect 100% success.**

Example 1

In a maternal and child health programme, the mean population indicators showed that the project had been a success (e.g. the mean week of gestation in which the first visit occurred improved from 24.6 (before) to 21.8 (after)). Only when the project asked about differential take-up was it found that on some indicators the outcome had deteriorated (e.g. the percentage who made contact by the 20th week of pregnancy had improved for average risk patients (from 61.0 to 66.7 per cent) whereas the rate for high risk had declined (from 54.1 to 48.3 per cent)).

Source: Nutting (1987), p 348

OH 7.5 Donabedian's model

Structure → Process → Outcome

OH 7.6 *Example 2:* Changes in the prevalence of hypertension in men in the family practice (CHAD) and control populations

	FAMILY PRACTICE		CONTROL	
	1970	1975	1970	1975
Age standardised prevalence rate of hypertension	24.1%	14.5%	20.4%	16.0%
Change 1970–1975	-9.6%		-4.3%	
Number of men who changed categories 1970–1975				
Moved out of hypertension category *a*	35		80	
Moved into hypertension category *b*	13		49	
Odds ratio *a*:*b**	2.7		1.6	
p	0.001		0.004	
Difference between the two populations in their odds ratios, controlling for age	1.7			
p	0.094			

* Odds ratio *a*:*b* expresses tendency to move out of hypertension category

Source: Kark (1989), p 188

OH 7.7 Maxwell's model – Dimensions of service quality

- Access.
- Relevance to community.
- Equity.
- Social acceptability.
- Effectiveness.
- Efficiency and economy.

OH 7.8 Preparing your report

- State relationship to project objectives.
- List possible health statements.
- List possible findings.
- Draw up dummy tables and possible statistical calculations.
- Draw up dummy graphs.
- List the type of conclusions you might make.

OH 7.9 *Example 3:* Prenatal care evaluation data

	BEFORE	AFTER
Mean week of gestation in which prenatal care was started	24.6	21.8
Mean number of prenatal visits	5.8	7.4
Prenatal workup rate	23.5%	37.2%
Pregnancy assessment rate	11.8%	57.8%
Anaemia screening rate	43.1%	64.7%
Postpartum follow-up rate	28.4%	48.0%

Source: Nutting (1987), p 348

OH 7.10 Effectiveness measures

- Changes in risk factors.
- Changes in morbidity.
- Changes in knowledge/attitudes.
- Changes in mortality.

OH 7.11 *Example 3:* Change in morbidity measured over time

Period	Haemoglobin below 10 gm/ml at any time during pregnancy (% pregnant women)
1958–59	12.0
1964–66	8.8
1970–71	3.3
1975–76	1.6

Source: Kark (1989), p 135

OH 7.12 Types of measure

- Identify which of your COPC objectives are effectiveness measures.
- Classify these into:
  - changes in risk factors
  - changes in morbidity
  - changes in knowledge/attitudes
  - changes in mortality.

OH 7.13 Data collection issues

- Ensure consistency and accuracy.
- Standardise measurement methods.
- Use standard rating scales.
- Use proven questionnaires or validate your own.
- Train interviewers and other data collectors.
- Test analysis and evaluation method.
- Build into practice routines.
- Decide who will coordinate data collection.

OH 7.14 Evaluation plan

- Who is it for?
- What questions will the report answer?
- When will the data collection cut-off date be?
- Who will analyse the data?
- What facilities or expertise will be needed?
- Who will write the report?
- When will the report be ready?

OH 7.15 Measuring effectiveness – Terminology

Non-cost related

- Effectiveness.
- Efficacy.

Cost-related

- Efficiency.
- Cost minimisation analysis.
- Cost effectiveness analysis.
- Cost utility analysis.
- Cost benefit analysis.
- Opportunity cost.

SESSION 8: PLANNING A BEHAVIOUR CHANGE

OH 8.1 Why behaviours may persist

- Reinterpreting data in personal terms.
- Rewards of present behaviour.
- Benefits too long term.
- Social pressure.
- Belief that change will have no effect.
- Belief that 'I cannot change'.

OH 8.2 Conditions for change

- Want to change.
- Believe you can change.
- Believe change will have the desired effect.
- Know how to change.

Source: Jacob & Plamping (1989), p 81

OH 8.3 Health Locus of Control (HLOC)

High — Low

Internal HLOC

High — Low

External HLOC

OH 8.4 Stages in behaviour change

1 Pre-contemplation

2 Contemplation

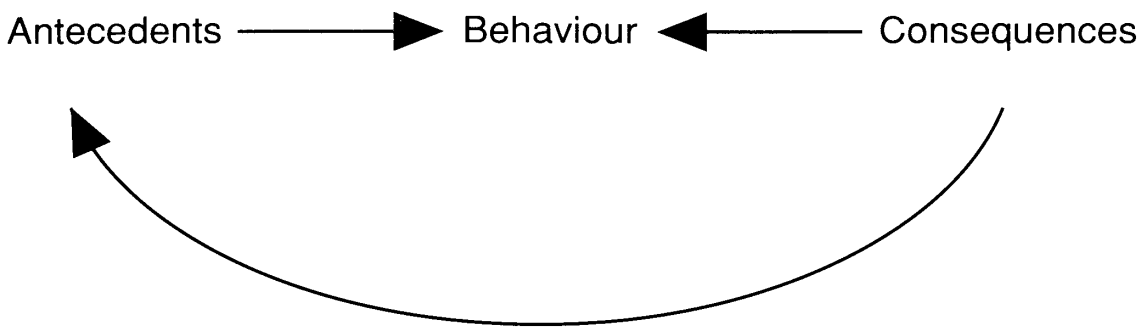
3 Action

4 Maintenance

5 Relapse

Source: Prochaska & DiClemente (1982), p 83

OH 8.5 The influence of environment on behaviour



Source: Jacob & Plamping (1989), p 85

OH 8.6 Behaviour change steps

1 **Decision making**
2 **Goal setting**
3 **Monitoring**
4 **Intervention**
5 **Evaluation**
6 **Maintenance/relapse**

OH 8.7 Decision-making aims

- **To help patient make a commitment to change.**
- **To increase self-efficacy.**
- **To increase internal HLOC.**

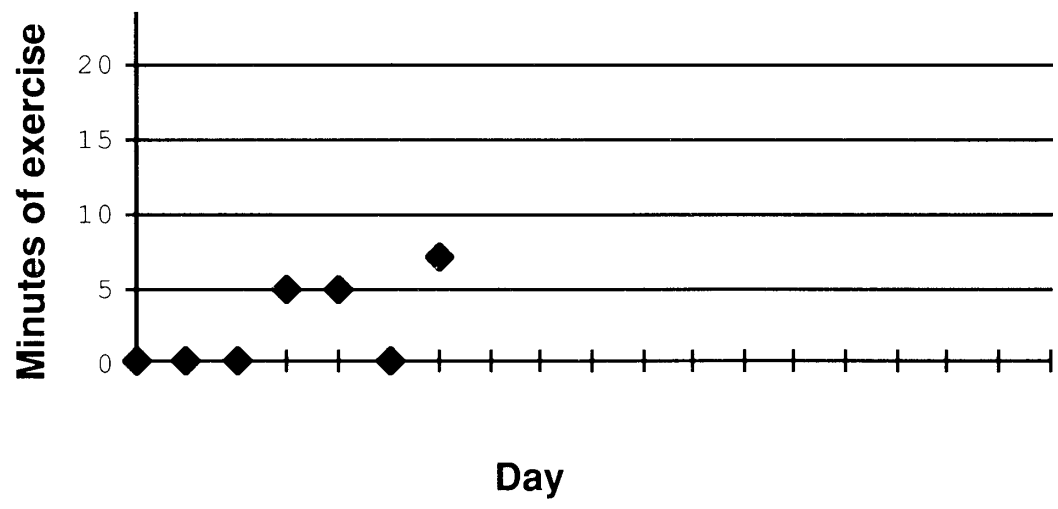
OH 8.8 Goal setting

A **Appropriate**
R **Realistic**
M **Measurable**
P **Positive**
I **Important to the patient**
T **Time-related**
S **Specific**

OH 8.9 Monitoring

- Establish baseline.
- Design the records.
- Measure the positive behaviour.
- Keep same measure throughout programme.

OH 8.10 Exercise chart



OH 8.11 Tackling antecedents and consequences

Antecedents

- Avoid them
- Change them

  (i.e. establish new cues).

Consequences

- Establish effective consequences.

OH 8.12 Relapse triggers

- An event that triggers a low emotional state.
- Interpersonal problems.
- Social pressure.

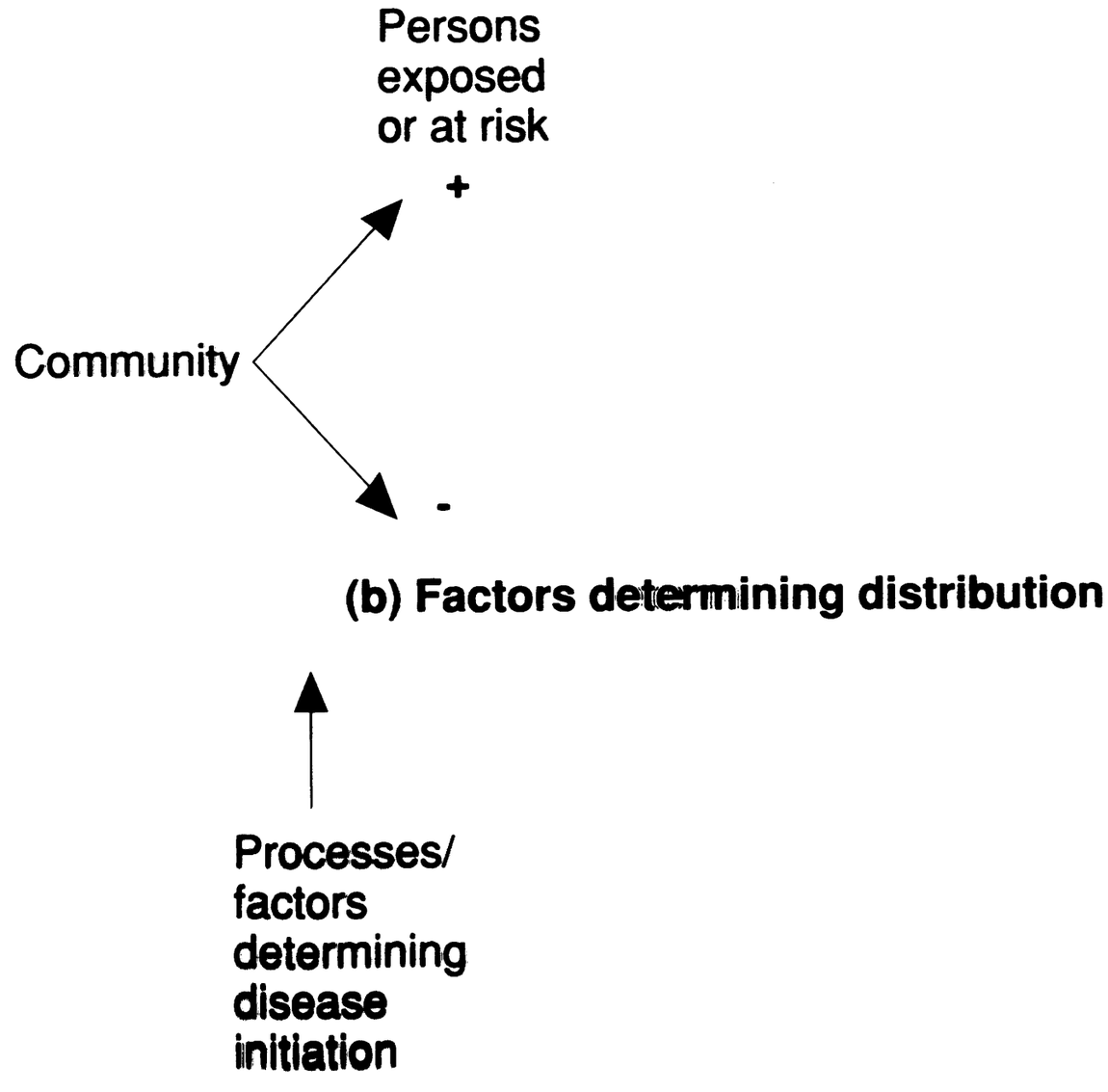
COMMUNITY-ORIENTED PRIMARY CARE

A RESOURCE FOR DEVELOPERS

OVERHEAD PROJECTIONS

OH 1.3 Natural history of disease in the community

(a) Distribution of health and disease



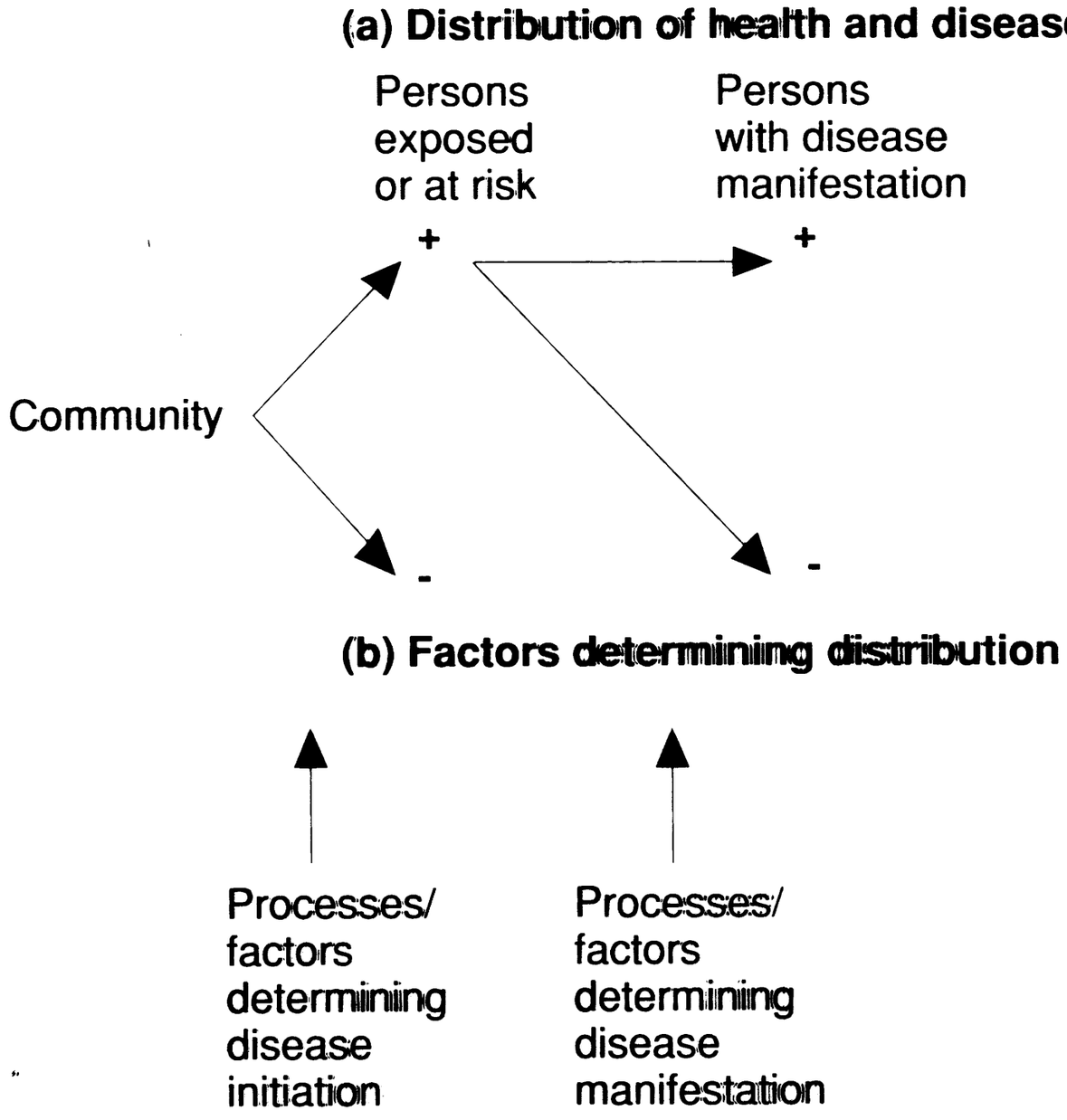
OH 1.2 Natural history of disease in the community

