Chronic Condition
Self-Management
Guidelines
Summary for Nurses and Allied Health Professionals

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Section 2  Underlying theories
Section 3  Problem definition
Section 4  Planning (Goals)
Section 5  Management strategies
Section 6  Monitoring
Section 7  Enhancing the multidisciplinary team
Section 8  Evidence levels

Designed for use with practical guide & desktop guide
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<table>
<thead>
<tr>
<th>Organisation</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoholics Anonymous</td>
<td>02 9799 1199</td>
</tr>
<tr>
<td>Arthritis Foundation</td>
<td>02 9552 6085</td>
</tr>
<tr>
<td>Asthma Australia</td>
<td>03 9696 7861</td>
</tr>
<tr>
<td>Diabetes Australia</td>
<td>02 6230 1155</td>
</tr>
<tr>
<td>Australian Kidney Foundation</td>
<td>08 8267 4555</td>
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<td>Carers Assn. Of Aust.</td>
<td>02 6288 4877</td>
</tr>
<tr>
<td>Continence Foundation</td>
<td>1800 069 789</td>
</tr>
<tr>
<td>Mental Health Info Service</td>
<td>02 9816 5688</td>
</tr>
<tr>
<td>National Asthma Campaign</td>
<td>03 9214 1476</td>
</tr>
<tr>
<td>Heart Foundation</td>
<td></td>
</tr>
<tr>
<td>National Stroke Foundation</td>
<td>1800 657 007</td>
</tr>
<tr>
<td>RACGP WA Research Unit</td>
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</table>

This document summarises the guidelines on self-management of chronic conditions developed by The Royal Australian College of General Practitioners in conjunction with the Sharing Health Care Steering Committee and the Commonwealth Department of Health and Ageing as part of the Enhanced Primary Care package.
Section 1 - Introduction

This guideline has been developed to assist nurses and allied health professionals facilitate self-management in clients with a chronic condition by providing a framework for effective interactions and management strategies.

A chronic condition is any that presents itself for longer than six months, involves slow changes, may be controlled but is often not curable. (1996)

The aim of enhancing self management is primarily to improve health status, or slow the deterioration of a chronic condition. As a result of this, the use of health services may be reduced (Lorig 1993) which is of benefit to clients and the health system alike.

When a client has a chronic condition, it is important to listen to their ideas and feelings about their illness. The client lives with the illness on a daily basis over a long period of time, so their ideas, thoughts and behaviours have an impact on their illness management and will influence the success of the relationship with the health care provider.

Clients can contribute to the consultation by:

- Discussing their ideas about appropriate treatment, prevention options and management of acute episodes
- Describing what meaning and emphasis they place on their symptoms

A philosophy of ‘client-centredness’ and multi disciplinary healthcare is needed to achieve successful management in improving the function and outcomes for clients with chronic conditions. It is important that the client becomes the manager of their condition. This involves planning and managing the condition in an individual way, as each client has values, situations and beliefs that need to be recognised.

The steps outlined here do not need to be completed in their entirety in one consultation, but rather as a process over time.

Chronic Condition Self Management

involves (the person with the chronic disease) engaging in activities that protect and promote health, monitoring and managing of symptoms and signs of illness, managing the impacts of illness on functioning, emotions and interpersonal relationships and adhering to treatment regimes. (Centre for Advancement in Health 1996:p1)

Due to the geographical and cultural diversity of Australia, these guidelines may require modification and adaptation by local primary care providers to reflect their community’s unique needs.
Section 2 - Underlying theories

The nature of illness is changing as the world’s population is ageing. This ageing, as well as improvements in health and treatment of medical conditions, have resulted in a greater number of people living with a chronic condition. The implication of this on health service delivery, care of clients and health resources is vast, increasing the importance of introducing and sustaining new methods in the management of health care. One method for enhancing chronic condition management is the expansion of self-management.

It is important to understand a client’s attitude to health, and knowledge of their condition as they are significant factors in understanding their health-related behaviours. Following is a brief summary of theories that relate to health behaviour and the way self-management is approached and adopted.

The importance of following treatment

Not all clients follow their treatment even if it has been set up to meet their needs and wants. This should not be seen as a difficult behaviour, but rather as that person’s decision. A client’s wish to follow treatment can be seen as whether the benefits of changing a behaviour (e.g., taking medication properly or undertaking physical activity) is greater than the costs of not doing these things. A client’s decision not to follow treatment should be seen as part of their freedom to make a choice about their management. (Centre for Advancement in Health 1996)

It might not be seen as the correct choice, but it is the client’s right.