Community

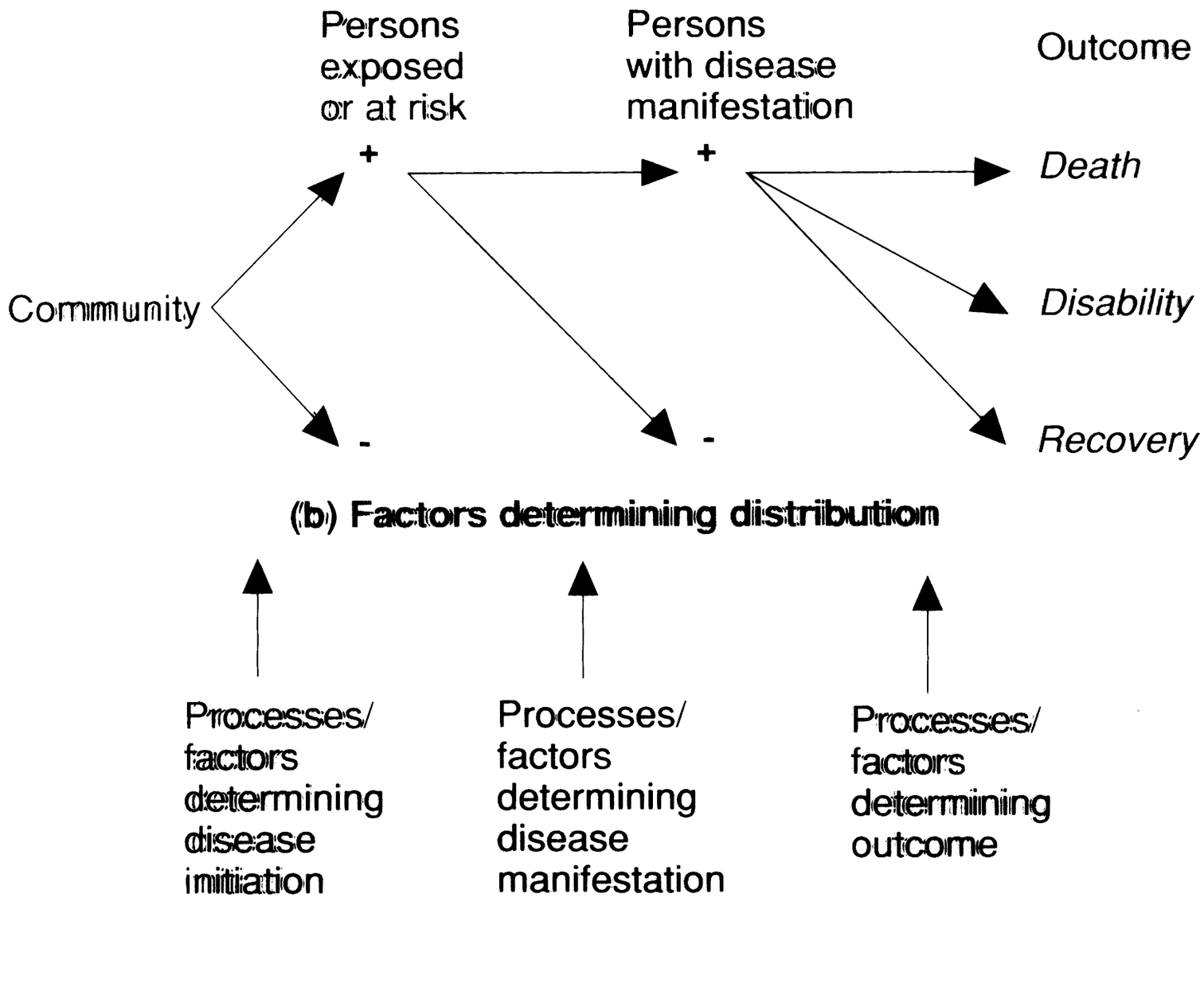
OH 1.1 Workshop aims

- To find out about COPC and its application in general practice.
- To compare COPC with your current work.
- To identify a potential COPC programme for your practice.
- To write a draft programme plan.

OH 1.4 Natural history of disease in the community



OH 1.5 Natural history of disease in the community



OH 1.6 Epidemiology – definition

Epidemiology is the study of the distribution and determinants of health and disease in populations. It provides a basis for the planning and evaluation of health services.

OH 1.7 The three stages

- Work with your PHCT colleagues in threes or fours.
- Identify one major health problem in your community.
- Identify the processes/factors which determine:
  - initiation
  - manifestation
  - outcome.

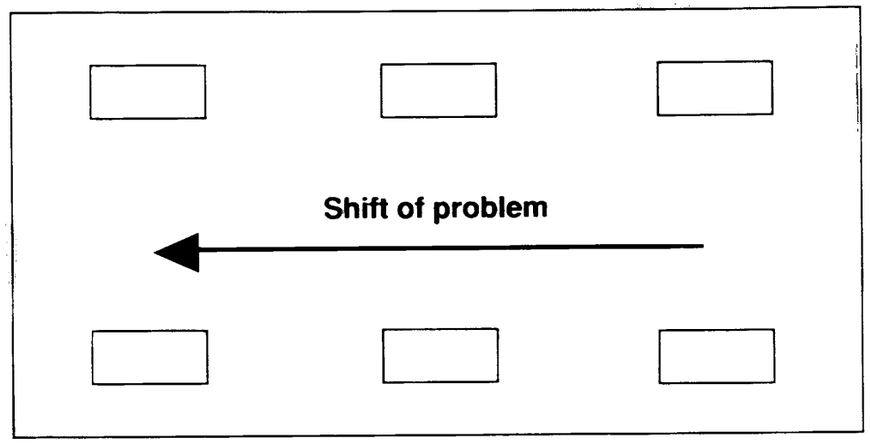
OH 1.8 Levels of prevention

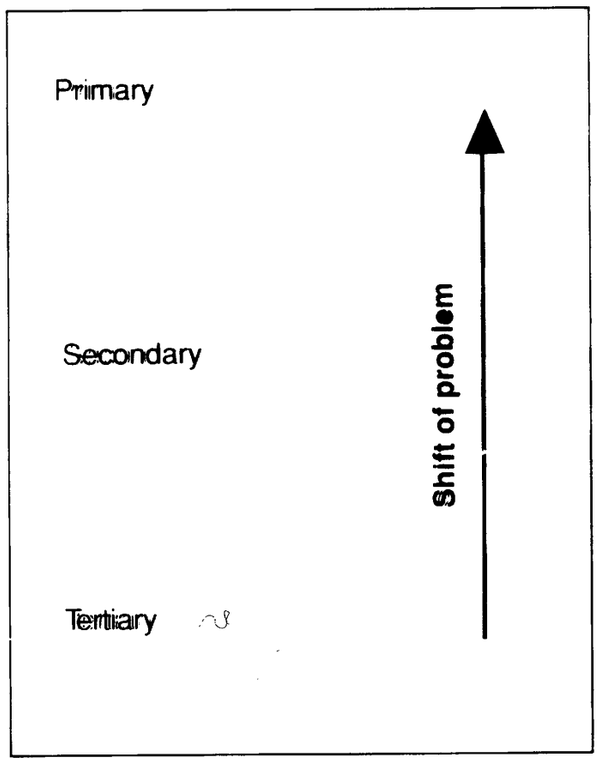
• Primary	(a) Health promotion (b) Immunisation	} Before any pathological change
• Secondary	(a) Early diagnosis (b) Medical treatment	} Preventing symptomatology
• Tertiary	(a) Reduce disability (b) Rehabilitate	} Preventing further deterioration

OH 1.9 Levels of prevention for CHD

PREVENTION STAGE	ACTIVITY
• Primary	Promoting exercise, non-smoking, healthy diet
• Secondary	Screening for breast cancer Treating hypertension
• Tertiary	Treating congestive cardiac failure

OH 1.10 Problem shift





OH 1.11 CHAD* programme

Case-finding and treatment of:

Coronary heart disease	Cerebrovascular disease		Peripheral vascular disease
Hypertension	Hyperlipaemia	Diabetes	Obesity

and

survey of community distribution of:

Systolic BP	Diastolic BP	Serum cholesterol	Weight–height index	Serum glucose

and

their modification if necessary by:

Dietary changes	Stopping cigarette-smoking	Exercise	Medical treatment

using:

CHAD clinic in family practice	Community health education

and

evaluation of the programme by:

Checking compliance with the programme by the health centre and the community	Measuring change in distribution of risk factors

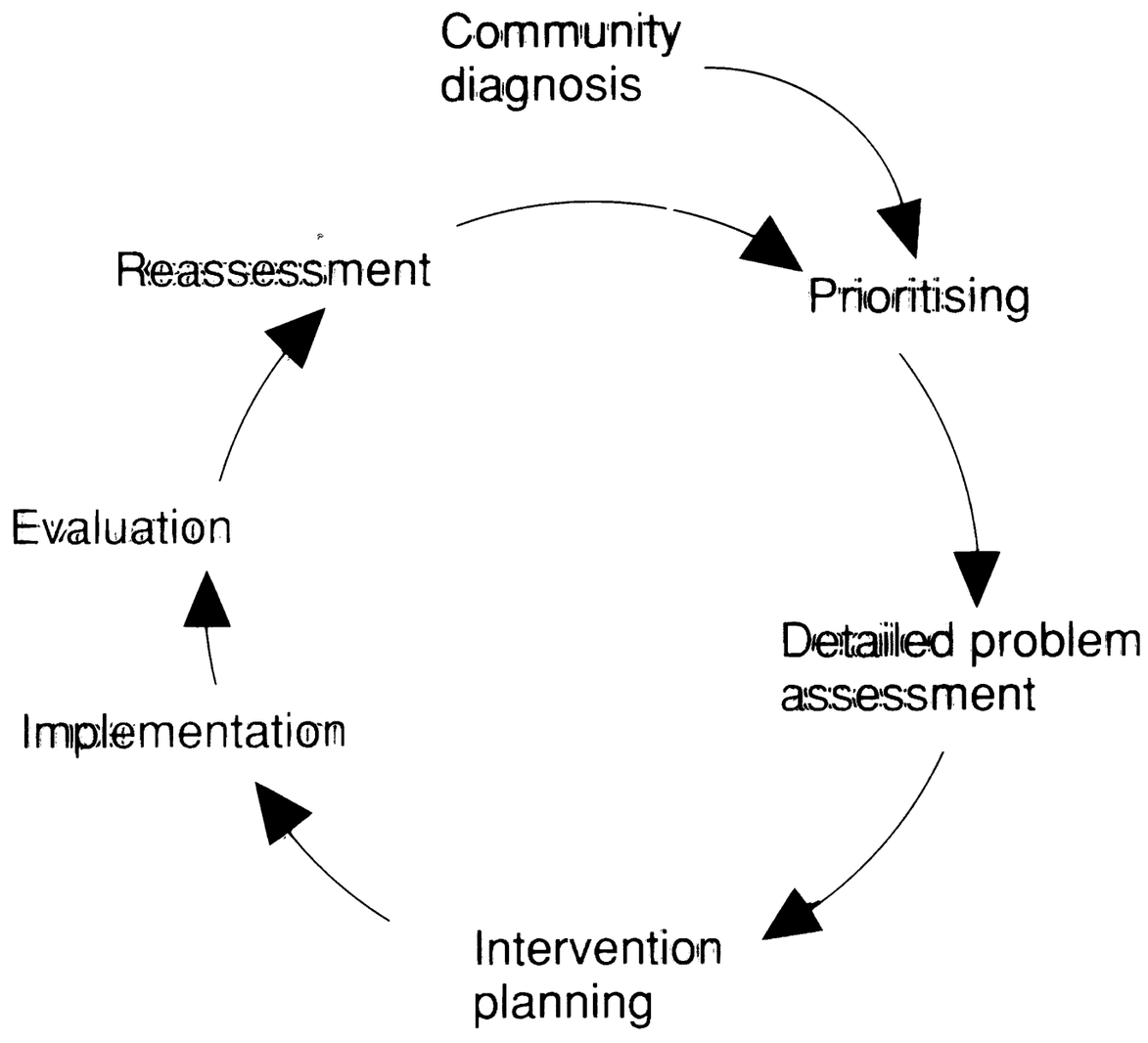
* Community syndrome of hypertension, atherosclerotic diseases and diabetes

Source: Kark (1989), p 165

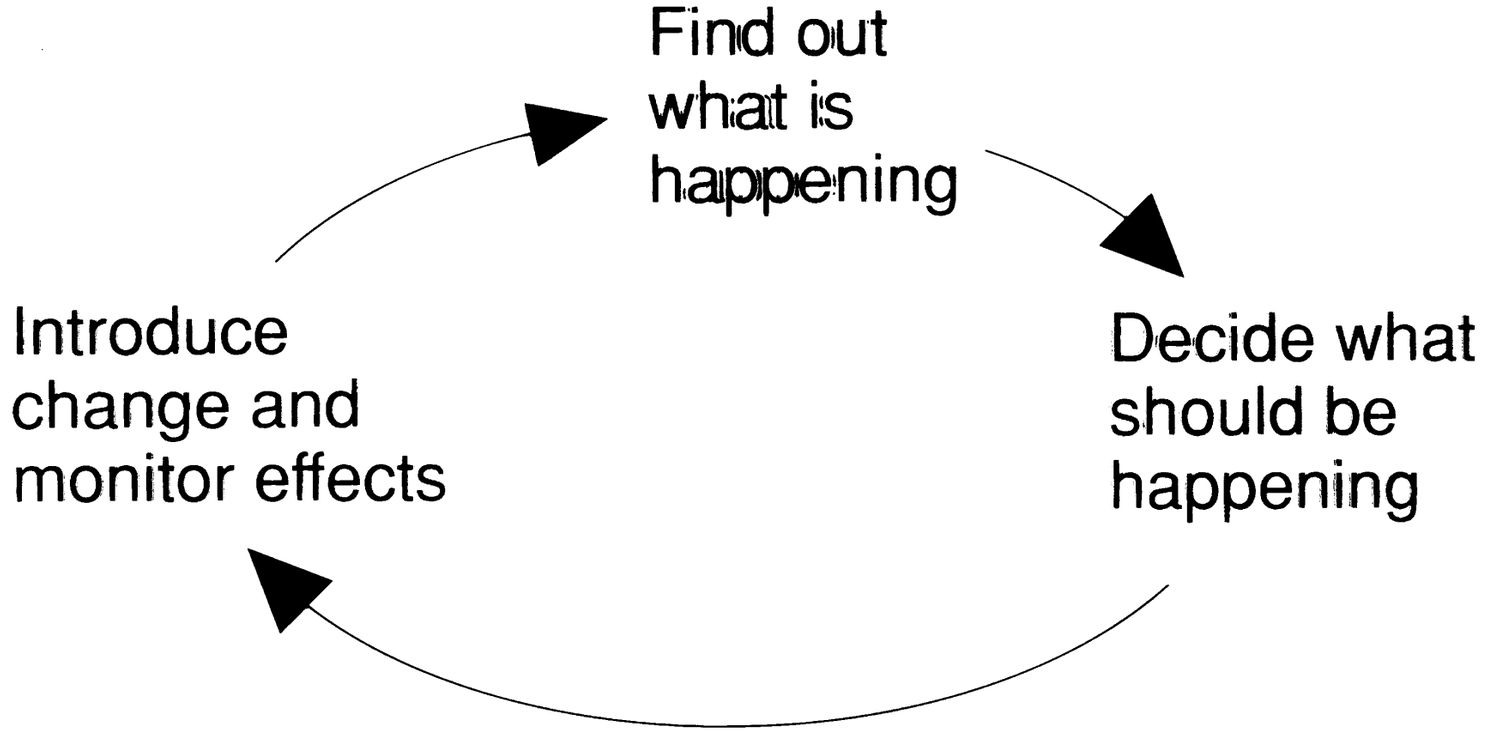
OH 1.12 Community-oriented primary care (COPC) – Definition

COPC is a *continuous process* by which *PHC* is provided to a *defined community* on the basis of its *assessed health needs* by the planned *integration* of *public health* with PC practice.

OH 1.13 The COPC cycle



OH 1.14 The audit cycle



Source: Hughes & Humphrey (1990), p 5

OH 1.15 COPC features

- Works with a defined group.
- Provides primary clinical care.
- Has defined programmes.
- Interests itself in *all* factors that affect health.
- Is concerned with the total natural history of a disease and all levels of prevention.
- Involves a multi-disciplinary team.
- Involves the community.
- Uses epidemiological methods.
- Is an integral part of PHC work.

OH 1.16 COPC and your present work

- What is new in the COPC approach for your practice?
- Identify examples where you already:
  - work with a defined group
  - have group-wide clinical care programmes
  - involve other agencies
  - use proven interventions
  - monitor the results of those interventions.

OH 1.17 The 'high-risk' strategy

Advantages

- **Intervention appropriate to individual recipient.**
- **Subject more likely to be motivated.**
- **PHCT members are motivated.**
- **Cost-effective.**
- **Favourable benefit : risk ratio.**

Disadvantages

- **Costs and problems of screening.**
- **Limited potential for health of total population.**
- **Socially/behaviourally inappropriate.**

OH 1.18 Population strategy

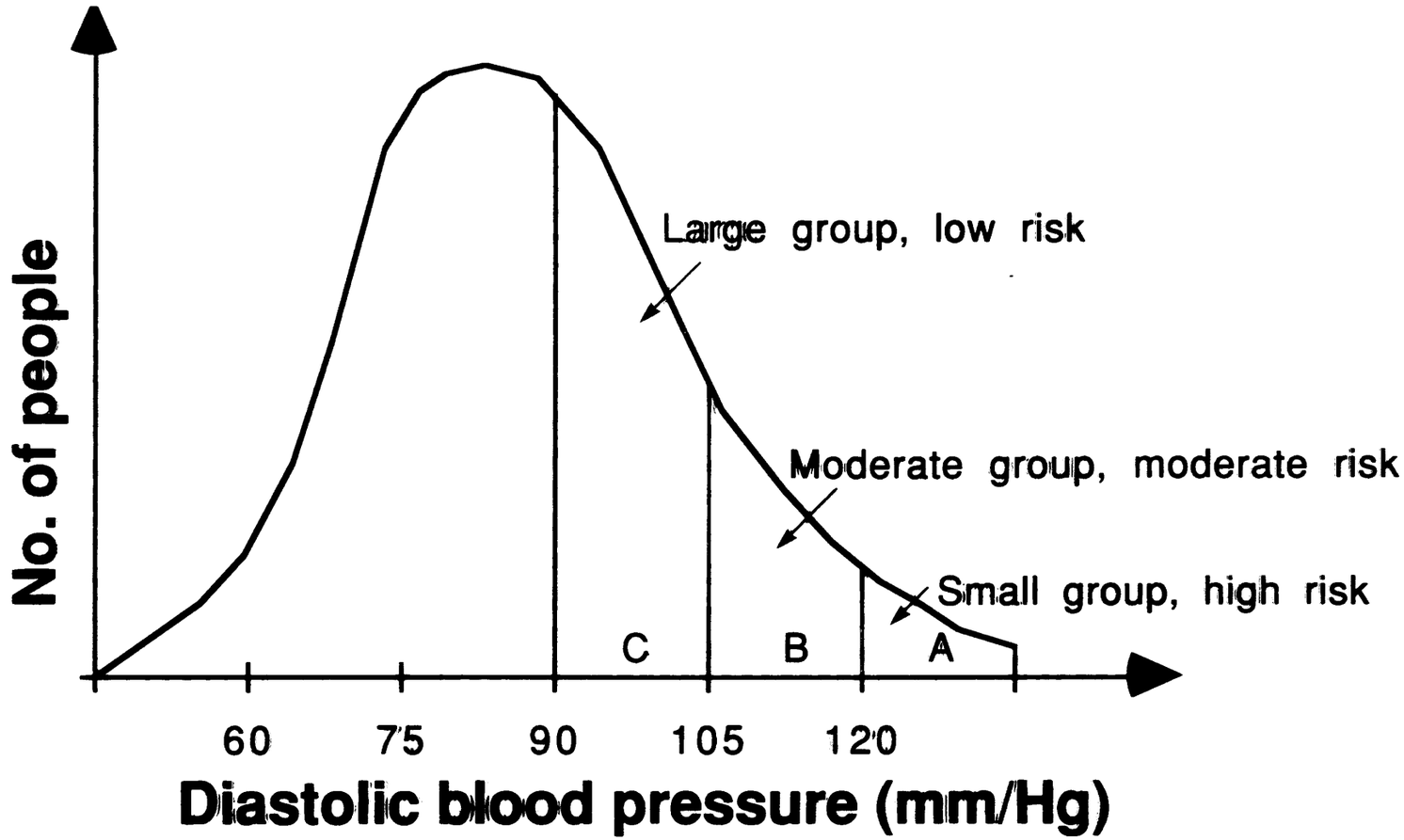
Advantages

- **Radically effective.**
- **Large potential benefits for population.**
- **Behaviourally appropriate.**

Disadvantages

- **Small benefit to individuals – the prevention paradox.**
- **Poor motivation of subjects.**
- **Poor motivation of PHCT members.**
- **Benefit : risk ratio may give concern.**

OH 1.19 Blood pressure distribution



Source: Padfield (1988)

OH 1.20 Programme types

Find examples from your practice of:

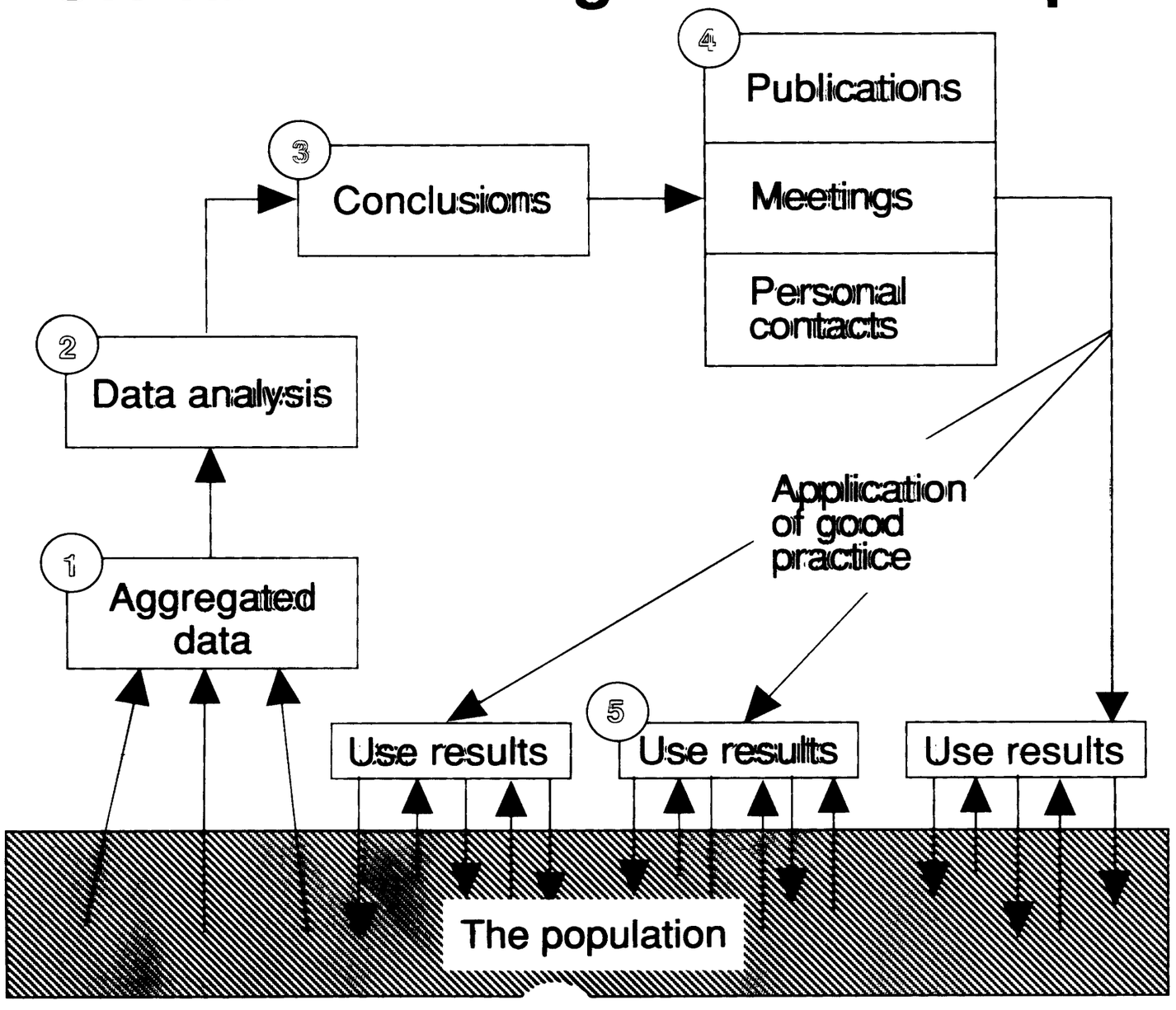
- **a high-risk programme where the balance of advantages and disadvantages justifies continuing with the high-risk approach.**
- **a high-risk programme where the balance of advantages and disadvantages suggests changing to a population approach.**
- **a population approach where the balance of advantages and disadvantages justifies continuing with the population approach.**
- **a population approach where the balance of advantages and disadvantages suggests changing to a high-risk approach.**

OH 1.21 Clinical use of epidemiology

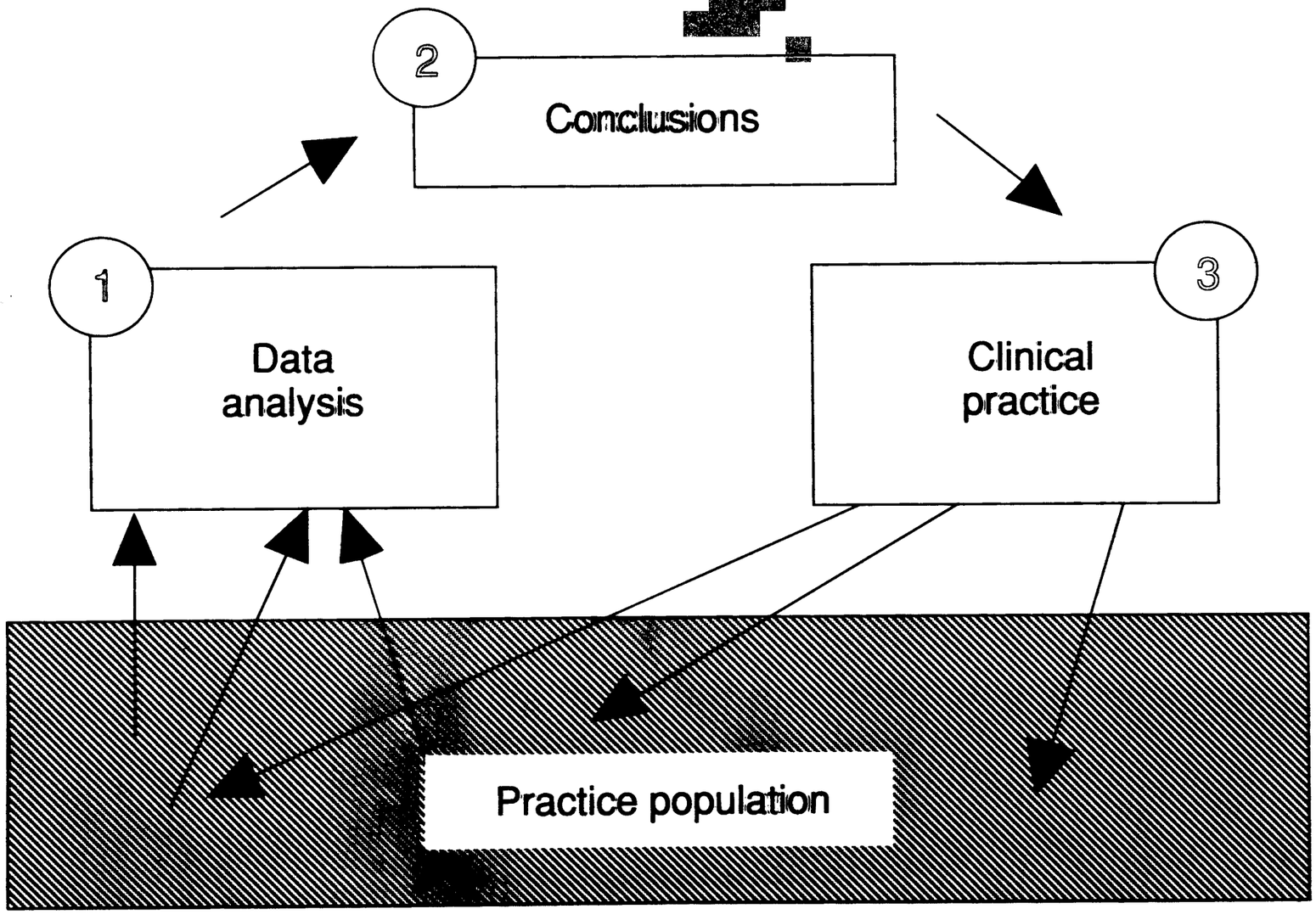
- **Contributes to the care of individuals.**
- **Is pragmatic.**
- **Its purpose is to benefit a particular community.**
- **The data which are collected are used both for clinical care and for epidemiological purposes.**
- **Can stimulate the community to become more active in the promotion of its own health.**