This does not always happen on an all or nothing basis as a client may choose to stay with certain parts of management over others. There are three different types of behaviour where clients may not follow what the health care provider wants them to do (Thorne 1990):

- changing the treatment plan without talking with the health care provider
- choosing certain parts of the treatment plan to follow
- agreeing to treatment suggestions without actually meaning it.

It is important to know what a client thinks about their health and to consider this when planning treatment. To explain how these thoughts turn into health behaviours there are behaviour theories such as the Health Belief Model (Rosenstock 1974), and the Stages of Change theory (Prochaska, DiClemente et al. 1992).
Theories of health behaviour

1. Benefits of health behaviour (Health Belief Model)
Clients weigh up the perceived benefits and costs when deciding on their ability to carry out a behaviour (Rosenstock 1974). These considerations include:

- perceived susceptibility – evaluation regarding their risk/vulnerability to a health threat
- perceived severity – perception of the seriousness of the illness
- perceived benefits – usefulness of the action taken to eliminate the threat of illness or disease
- perceived barriers – assessment of things that may prevent practising the proposed behaviour

The perceived threat or the expectation of outcome of adopting or changing a behaviour relates directly to clients’ self efficacy, or their perceived ability to carry out the action.

2. Stages of change
Appropriate health interventions should be ‘timed’ to coincide with a client’s cognitive behavioural stage. The Transtheoretical Model (Prochaska et al 1992) identifies five basic stages of change, which are a sequential, ongoing process. A client’s motivation level or readiness to change may differ during the change process, resulting in repetition of a stage or relapse (Cassidy 1999). Repetition or relapses should not to be viewed as negative events, for each time a stage is repeated the person learns from the experience and gains skills to help move onto the next stage.

![Stages of change diagram]
<table>
<thead>
<tr>
<th>Stage</th>
<th>Explanation of Stage</th>
<th>Approach suitable to stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-contemplation</td>
<td>Stage during which a person does not even consider the need to change:</td>
<td>• Reflective listening</td>
</tr>
<tr>
<td>(not thinking of change)</td>
<td>• Have not had sufficient experience with negative consequences</td>
<td>• Empathy</td>
</tr>
<tr>
<td></td>
<td>• Tipped toward negatives of change</td>
<td>• Effective questioning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provide objective information in a non-judgmental manner</td>
</tr>
<tr>
<td>Contemplation</td>
<td>In this stage, a person considers changing a specific behaviour:</td>
<td>• Explore barriers</td>
</tr>
<tr>
<td>(thinking of change)</td>
<td>• Beginning to seek relevant information</td>
<td>(Action-oriented messages are not appropriate)</td>
</tr>
<tr>
<td></td>
<td>• Re-evaluating behaviour</td>
<td>• Reflective listening</td>
</tr>
<tr>
<td></td>
<td>• Obtaining help of others to support future attempts</td>
<td>• Empathy</td>
</tr>
<tr>
<td></td>
<td>• Still weighing up options</td>
<td>• Effective questioning</td>
</tr>
<tr>
<td></td>
<td>• Not ready to take action</td>
<td>• Provide non-judgmental objective information that may be taken away</td>
</tr>
<tr>
<td>Preparation/</td>
<td>The stage where a person makes a serious commitment to change</td>
<td>• Encourage the client to accept ownership of the problem</td>
</tr>
<tr>
<td>determination</td>
<td>• Ready to take action in the next 30 days</td>
<td>• Increase awareness of negative questions</td>
</tr>
<tr>
<td>(ready for change)</td>
<td>• Need to set goals and develop priorities in order to manage illness</td>
<td>• Recognise how situations affect illness</td>
</tr>
<tr>
<td>Action</td>
<td>Change begins (this can be large or small changes)</td>
<td>• Encouragement</td>
</tr>
<tr>
<td>(changing behaviour)</td>
<td>• Efforts made to modify habits and environment</td>
<td>• Empathy</td>
</tr>
<tr>
<td></td>
<td>• Increased use of behavioural processes of change (e.g., restructuring one's</td>
<td>• Goal setting</td>
</tr>
<tr>
<td></td>
<td>environment, removing alcohol)</td>
<td>• Support of self-efficacious behaviour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Encourage stimulus control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Skills training interventions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Encourage support from others</td>
</tr>
</tbody>
</table>
### Stages of change and approaches that are most appropriate at each stage

<table>
<thead>
<tr>
<th>Stage</th>
<th>Explanation of Stage</th>
<th>Approach suitable to stage</th>
</tr>
</thead>
</table>
| Maintenance (Maintaining change) | Change is sustained over a period of time  
  • Substituting alternatives for problem behaviours eg relaxation  
  • Taking responsibility for actions  
  • Susceptible to relapse. Need to remain aware of stimuli that may trigger problem behaviours |  
|                        | • Do not view relapse as failure, but as a way to gain knowledge of triggers  
  • Decrease environmental and internal stimuli that trigger problem behaviours |
Principles for effective management

1. Client-centred Approach

Chronic condition self management requires a client-centred approach, with the client at the centre, contributing to and driving the management process. This is in contrast to a condition-centred approach in which management is measured in terms of measurable biological variables. This approach is limited as it does not consider the person as a whole, and only allows for partial inclusion of the client in the process (Stewart et al 1995). The client-centred approach uses a biopsychosocial approach to the provision of primary care and underpins self management.

There are six interactive components involved with a client-centred approach:

1. Exploring both the disease and the illness experience (FIFE) including:
   - Their feelings, such as fear about being ill
   - Their ideas about what is wrong with them
   - The functional impact of their problems
   - Their expectations about what should be done

2. Understanding the whole person - Over time the health care provider will come to know the client and the client's context of life setting and stage of personal development.

3. Finding common ground - To develop an effective management plan, the client, health care provider, and other health professionals as appropriate, must come to an agreement in three areas:
   - The nature of the problems and priorities
   - The goals of treatment
   - The role of the client and other health care providers

4. Incorporating prevention and health promotion - Finding common ground for opportunities for disease prevention and health promotion.

5. Enhancing the client-healthcare provider relationship - The development of the health care provider-client relationship is essential.

6. Being realistic - Skills of priority setting, resource allocation and teamwork can be used to improve efficient time management. It is also important to make goals and timeframes for their achievement realistic.
2. Decision making

Clients have a right to make informed decisions about their health care. The client/health care provider partnership can facilitate such decision-making (Irwig et al 1999). Health care choices should be based on:

- Health care provider’s clinical skills
- Best evidence from the respective literature
- Preferences based on benefits and possible harms

The health care provider and the client can work together to determine an appropriate course of action and solve problems that arise within the management plan by:

- Understanding the problems and goals clearly
- Considering a wide variety of courses of action
- Creating multiple solutions to the problem
- Collecting all available information to use in a combined solution
- Weighing the positives and negatives of each solution to determine depth of commitment to each.

3. Motivational interactions

There are eight interaction technique strategies that can be used to motivate clients to change or adopt healthful lifestyles (Compton et al 1999).

- Giving Advice
- Removing Barriers
- Providing Choice
- Decreasing Desirability
- Practising Empathy
- Providing Feedback
- Clarifying Goals
- Active Helping

Although motivational interviewing may be seen as a time consuming activity, the effect that a health care provider can have on a client with even a brief encounter should not be overlooked. Motivation can be built upon over time and within the development of the therapeutic relationship.
Section 3  Problem definition

Effective self management is possible when the health care provider and client work together. Clear definitions of what the client sees as problems are required, ensuring that the areas identified for action are those that are significant to the client and their lifestyle. This process may be initiated by providing the patient with, and discussing, a self management information pamphlet.

Assessment begins with a definition of needs and acknowledgment of strengths:

1. **Identify the impact of illness.** Determine client’s illness experience:
   - **Feelings:** anger, fear, guilt, relief or beliefs about self worth and ability to control their symptoms
   - **Ideas:** about disease and the meaning of illness to the person. Values and beliefs about their health and their illness
   - **Effect on Function:** activities of daily living (ADLs), family relationships, requirement of lifestyle change and effect on life roles
   - **Expectations:** clients’ expectations of the health care provider ie action or just listen

2. **Identify the specific symptoms and signs of illness**
   - With the client, identify the target physical and psychological symptoms of the existing illness, eg pain, limitations in range of motion (ROM) and strength, depression
   - Use objective measures for assessment if possible, eg pain scales, ROM assessments, psychological evaluations

3. **Identify factors leading to the preservation and promotion of health (lifestyle)**
   - Consider factors that may be related to and affect the presentation and subsequent course of the illness ie diet/nutrition, weight, smoking, stress and exercise
   - Use specific guidelines relating to these lifestyle conditions
   - Determine which stage of change the client is at by asking "How do you feel about your ______(eg weight)?" (Richmond et al. 1998).