Source: Abramson, Kark & Palti (1983), pp 255–7

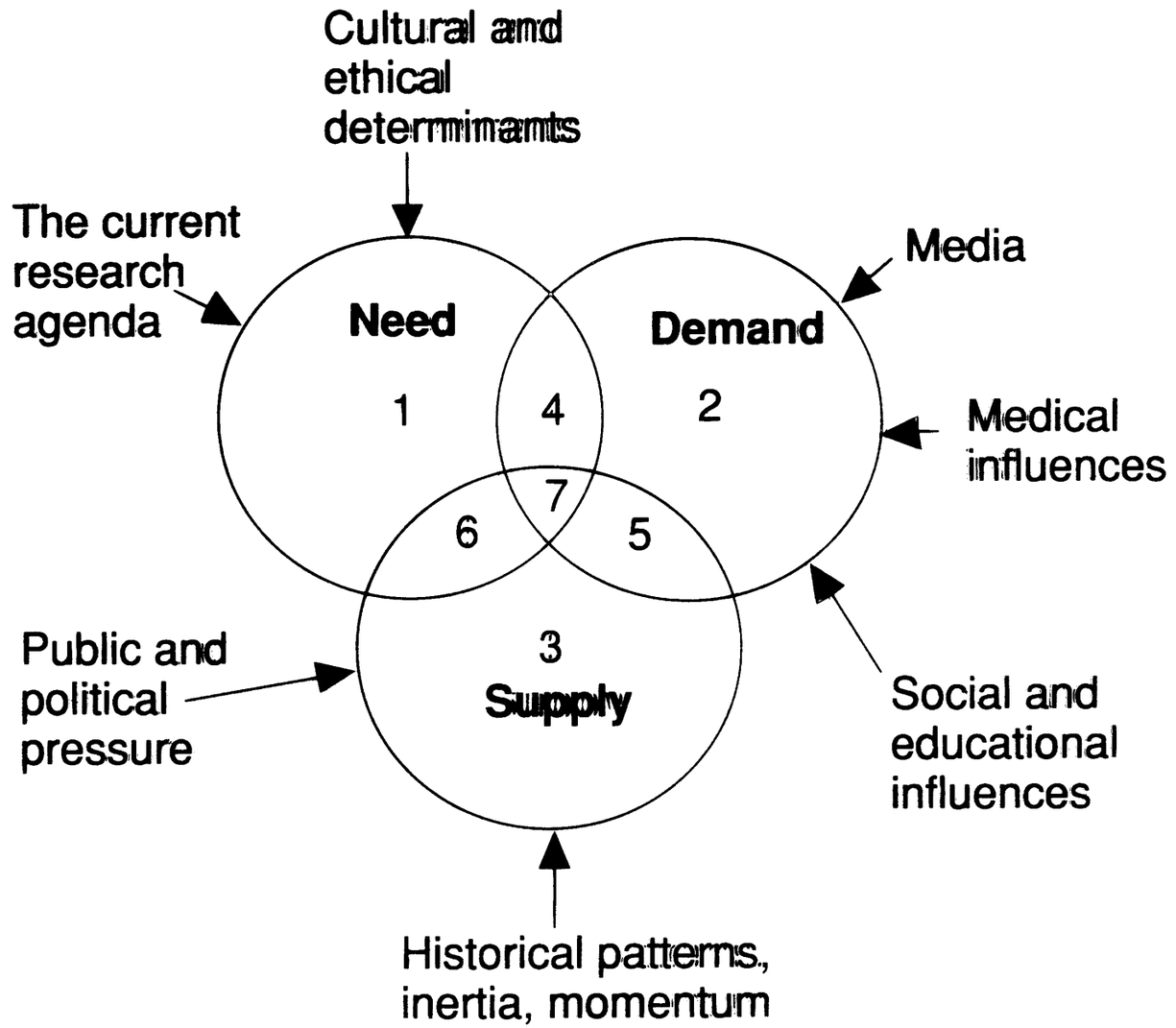
OH 1.22 The long feedback loop



OH 1.23 The short feedback loop



OH 1.24 Need, demand and supply



Source: Stevens & Gabbay (1991), p 21

OH 1.25 Identifying need

- **Work in threes.**
- **Identify one health problem for each of the fields 1 to 7.**
- **For each health problem except field 7, identify some of the pressures which create the mis-match (e.g. professional desire to use high-tech methods or patient demand).**
- **Interpret 'need' as what people would *benefit* from and find *acceptable*.**

OH 1.26 Why COPC?

- **Emphasises the whole team's responsibility for the health of the defined population.**
- **Offers a better understanding of the practice population and its health needs.**
- **Provides more control of the workload.**
- **Extends audit.**
- **Addresses the prevention paradox.**

OH 1.27 The prevention paradox

'A large number of people at a small risk may give rise to more cases than a small number of people who are at a high risk.'

Source: Rose (1992), p 24

OH 1.28 The nature of primary health care

- Accessible.
- Affordable.
- Acceptable.
- Includes: promotion, prevention, treatment and rehabilitation.
- Involves the community.
- May involve continuing surveillance of the population's health.

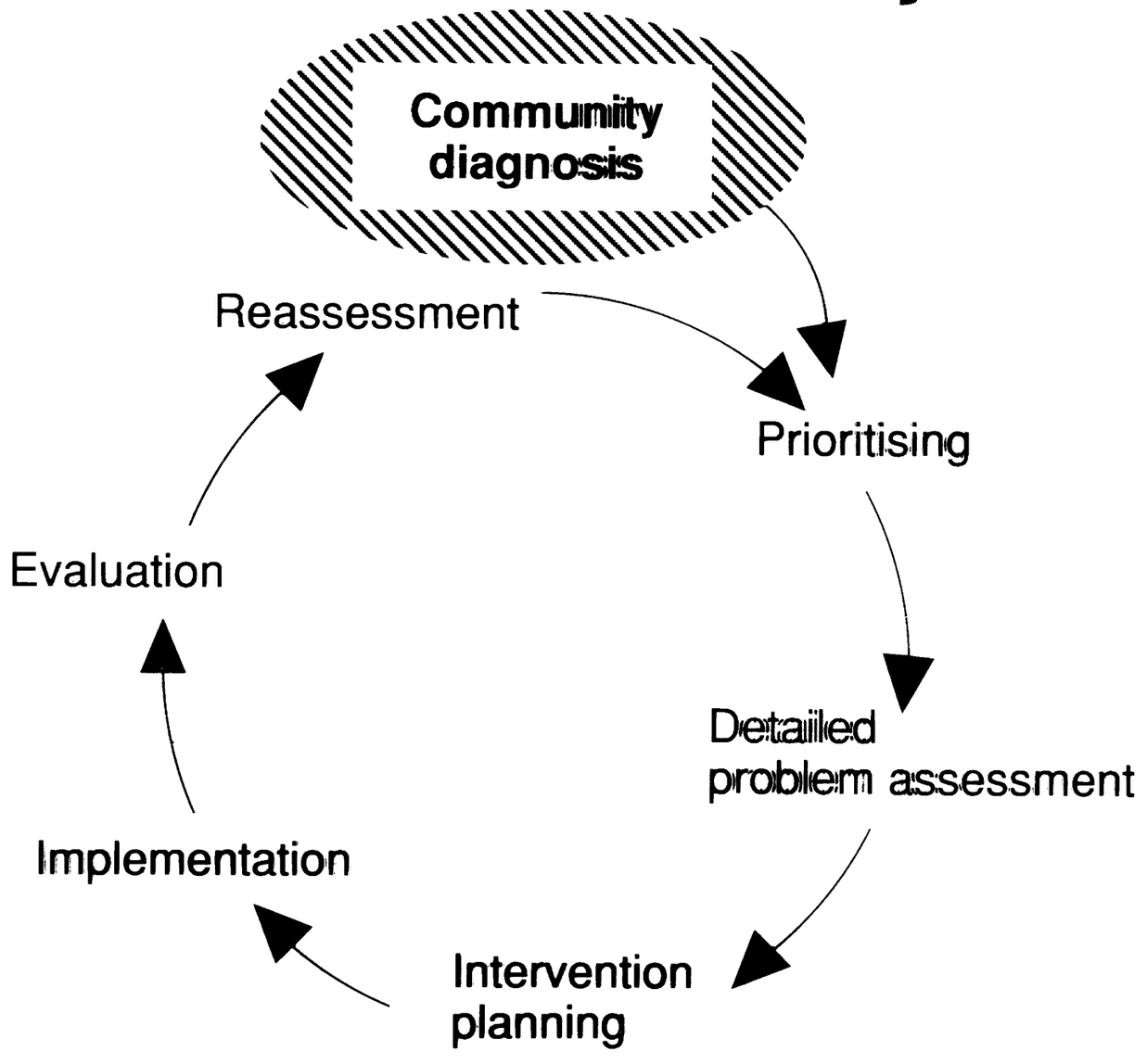
OH 1.29 Population-based medicine

- Deals with populations as well as individuals.
- Diagnoses the state of health of the community.
- Uses outreach and planned programmes.
- Provides anticipatory care.
- Involves continuing surveillance of the population's health.
- Sees potential for prevention in every consultation.
- Needs epidemiological skills.

OH 1.30 The complementary functions of clinical and epidemiological skills

INDIVIDUAL	POPULATION
Examination of a patient	Survey of community
Diagnosis of patient	Diagnosis of community
Treatment of patient	Treatment of community
Continuing observation	Continuing surveillance
Evaluation of treatment	Evaluation of programme

OH 2.1 The COPC cycle



OH 2.2 Why a community diagnosis?

- To know your practice.
- To identify all major health problems.
- As the basis for selecting your COPC priority.
- To ensure that you do not overlook potential resources.
- To ensure that you take a *population-based* view.
- To ensure that you do not inadvertently plump for an 'obvious' project.

OH 2.3 Use of community diagnoses

- Work in pairs with someone from another practice.
- Identify three ways in which a community diagnosis might influence decisions which you make about your work.
- What benefits do you think will come from the wider view which the community diagnosis gives?

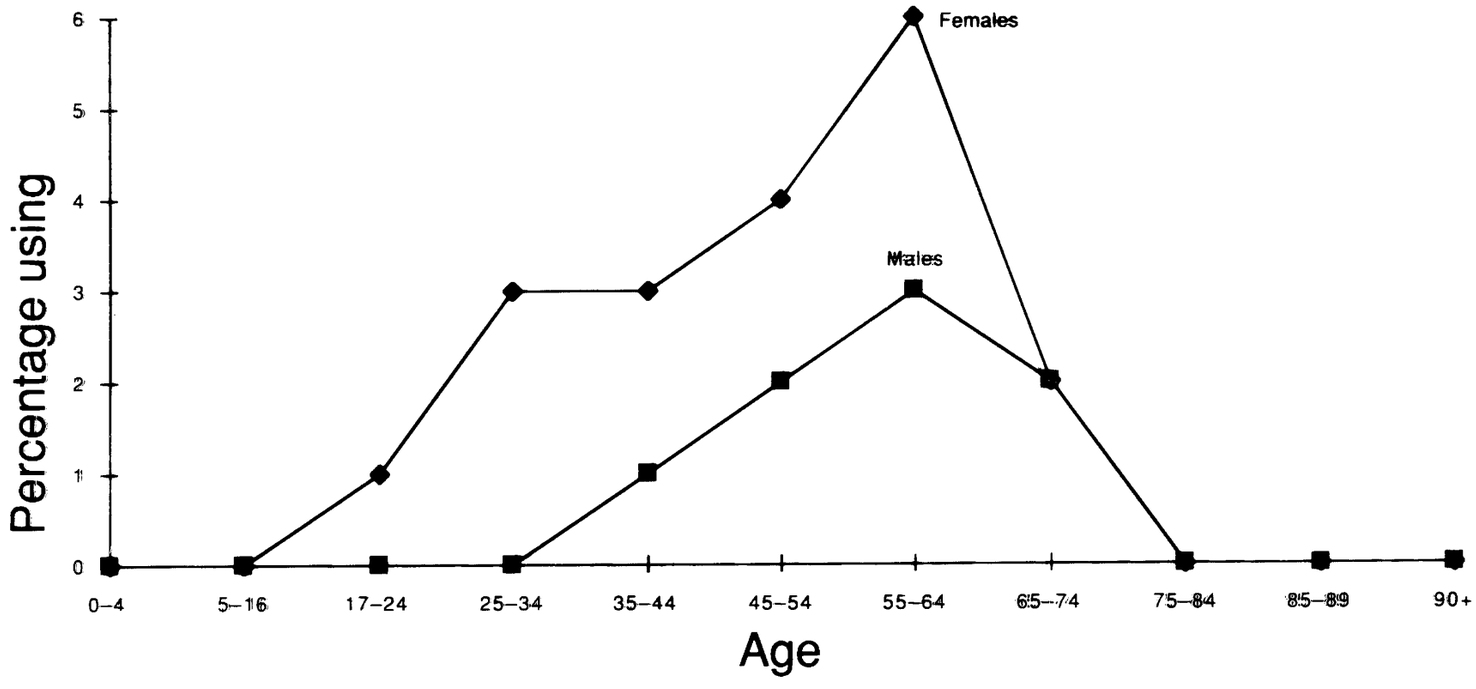
OH 2.4 Mean IQ of children aged 4–6.5 years, Israel national sample

SOCIO-ECONOMIC STATUS	FATHER'S ORIGIN			
	Israel	E Europe	Middle East	N Africa
High	111.4 (130)	110.5 (92)	101.5 (39)	98.9 (24)
Low	101.5 (125)	102.1 (94)	93.2 (224)	90.0 (156)

Source: Abramson, Kark & Palti (1983), p 240

OH 2.5 Antidepressant use

Age group	0–4	5–16	17–24	25–34	35–44	45–54	55–64	65–74	75–84	85–89	90+
Males	0	0	2	4	6	13	14	8	0	0	0
Base	366	1301	779	809	870	819	556	432	228	44	11
Percent	0	0	0	0	1	2	3	2	0	0	0
Females	0	0	9	21	24	33	31	10	0	0	0
Base	349	948	616	754	808	793	550	534	453	103	45
Percent	0	0	1	3	3	4	6	2	0	0	0



Source: Part of a COPC plan prepared by a Wiltshire practice at a COPC workshop

OH 2.6 Dumbiedykes community consultation

- Remember the 50–75 year olds who are very well represented in Dumbiedykes (e.g. more home helps).
- Start a crèche or play group run by middle-aged/elderly to help unite the old and the young.
- Get a bus into the estate.
- Create multiple small play areas (dog-free zones).
- Increase the use of the community rooms, both in the high flats and in Viewcraigs Street. The residents' associations could plan these activities according to the needs of the community.
- Housing department official to come to the community room regularly.
- Regular citizens' advice in a community room.
- Outreach health promotion courses for specific groups (e.g. carers, the stressed, the unfit, or even a first-aid class) were thought to be useful.
- Counselling service – individual or group-based – could be developed by Mental Health Development Officer (Social Work) or a health visitor or counsellor.
- A number of taster (one-off) classes on a range of topics to assess potential interest.
- Various specific recommendations to improve the running of Mackenzie Medical Centre and other practices.
- Chemist to help more – collecting and delivering prescriptions.
- Hold an information day as 'it is finding out about services that is difficult'.
- Feed local needs assessment to Lothian Health Purchasing Unit via the locality group of GPs.
- Inform all residents about Dial-a-bus, taxi cards and other initiatives which help deal with the difficult physical environment.
- Have community notice-board.

Source: Dumbiedykes Health: A Community Appraisal (1993), pp 18–19

OH 2.7 The community diagnosis checklist

- General description of environment.
- Community characteristics.
- Health service system:
  - within the practice
  - outside the practice.
- State of health:
  - morbidity
  - mortality
  - behaviour.
- Health problem list – maximum of 6.