**Determine strengths and barriers to the capacity to self-manage**

To determine a client's ability to self-manage, their self-management skills need to be identified. This should be done alongside previous assessment rather than in isolation. The information may be obtained over a series of visits.
| Key aspects relating to the clients’ ability to take on a self-management role |
|---|---|---|
| **Factors affecting self management** | **How can these factors be modified** | **Practical points to consider** |
| Motivation | This will be affected by the stage of change currently experienced by the client | What stage of change is the client in?  
Is the client concerned about lifestyle behaviours?  
Does the client recognise the benefits that may come with change?  
Does the client know what action is needed to change? |
| Knowledge of condition | Knowledge helps the client in their decision making process. However, it is generally accepted that program which seek to improve health by increasing client knowledge alone are rarely successful. | Does the client want information related to their illness?  
Does the client understand the rationale behind treatment? |
| Knowledge of symptom management plan | Information on managing a crisis, emergency or symptoms is important for both client or carer(s). | Does the client have a symptom action plan?  
Is there a need to consider the management capacity of carers and others in the immediate social environment as well?  
Are there sensory or cognitive impairments that may affect the client’s ability to self-manage? |
| Co-morbidities | Consideration of other conditions that may affect self-management eg sensory or cognitive impairments (hearing or visual loss, dementia) |  |
| Health beliefs | Understanding the religious, cultural and familial beliefs that may influence the effect of management interventions. | What effect do these beliefs have on the client’s thoughts about self-management? |
| Self-efficacy | The extent of the client's confidence in their capacity to self-manage, the extent to which the client values him/herself and the extent to which they feel they have some control over their ability and desire to assume a self-management role. | Is the client confident in his or her ability to self-manage?  
Does the client feel that he or she has the skills to make changes and control the illness? |
| Social context | Consideration of such things as access to services and cultural aspects of the client’s life. | What aspects of life eg family, friends, literacy, access, employment, culture, roles need to be considered? |
Section 4 - Planning (Goals)

For management to be shared, a client-centred approach must be used. This enhances self-efficacy, encourages greater personal responsibility and fosters a partnership approach between the health care provider and client. A plan that acknowledges, incorporates and reinforces client preferences has the best chance of resulting in concordance and an improved quality of life.

When clients are unable to fully participate in the planning process due to co-morbidities such as reduced cognitive abilities, family and caregivers need to be involved to increase the likelihood that client preferences are included. The management then becomes ‘family focussed’ rather than ‘client-centred’. Such an approach may also be used at times when the assistance of the whole family or social environment is needed to help bring about motivation and change (Fisher and Weihs 2000).

Goals should be determined as specific objectives, and these objectives should be SMART:

- Specific
- Measurable
- Achievable
- Realistic
- Timely

This enables easier monitoring of the plan and also provides a useful motivation tool. It is essential that the goals are understood and agreed to by the client. Initiating too many changes at once may result in poor client concordance and the client may become discouraged (Von Korff et al 1997). Steps for developing a client management plan are outlined below.

1. **Determine specific goals** according to the problems and ability of the client to self manage. Such goals may include:
   - Increase knowledge concerning their illness, lifestyle factors and treatment options
   - Reduce illness symptoms
   - Use symptom action plan and diaries
   - Increase concordance with management strategies
   - Improve function
   - Reduce impact on social, emotional and personal life

2. **Prioritise** goals in collaboration with the client. Client preferences are central but are influenced by the capacity for self-management and the available resources.
3. **Determine outcomes** for each of the goals using the SMART principles.

4. **Decide on time frame and responsibility** for achievement of goals and/or monitoring. Where multiple health professionals are involved it is necessary to clearly identify the roles and responsibilities of each person. The control of this process must rest with the client where possible. Monitoring progress including frequency of review must also be included (see Section 6 - Monitoring).

5. **Select appropriate interventions** to achieve goals using the decision-making principles outlined in Section 7.

6. **Document the plan** in the client’s notes and give the client a copy. This may be in the form of a formal care plan upon which other health care providers have input (see Section 8), a diagnosis-specific diary or monitor, or a centre-specific record.
Section 5 - Management strategies

The most appropriate mix of strategies for client self-management should be chosen depending on the goals, availability of resources, quality of resources and client self-management skills. To provide a continuum of care, other health care providers may be used to implement strategies.

Self-management interventions for people with chronic conditions should include:
1. A focus on the client’s perceived needs
2. Practice and feedback in new skills, including decision-making and problem-solving
3. Attention to emotional and social management in addition to medical management
4. Use of techniques to increase client’s confidence in their ability to manage their conditions
5. Emphasis on the client being active in the health care provider/client relationship

Categories of Intervention

• **Education and information** (consumer guides and handbooks) – provide the client with information about their illness and the impact of interventions.

• **Motivational interviewing** – with the assistance of the health care provider clients are given the opportunity to examine different aspects of their illness and treatment eg positives and negatives of change. This results in client-made decisions.