OH 2.8 Information sources

Inside the practice

- Practice computer
- Annual reports
- Practice leaflets
- Audiit reports

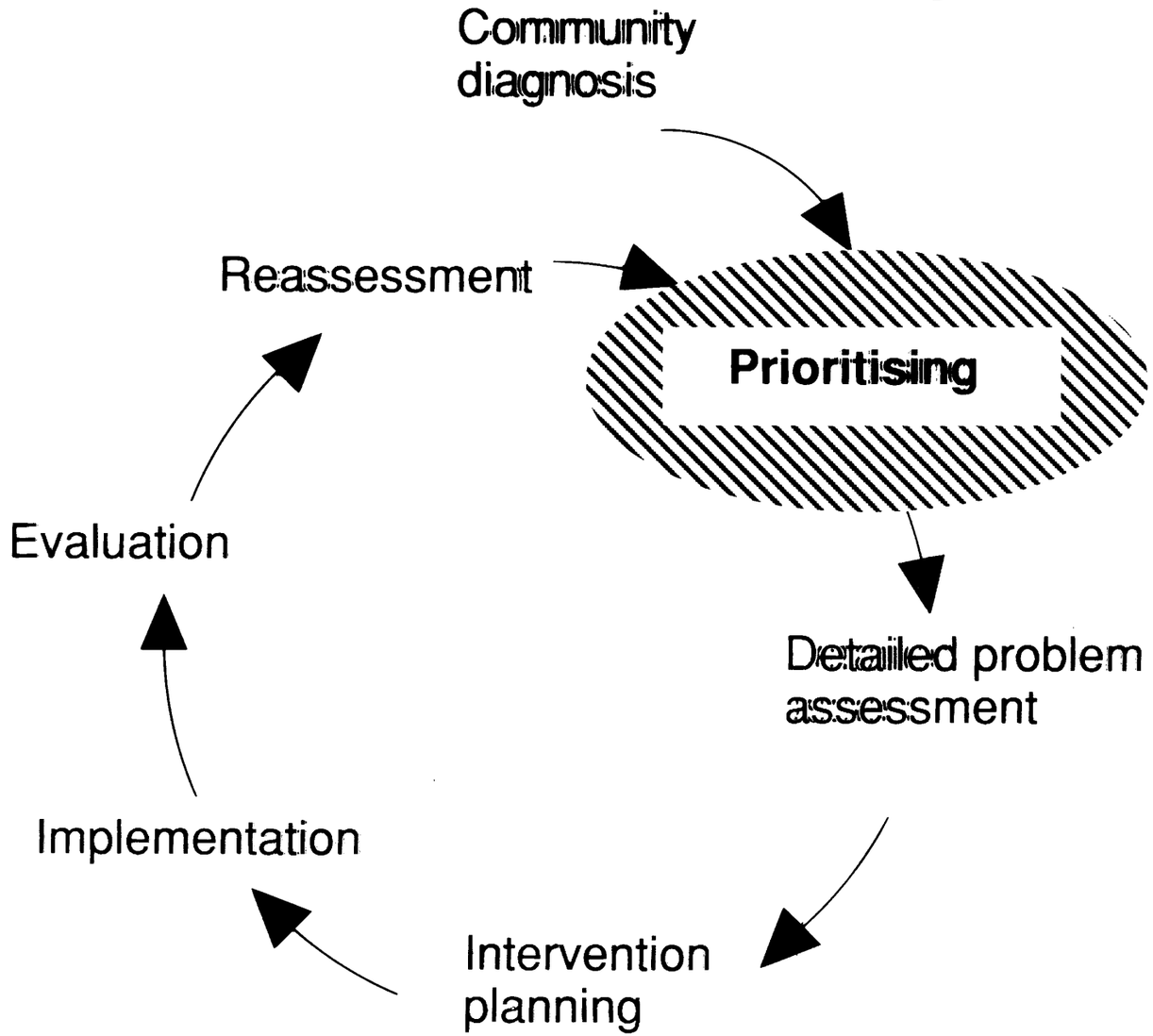
Outside the practice

- Local census data
- Local education authority
- FHSA
- DHA

OH 2.9 Group work: community diagnosis

- Split into practice-based groups – one group per practice.
- Follow the instructions in your booklet under 'Preparing your community diagnosis'.
- When you have finished you will have:
  - a full profile on paper
  - a summary on a flipchart.
- Report back to the full group.

OH 3.1 The COPC cycle



OH 3.2 Prioritising grid

CRITERION	PROJECT					
Prevalence/incidence						
Severity of problem						
Effective intervention						
Acceptability/feasibility						
Community involvement						
Cost and resources						
TOTAL SCORE						

OH 3.3 Prevalence/incidence

$$\text{Incidence rate} = \frac{\text{Number of new cases in period}}{\text{Number at risk in period}}$$

$$\text{(Point) prevalence rate} = \frac{\text{Number of persons with the disease at a point in time}}{\text{Total population}}$$

OH 3.4 Severity

Morbidity

- **Does the disease seriously affect quality of life?**
- **Is the disease a big drain on PHCT resources?**
- **Is the disease a big drain on community resources?**

Mortality

- **Mortality rates – what are they?**
- **What is the case fatality rate?**

OH 3.5 Effective intervention

- **A disease for which there is no proven intervention must score low.**
- **A disease for which there is a proven and effective intervention must score high.**

OH 3.6 Feasible for the PHCT?

Consider:

- **Is this project too big for us?**
- **Do we have/can we gain the skills for it?**
- **Do we all want to do it?**
- **Does it fit with DHA/FHSA priorities?**
- **Are we likely to succeed?**
- **Can we find time to do more?**

OH 3.7 Community involvement

- **Is community involvement needed for your project?**
- **What are the benefits to the PHCT?**
- **What are the benefits to the community of its involvement?**

OH 3.8 Resources

- **How much staff time will be needed?**
- **What staff skills will be needed?**
- **What equipment will be needed?**
- **What other resources (including training) will be needed?**
- **Where might extra resources come from?**

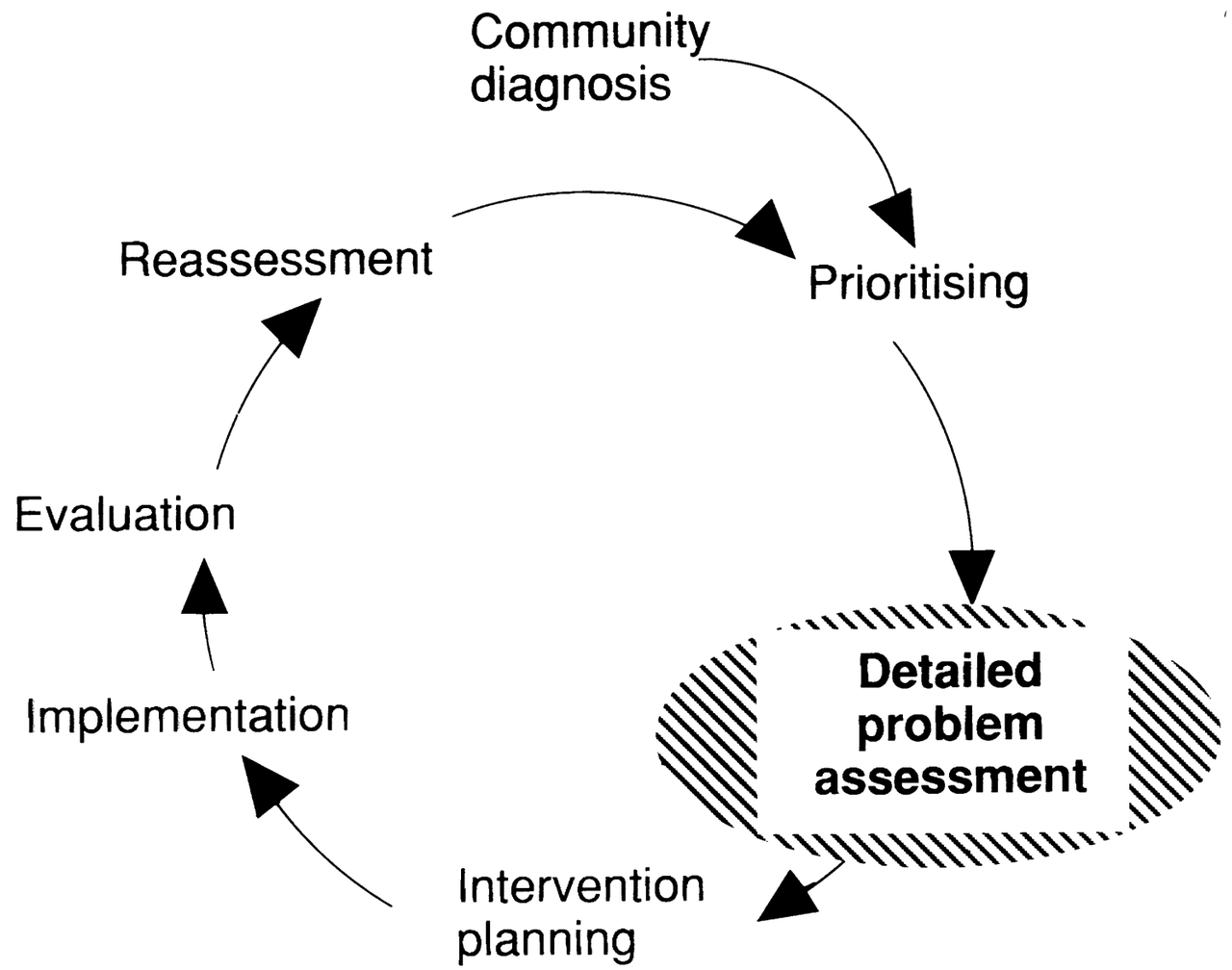
OH 3.9 Prioritising grid

CRITERION	PROJECT					
	Coughs and colds	Postnatal depression	Carers	Asthma	Smoking	Cancer
Prevalence/incidence	3	3	3	3	3	3
Severity of problem	1	3	3	3	3	3
Effective intervention	1	3	3	3	2	1
Acceptability/feasibility	1	3	2	2	3	2
Community involvement	1	2	3	2	2	2
Costs and resources	3	2	2	2	2	2
TOTAL SCORE	10	16	16	15	15	13

OH 3.10 Working out your priorities

- Divide into practice groups.
- Discuss each potential project under the seven headings.
- Allocate it a score from 0 to 4.
- Decide what weight to give each criterion.
- Total all your scores for each health problem.
- Decide which health problem you are going to tackle.
- Prepare a report back.

OH 4.1 The COPC cycle



OH 4.2 Detailed problem assessment

What

- **A description of where your group is now:**
  - **what the health problem is**
  - **who is in the group**
  - **the extent of the health problem.**

Why

- **As a base from which to:**
  - **plan**
  - **implement**
  - **evaluate your COPC project.**

OH 4.3 Detailed problem assessment – content

- **Definition of the group.**
- **Characteristics to be measured.**
- **Definition of the measures.**
- **Methods of data collection.**
- **Records.**

OH 4.4 Defining the group

The group must be:

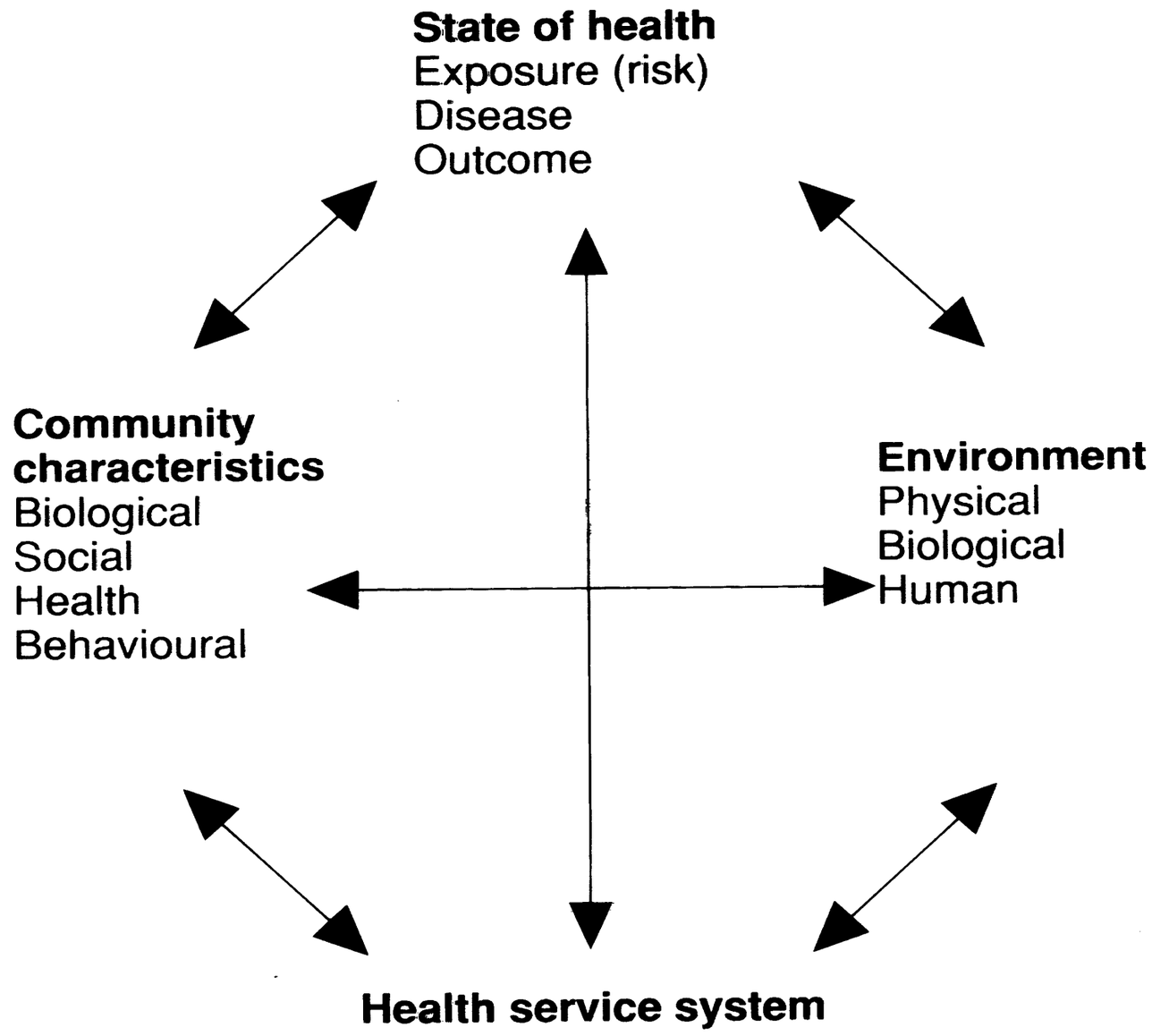
- **well defined**
- **identifiable**
- **contactable**
- **sufficiently stable.**

OH 4.5 Activity – Defining the group

Look at the examples in your handouts.
How well do these meet the criteria below?

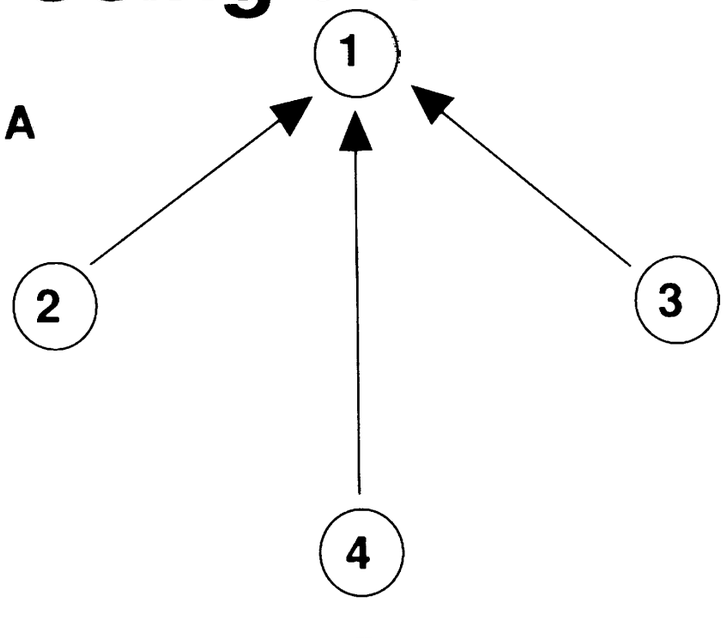
- **a well-defined group**
- **identifiable**
- **contactable**
- **sufficiently stable.**

OH 4.6 The health model

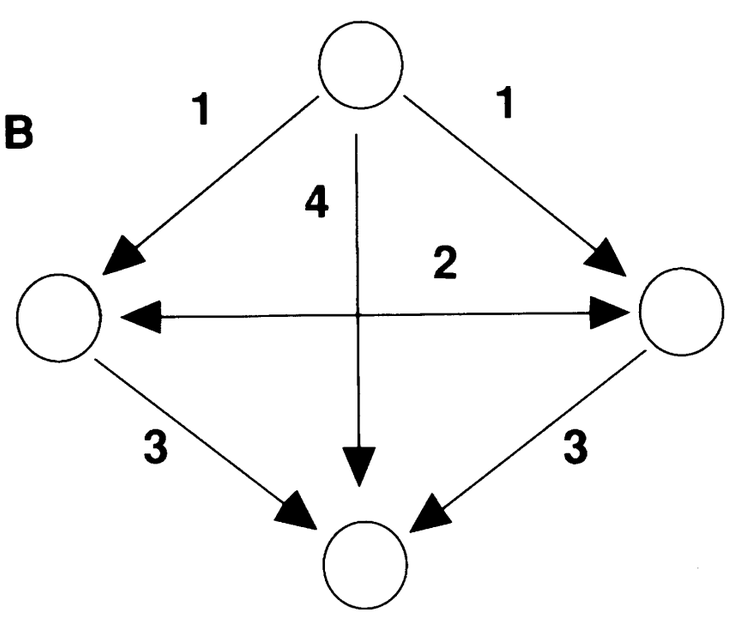


OH 4.7 Using the health model

Stage A

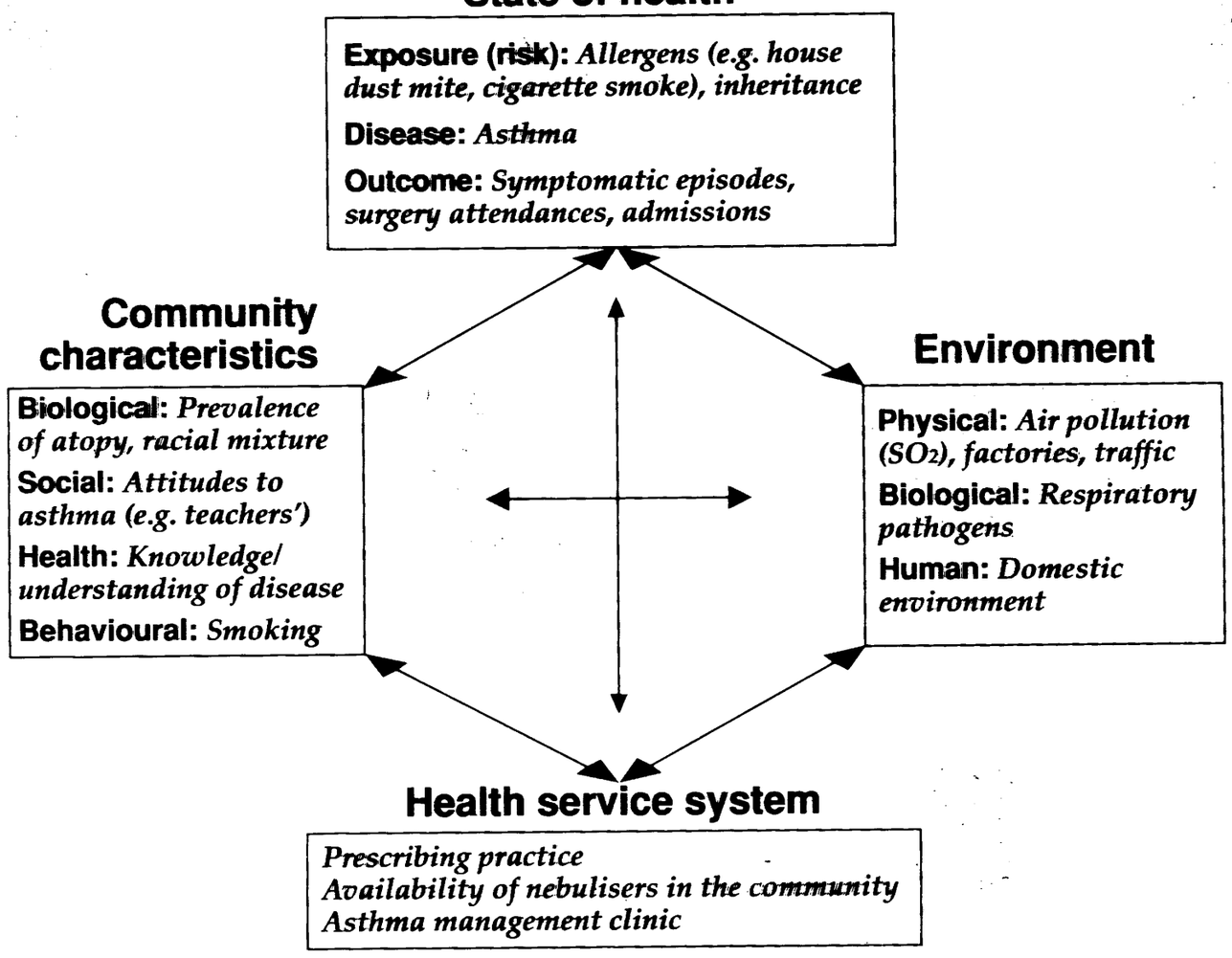


Stage B



OH 4.8 Health model example

Health problem: *Asthma in childhood – cough/wheeze/shortness of breath*



OH 4.9 What to measure

- **Valid indicators of current health status.**
- **Valid measures of any health status change.**
- **Correlates of health status in the community.**
- **Measures accepted by other workers.**

OH 4.10 Baseline measures

Consider your priority health problem.
For that health problem:

- **what measures would you use to establish the current health status of your practice population?**
- **what measures might you use to establish health status change later on?**

OH 4.11 The need for rigour

Reliability

- **Everyone must be measuring the same thing.**
- **Measurements must be consistent within and between observers.**
- **Measurements must be consistent over time.**

Validity

- **Measurements must reflect the state of the health problem and/or the intervention – measure what is wanted.**

OH 4.12 Main data collection methods

- Data may exist in practice records.
- Questioning patient (e.g. discussion on smoking habits).
- Observation of patient (e.g. blood pressure).
- Questioning a person close to the patient (e.g. asking a parent about an infant).
- Self-administered questionnaires.
- PHCT-administered questionnaires.
- Patient diaries.

OH 4.13 Baseline data collection

- **Work in practice-based threes or fours.**
- **Identify some methods which you might use to collect baseline data for your project.**

OH 4.14 The need for good records

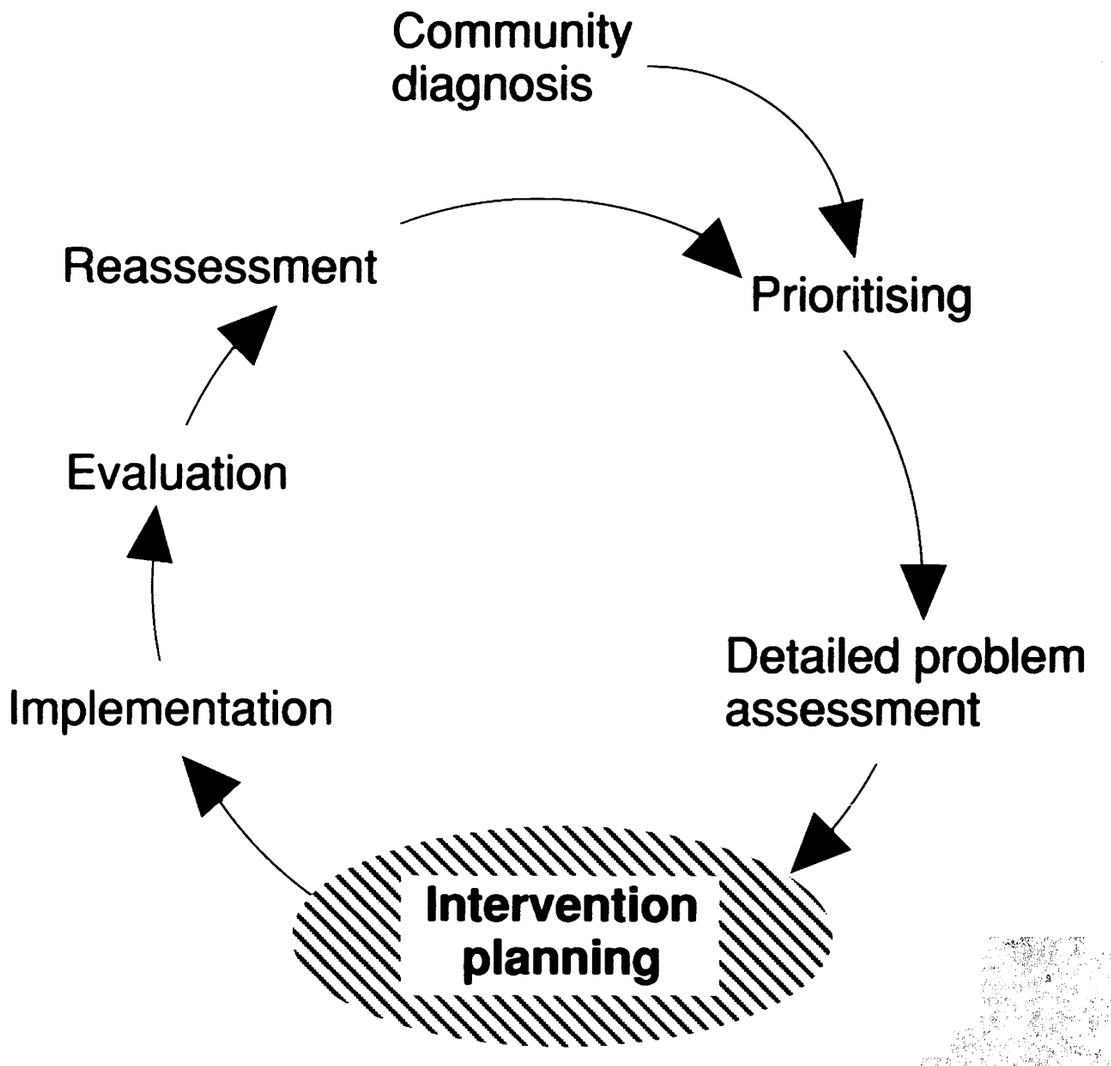
- **Relevant data are trapped.**
- **Data are accessible for clinical work, COPC evaluation and continued surveillance.**
- **Recording is simple and not prone to error.**
- **The skill needed to record data is minimised.**
- **Existing systems are used where possible.**
- **Recording format should permit easy analysis.**

OH 4.15 Writing your detailed problem assessment

Headings

- **The health problem.**
- **Definition of group for assessment.**
- **Characteristics to be measured.**
- **Definition of how the measurements are to be taken.**
- **Data collection methods.**
- **Records formats.**
- **Plan of analysis with dummy tables.**

OH 5.1 The COPC cycle



OH 5.2 Planning an intervention – the steps

1 **Review where you are now.**

2 **Formulate your objectives.**

3 **Choose an intervention.**

4 **Decide on your criteria for intervention.**

5 **Devise your protocols.**

6 **Decide on who does what and when.**

7 **Devise your recording system.**

8 **Devise your monitoring system.**

OH 5.3 Where are you now?

- **What are you doing about the problem now?**
- **What are you achieving?**
- **What changes/improvements do you want to make?**

OH 5.4 Objectives

Should be:

A **Appropriate**
R **Realistic**
M **Measurable**
P **Positive**
I **Important enough**
T **Time-related**
S **Supported by the team**

OH 5.5 A set of COPC objectives

The Glyncorrwg ischaemic heart disease programme

1 **All persons 20–64 years of age to have a blood pressure measurement every five years.**

2 **Persons 20–39 years of age whose blood pressure exceeded systolic 165 or diastolic 100 mm/Hg (mean of three separate readings) to be placed in the treatment group.**

3 **Persons 40–64 years of age whose blood pressure exceeded systolic 180 or diastolic 105 mm/Hg (mean of three separate readings) to be placed in the treatment group.**

4 **Persons in the treatment group to have a follow-up visit every three months.**

5 **Treatment has the following specific objectives: no smoking, reduction of pressure to the range below 160–180 systolic and 90–100 diastolic, and weight reduction to within 10 per cent above desirable weight level.**

Source: Adapted from Nutting (1987), p 252

OH 5.6 Assessing COPC objectives

- **How well do the Glyncorrwg objectives fit the ARMPITS criteria?**
- **To what extent do the objectives reflect both activities and outcomes?**
- **What changes would you make to fit the criteria better?**

OH 5.7 Choosing an intervention

Primary prevention

- **The risk factors must be known and modifiable.**
- **The risk markers must be known.**

Primary, secondary and tertiary prevention

- **The proposed intervention must be accepted/state-of-the-art.**

OH 5.8 Risk factors

FACTOR	BORDERLINE	HIGH
Systolic BP (mm/Hg)	140–159	160+
Diastolic BP (mm/Hg)	90–94	95+
Serum cholesterol (mg/100ml)	200–239	240+
Serum glucose (mg/100ml)	180 or possible diabetes mellitus	Diabetes mellitus
Relative weight	10–19% above standard weight	20+% above standard weight

Source: Kark (1989), p 169

OH 5.9 Choosing your intervention

Primary prevention

- **List some of the risk factors for the health problems you have chosen to tackle.**
- **Is it practical in all cases to establish the level of risk for each patient in the subgroup?**
- **If not, what are the implications for the project?**

Primary, secondary and tertiary prevention

- **Is there an established intervention for the health problem?**
- **Can intervention levels be set to decide with whom to intervene?**
- **If not, what are the implications for the project?**

OH 5.10 Intervention levels

HAEMOGLOBIN LEVEL (per 100 ml)	TREATMENT
12 gm and over	No treatment
11 gm	1 iron tablet daily
10 gm	3 iron tablets daily
Over 10 gm	Hematocrit and full blood count. Treatment according to the nature of the anaemia

Source: Kark (1989), p 134

OH 5.11 The intervention plan

- **Activities and protocols to be used.**
- **Who does what and when.**
- **Records to be kept.**
- **Monitoring system.**

OH 5.12 Respiratory infections protocol

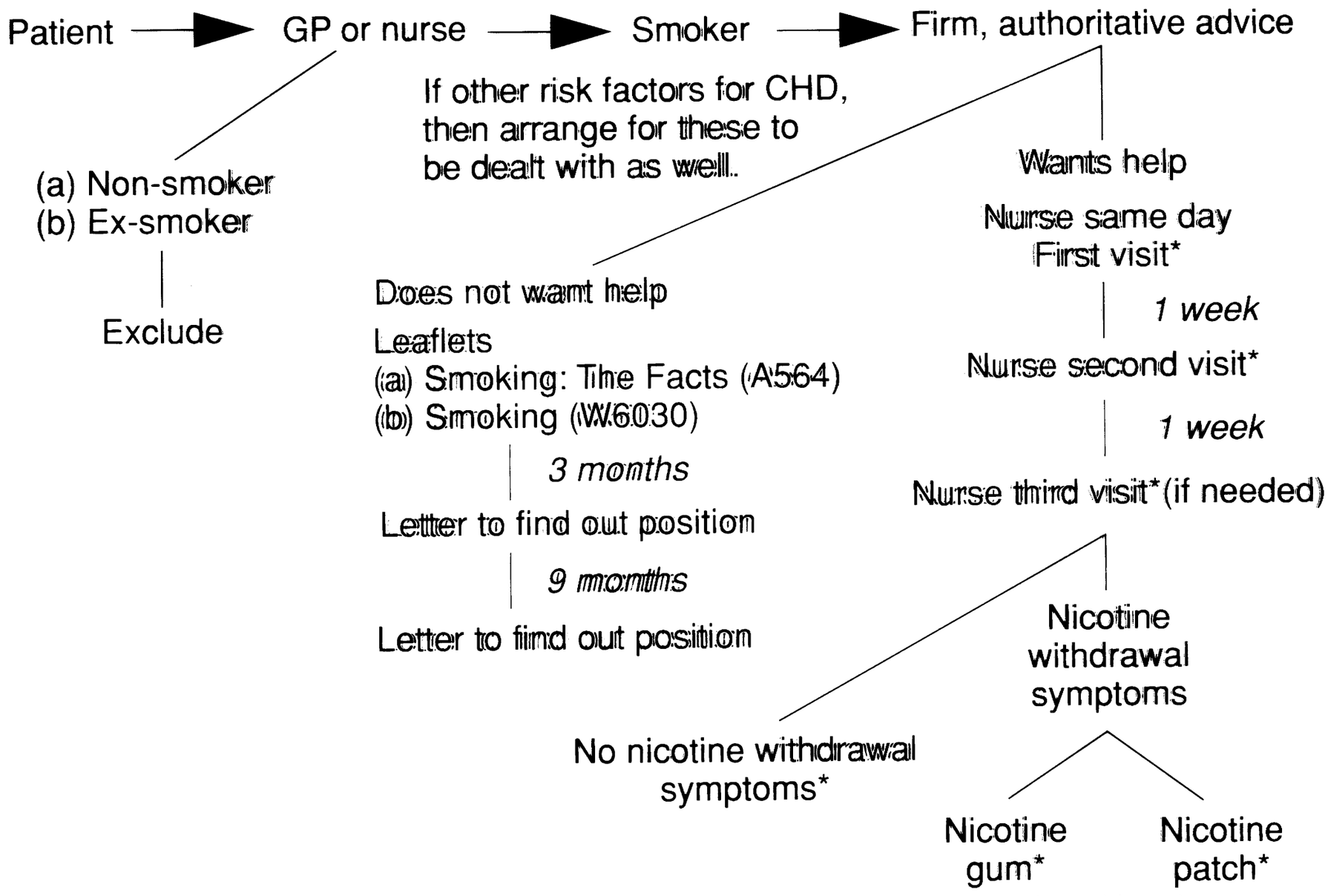
INFORMATION GATHERING	STAGE I	STAGE II	STAGE III
Subjective			
How long has it been present?	< 5 days	5–7 days	≥ 7 days
Is there coughing?	Yes/No		
Does he cough so hard he passes out or turns blue?	No		Yes
Does he indicate that his ear hurts?	No		Yes
Is there pus in his ear?	No		Yes
Does he have a sore throat?	No	Yes	
Is he throwing up – after coughing only?	No		Yes
– after each feeding?	No		Yes
Objective			
Temperature: [ ] age 0–6 months	< 100°		≥ 100°
[ ] age 6 months to 2 years	< 100°	100°–101°	≥ 101°
[ ] age 2–4 years	< 101°	101°–102°	≥ 102°
Respiratory rate	< 32/min	32–40/min	≥ 40/min
Are there retractions present?	No		Yes
Is there flaring of the nostrils?	No		Yes
Is there grunting when he breathes out?	No		Yes
Is there wheezing present when he breathes out?	No		Yes
Is the baby lethargic?	No		Yes
Does he have a stiff neck?	No		Yes

ASSESSMENT	TREATMENT PLAN
[ ] Well child	Do educational task A
[ ] Respiratory infection stage I	Treat as below; do educational task A and follow up in 5 days; refer to clinic if not better
[ ] Respiratory infection stage II	Treat as below; do educational task A and follow up in 24 hours; refer to clinic if not better
[ ] Respiratory infection stage III	Refer to clinic rightaway
[ ] No sickness – medicine given to be kept on hand	

TREATMENT	
1 Fever or headache Use acetaminophen drops	[ ] 0–6 months – Acetaminophen drops 0.3 cc every 4 hrs [ ] 6–12 months – Acetaminophen drops 0.6 cc every 4 hrs [ ] 12–18 months – Acetaminophen drops 0.9 cc every 4 hrs [ ] 18 months–2 yrs – Baby aspirin 75 mg – 1 tablet for each yr of age, every 4 hrs
2 Runny or stuffy nose: Saline nose drops. 1 drop in each side every 3–4 hrs	
3 Coughing Use Glyceryl Gualacolate Cough Syrup	DO NOT GIVE TO BABIES LESS THAN 6 MONTHS OLD [ ] 6 ms–2 yrs – 1/2 teaspoonful 3 times a day [ ] 2 yrs–4 yrs – 1/2 teaspoonful 4 times a day
4 Sore throat	[ ] Throat culture – label with name, date, number and village and send to disease control lab within 24 hrs
5 Educational task A	Encourage fluids Other

Source: Nutting in Nutting (1987), p 301

OH 5.13 Stockbridge Practice smoking-reduction pathway



** The Stockbridge Practice wrote additional sheets for these stages (not reproduced here)*

5.14 Intervention records

- **Dual purpose:**
  - **for patient treatment**
  - **for COPC monitoring and evaluation.**
- **When are the data needed?**
- **What actions will you take?**
- **Collect only what you need.**
- **Must be accurate.**
- **Must be reliable.**
- **Must be valid.**

OH 5.15 Data needed for pregnancy and its outcomes

- ***Demographic data*: age, marital status, parity, education, occupation, social class, ethnic group, religion.**
- ***Pregnancy history:* present pregnancy, wanted, planned; previous abortions, stillbirths and live births; family spacing.**
- ***Somatic characteristics:* mother's height, weight and weight changes during pregnancy, blood group ABO, Rh.**
- ***Behaviour:* alcohol, smoking, drug addiction, medications, diet.**
- ***Progress of the pregnancy:* normal pregnancy, morbidity mainly related to pregnancy, and general disease, psychiatric disorder.**
- ***Foetal health and growth:* prenatal screening, procedures for detection of foetal abnormality and growth retardation.**
- ***Outcome of pregnancy:* normal live-born infant and type of birth, birth weight, period of gestation, abortive outcome, stillbirth, congenital anomalies.**
- ***Delivery and labour:* normal labour and delivery, complications, methods of delivery.**
- ***Puerperium:* normal, complications of puerperium.**
- ***Postpartum care and examination.***
- ***Perinatal period* (foetal age 28 weeks to new-born through first week): normal, abnormal conditions originating in the perinatal period, perinatal mortality.**

Source: Kark (1989), p 47

OH 5.16 Prenatal care – project monitoring

- **Monthly team meeting.**
- **Monthly statistical report.**
- **All cases of perinatal morbidity and mortality reviewed.**
- **Overdue and patients at high risk discussed to anticipate and prevent complications.**
- **Special topic presentations (e.g. genetic counselling).**

Source: Doyle in Nutting (1987), p 261

OH 5.17 Compliance monitoring

CATEGORY	1	2	3
Number of persons in category	250	373	106
Percentage having at least one contact	95.6	81.2	66
Number of contacts per person			
Aim for year	3	2	1
Actual average	2.1	1.2	0.8

Categories

(1) Those in need of medication.
(2) Those in need of special counselling and surveillance.
(3) Those with no risk factors and smokers with no other risk factors.

Source: Kark (1989), p 185

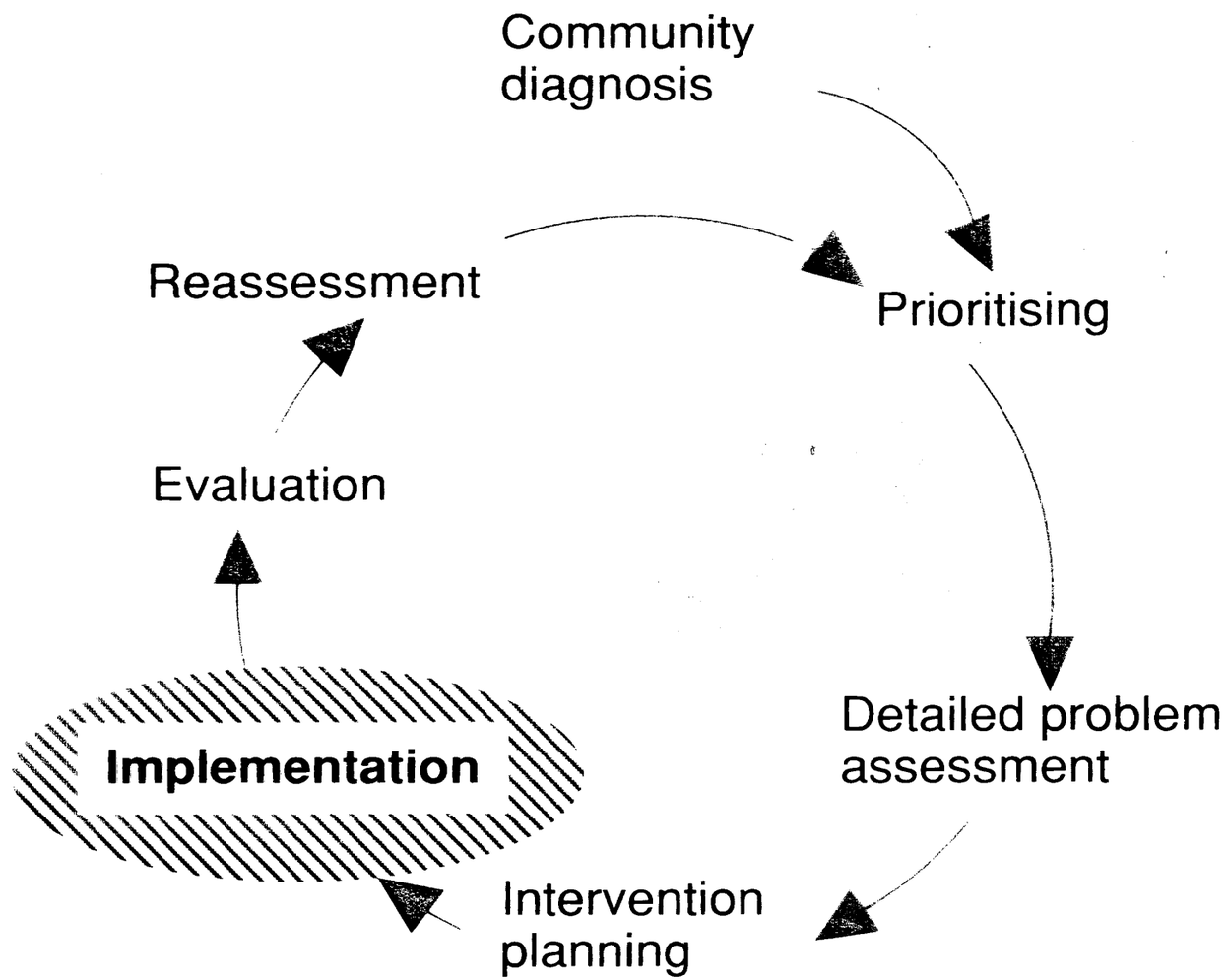
OH 5.18 Project monitoring

- How frequently will your project need to be monitored?
- Who will coordinate the monitoring?
- What sorts of issue are likely to be on the monitoring agenda?
- What monitoring data will be needed?

OH 5.19 PHCT task – Planning your intervention

- Review where you are now.
- Define your group.
- Write your objectives.
- Choose an intervention.
- Decide your criteria for intervention.
- Devise your protocols.
- Decide who does what and when.
- Devise your recording system.
- Devise your monitoring system.
- Decide staff training needs.
- Estimate resources.

OH 6.1 The COPC cycle



OH 6.2 Activity – What makes a project work?

- Choose one or two past projects.
- Brainstorm:
  - what went well
  - what did not work.
- Identify how the project management system:
  - made things go well
  - prevented things going well.
- Identify five key feedback points for successful practice-based projects.

OH 6.3 Features of successful project management

- Clear goals.
- Clear stages with milestones.
- Progress reviews.
- Adequate resources.
- Who does what is clear.
- Good information.
- Team commitment.

OH 6.4 Your project experience

- **Choose a recent or current project in your practice.**
- **Using OH 6.3, identify (if possible):**
  - **for each criterion, one way in which your project met that criterion**
  - **for each criterion, one way in which your project could meet that criterion better.**

OH 6.5 Milestones

- State a goal to be achieved
- Do not imply a method of reaching the goal

Examples

'Protocols ready for use'

'Computer system ready to accept COPC data'

'Detailed assessment complete'

OH 6.6 How to choose milestones

- **Important achievements.**
- **Natural stages – do not invent them.**
- **Steps of comparable size and duration.**
- **Not too many – at most ten on a small project.**

OH 6.7 Task identification

MILESTONE	TASKS FOR THIS MILESTONE
Community diagnosis complete	1 First draft
	2 Research
	3 Second draft
	etc.
Prioritisation	1
	2
	3
	etc.
etc.	

OH 6.8 Project meetings – purposes

- Monitor progress.
- Foresee problems.
- Agree actions.
- Agree changes to the plan.
- Promote communication.
- Promote team work.

OH 6.9 Project meetings – running

- **Issue an agenda.**
- **Issue a project progress report.**
- **Agree the time for each agenda item.**
- **Keep discussion relevant, positive, decisive.**
- **Record what, who, by when.**

OH 6.10 Project reviews – purposes

- **To revisit the project goals:**
  - **– are they still relevant?**
- **To review the project methodology:**
  - **– is it still the best way of achieving the goals?**
- **To revisit the use of resources:**
  - **– do we have other calls on the resources?**
  - **– should some team members do more?**
  - **– should some do less?**

OH 6.11 Planning your project

1 Decide the milestones for your project.

2 Draw up a list of all the tasks.

3 Put the milestones and tasks on a task sheet.

4 Estimate how long each stage will take.

5 Present the task list to the full workshop.

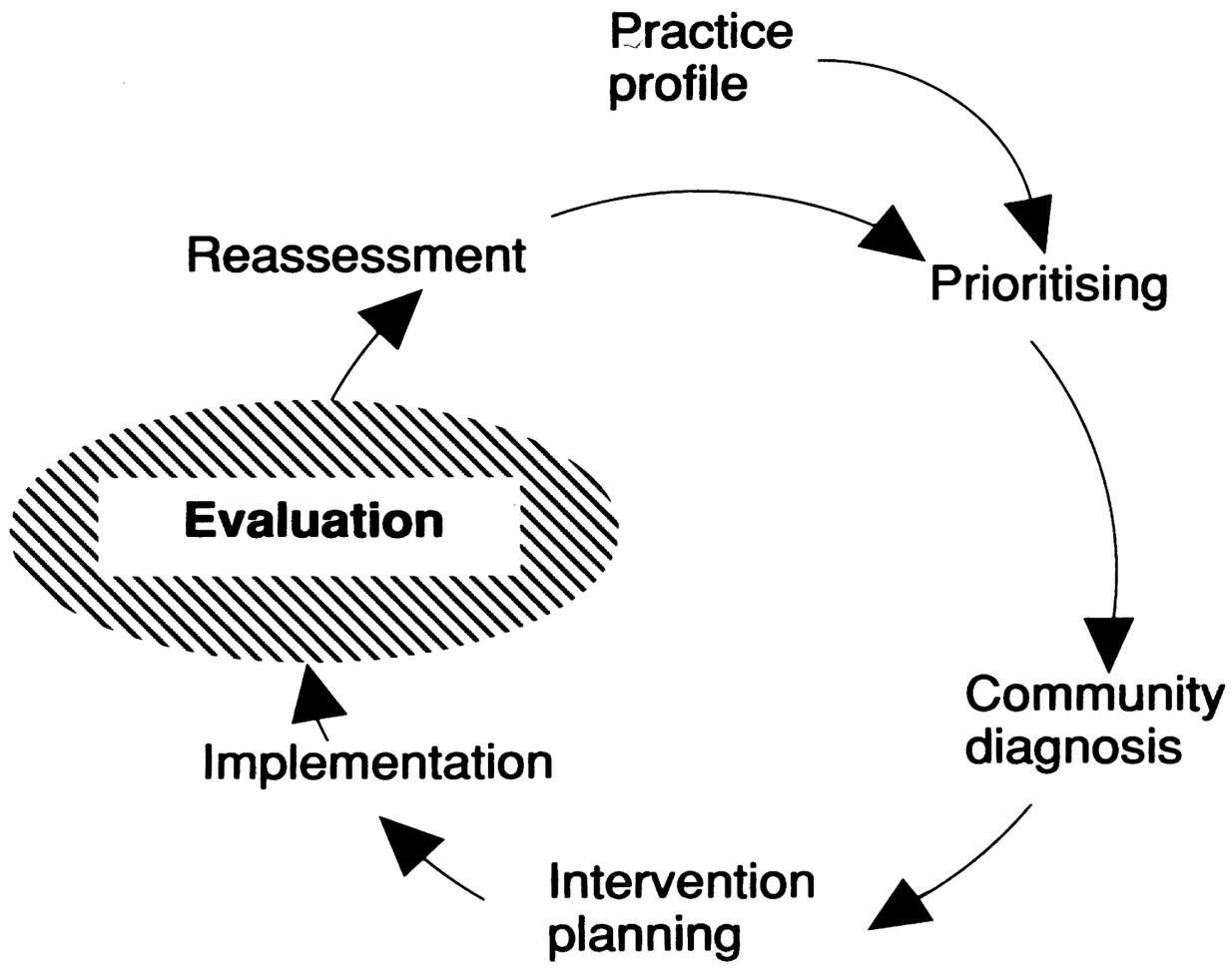
OH 6.12 Sample Gantt chart

MILESTONE	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9
Plan intervention									
Read research	▨	▨							
Decide criteria			▨						
Write protocols				▨	▨				
Design records						▭			
Brief colleagues						▭	▭		
Collect data							▭	▭	▭

▨ = task done

▭ = task to be done

OH 7.1 The COPC cycle



OH 7.2 Evaluation

The critical and objective assessment of the degree to which a service fulfils stated goals.

OH 7.3 Evaluation purposes

- To ask 'was it worthwhile?'
- To ask 'what worked and what did not?'
- To ensure that resources are used efficiently.
- To provide feedback to the team.
- To identify new areas of work.
- To justify the use of resources.

OH 7.4 Evaluation guidelines

- **Keep it simple.**
- **But rigorous.**
- **Measure the effect on the population.**
- **Ask the right questions.**
- **Use proxy questions where needed.**
- **Do not expect 100% success.**

OH 7.5 Donabedian's model

OH 7.6 Changes in the prevalence of hypertension in men in the family practice (CHAD) and control populations

	FAMILY PRACTICE		CONTROL	
	1970	1975	1970	1975
Age standardised prevalence rate of hypertension	24.1%	14.5%	20.4%	16.0%
Change 1970–1975	-9.6%		-4.3%	
Number of men who changed categories 1970–1975				
Moved out of hypertension category *a*	35		80	
Moved into hypertension category *b*	13		49	
Odds ratio *a*:*b**	2.7		1.6	
p	0.001		0.004	
Difference between the two populations in their odds ratios, controlling for age	1.7			
p	0.094			

* Odds ratio *a*:*b* expresses tendency to move out of hypertension category

Source: Kark (1989), p 188

OH 7.7 Maxwell's model – Dimensions of service quality

- Access.
- Relevance to community.
- Equity.
- Social acceptability.
- Effectiveness.
- Efficiency and economy.

OH 7.8 Preparing your report

- State relationship to project objectives.
- List possible health statements.
- List possible findings.
- Draw up dummy tables and possible statistical calculations.
- Draw up dummy graphs.
- List the type of conclusions you might make.

OH 7.9 Prenatal care evaluation data

	BEFORE	AFTER
Mean week of gestation in which prenatal care was started	24.6	21.8
Mean number of prenatal visits	5.8	7.4
Prenatal workup rate	23.5%	37.2%
Pregnancy assessment rate	11.8%	57.8%
Anaemia screening rate	43.1%	64.7%
Postpartum follow-up rate	28.4%	48.0%

Source: Nutting (1987), p 348

OH 7.10 Effectiveness measures

- **Changes in risk factors.**
- **Changes in morbidity.**
- **Changes in knowledge/attitudes.**
- **Changes in mortality.**

OH 7.11 Change in morbidity measured over time

Period	Haemoglobin below 10 gm/ml at any time during pregnancy (% pregnant women)
1958–59	12.0
1964–66	8.8
1970–71	3.3
1975–76	1.6

Source: Kark (1989), p 135

OH 7.12 Types of measure

- **Identify which of your COPC objectives are effectiveness measures.**
- **Classify these into:**
  - **changes in risk factors**
  - **changes in morbidity**
  - **changes in knowledge/attitudes**
  - **changes in mortality.**

OH 7.13 Data collection issues

- Ensure consistency and accuracy.
- Standardise measurement methods.
- Use standard rating scales.
- Use proven questionnaires or validate your own.
- Train interviewers and other data collectors.
- Test analysis and evaluation method.
- Build into practice routines.
- Decide who will coordinate data collection.

OH 7.14 Evaluation plan

- **Who is it for?**
- **What questions will the report answer?**
- **When will the data collection cut-off date be?**
- **Who will analyse the data?**
- **What facilities or expertise will be needed?**
- **Who will write the report?**
- **When will the report be ready?**

OH 7.15 Measuring effectiveness – Terminology

Non-cost related

- **Effectiveness.**
- **Efficacy.**

Cost-related

- **Efficiency.**
- **Cost minimisation analysis.**
- **Cost effectiveness analysis.**
- **Cost utility analysis.**
- **Cost benefit analysis.**
- **Opportunity cost.**

OH 7.16 Small-group task – Evaluation plan

Issues

- **Who is it for?**
- **What questions will the report answer?**
- **When will the data collection cut-off date be?**
- **Who will analyse the data?**
- **What facilities or expertise will be needed?**
- **Who will write the report?**
- **When will the report be ready?**

Format

- **Present your plan on a flipchart sheet.**

OH 8.1 Why behaviours may persist

- **Reinterpreting data in personal terms.**
- **Rewards of present behaviour.**
- **Benefits too long term.**
- **Social pressure.**
- **Belief that change will have no effect.**
- **Belief that 'I cannot change'.**

OH 8.2 Conditions for change

- **Want to change.**
- **Believe you can change.**
- **Believe change will have the desired effect.**
- **Know how to change.**

Source: Jacob & Plamping (1989), p 81

OH 8.3 Health Locus of Control (HLOC)

High **Low**

Internal HLOC

High **Low**

External HLOC

OH 8.4 Stages in behaviour change

1 Pre-contemplation

2 Contemplation

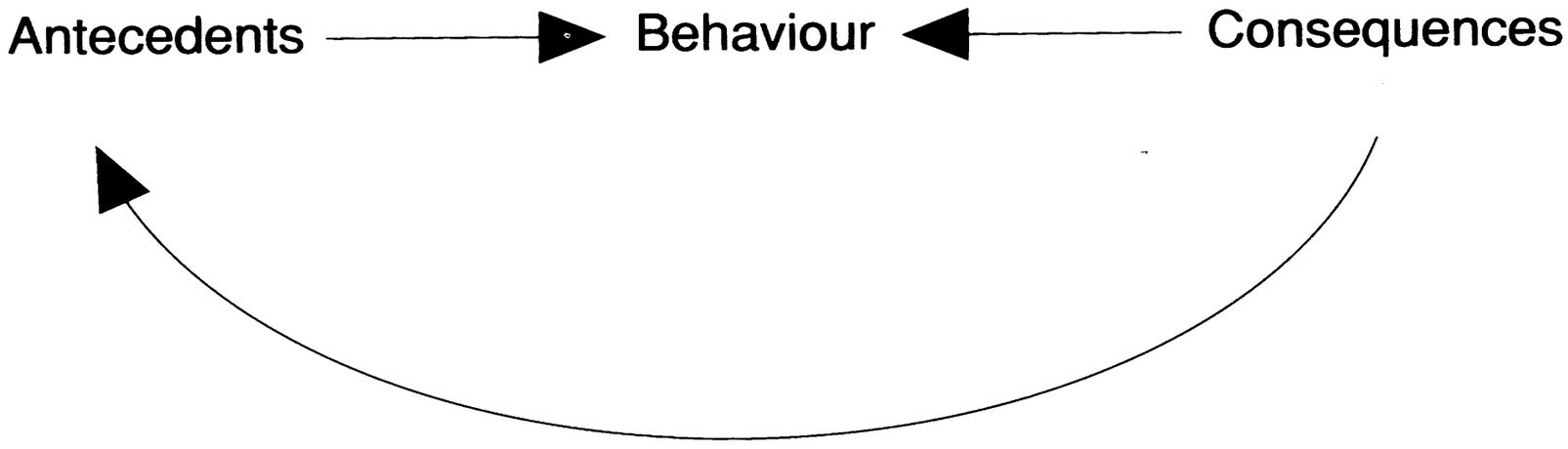
3 Action

4 Maintenance

5 Relapse

Source: Prochaska & DiClemente (1982), p 83

OH 8.5 The influence of environment on behaviour



Source: Jacob & Plamping (1989), p 85

OH 8.6 Behaviour change steps

1 Decision making

2 Goal setting

3 Monitoring

4 Intervention

5 Evaluation

6 Maintenance/relapse

OH 8.7 Decision-making aims

- **To help patient make a commitment to change.**
- **To increase self-efficacy.**
- **To increase internal HLOC.**

OH 8.8 Goal setting

A Appropriate

R Realistic

M Measurable

P Positive

I Important to the patient

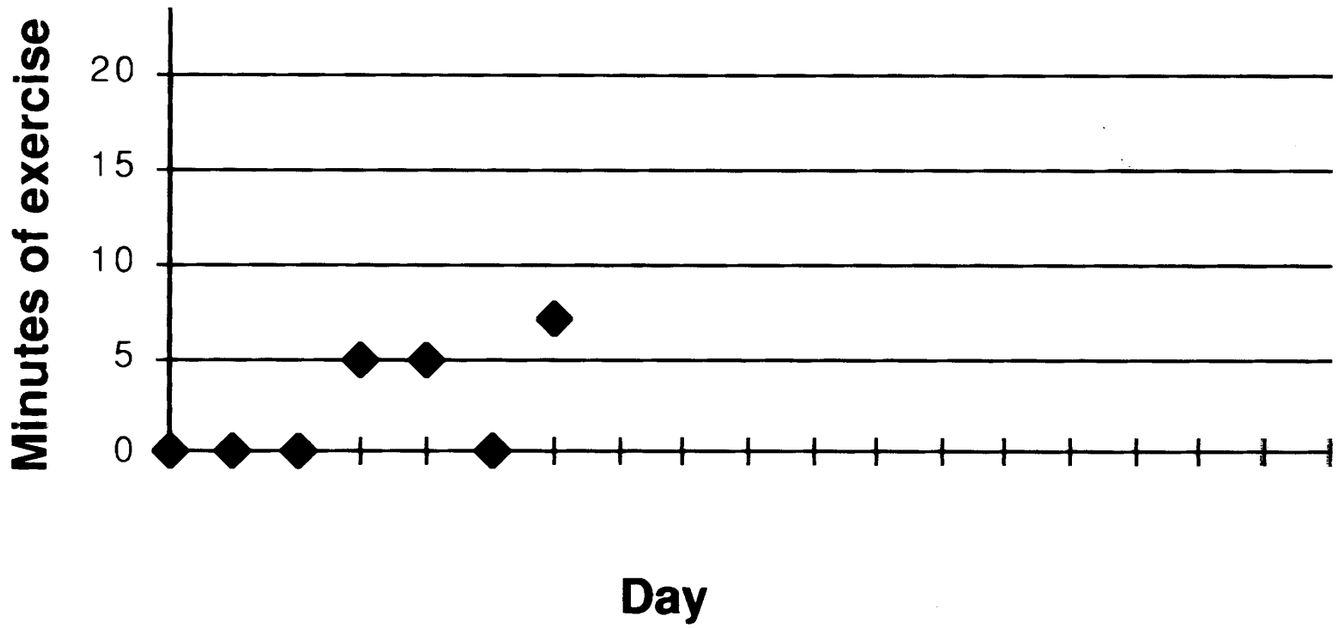
T Time-related

S Specific

OH 8.9 Monitoring

- **Establish baseline.**
- **Design the records.**
- **Measure the positive behaviour.**
- **Keep same measure throughout programme.**

OH 8.10 Exercise chart



OH 8.11 Tackling antecedents and consequences

Antecedents

- **Avoid them**
- **Change them**
  (i.e. establish new cues).

Consequences

- **Establish effective consequences.**

OH 8.12 Relapse triggers

- **An event that triggers a low emotional state.**
- **Interpersonal problems.**
- **Social pressure.**

OH 8.13 Small-group task – Planning behaviour change

- **Work in groups of twos or threes.**
- **Think of two patient types for whom behaviour change is appropriate.**
- **Decide what you should do to improve the patient's self-efficacy and internal HLOC.**
- **Plan a behaviour change programme, including goals and records.**
- **Present your programme back to the group on a flipchart.**