• **Peer support and motivation** – community groups and associations, such as weight loss and fitness eg community walking groups.

• **Structured disease specific programs** – groups and programs run by organisations such as Asthma Foundation and Arthritis Foundation.

• **Self-management programs led by lay people** – programs where client illness management techniques are taught by lay people, providing inspiration from role models and mutual support.

• **Symptom diaries** – help clients monitor their illness. The information can be used to develop a management plan.
- **Community based skill groups** - groups that exist to enhance skills for healthy lifestyles such as fitness, nutrition (food purchasing and cooking) and life skills.
- **Referral to another health care provider** - the expertise of another health care provider may be required to enhance another area of self-management performance eg chronic pain management, medication review, stress management or ADL adaptation for independence. This may be done utilising the Care Plan and Case Conference items of the EPC Package (see Section 7 for further detail).

To assist clients to be effective in managing their own condition, a range of management options may be used to:
- Develop self-management skills
  - Medication use
  - Pain control
  - Adjustment to change
  - Coping with emotional reactions
- Guide behaviour change related to lifestyle and activities
- Develop knowledge
  - Monitor changes in condition and symptoms
- Provide social support
  - Effective use of community resources.

Self-management components can be used to improve a person's management of their condition by putting the client at the centre around which treatments are built. However, it is important to remember that one strategy does not suit all and that they all have varying applicability.
Section 6 - Monitoring

It is not only important to select the right intervention. It is also essential to monitor the effect of a chosen intervention for several reasons:

- Helps determine the effectiveness of interventions
- Provides information that can be used to motivate clients
- Provides an opportunity to review progress and adjust the management plan if necessary

How the outcomes are to be measured needs to be determined prior to commencing the intervention. This should occur at the planning stage when the goals are decided, as outcomes often relate directly to selected goals. It is essential that these outcome measurements are determined jointly with the client, and the parameters for success or failure are agreed upon and documented.

Selecting the measures

The indices chosen should be valid and reliable, easy to measure and easily understood. The selection of the indices can be broadly categorised into three main groups:

1. **Physiological measures.** This may relate to illness specific disease markers and are best used for goals reflecting aspects of illness or lifestyle. Examples include ROM, strength and weight.

2. **Clinical measures.** These are judgements made by the health care provider and client concerning overall progress. They are not as precise as objective measures as they involve a degree of judgement and rely on an overall assessment of the condition to which a systematic approach can be taken, for example by using a scaling system.

3. **Quality of life measures.** These can be used to measure functional improvements. Client assessment is central in this measurement and various validated instruments or scales can be used depending on the goal. Quality of life measures are best used for goals involving symptom control (e.g., pain) and functional improvement (e.g., mobility).

When to measure

Deciding when outcomes are to be measured should also occur at the planning stage, as monitoring intervals will depend on what is being measured and how quickly change is required. When deciding monitoring time, evidence based principles should be used whilst keeping in mind individual circumstance. This is particularly relevant for condition-specific objective indices.
How to measure

Measurement and review can take many different forms. These can include:

- Regular visits to the health care provider
- Care planning with the GP and other health care providers (see Section 7)
- Case conferencing with other health care providers (see Section 7)
- Phone contact initiated by the health care provider or client
- Electronic reviews (through email)
- Letter/postcard contact
Section 7 - Enhancing the Multidisciplinary Team

The Enhanced Primary Care (EPC) package was developed to assist those with complex and chronic conditions and encourage a greater role for consumers in decision-making about their health.

One component of this package is the availability of new Medicare Benefit Schedule (MBS) service numbers for GPs. The new MBS items enable GPs to focus on prevention and better coordination of care for their clients through multidisciplinary care planning and case conferencing. The new MBS items also provide allied health professionals a greater opportunity to invite GPs to be involved in client care.

The EPC care planning and case conferencing MBS items aim to improve communication between GPs and allied health professionals to ensure better care for clients. By enhancing this multidisciplinary approach, the basic premises of self-management can also be facilitated.

The new services include:

- Care plans or case conferences for clients, organised by the health care provider to which you can invite GPs to contribute.
- Care plans or case conferences for clients, organised by the GP, to which they can invite the health care provider to contribute.

Clients who are eligible for these services are those:

- Of any age with a chronic medical condition (lasting six months or longer) or terminal illness who require multidisciplinary care from two or more providers and who are:
  - In the community
  - In residential aged care facilities
  - Private patients being discharged from hospital

Example:

A client with poorly controlled diabetes may need to see a:

- GP – for general health management
- Diabetes nurse educator – to teach him/her how to use the glucometer
- Dietician – to help the client lose weight
How does a care plan differ from a case conference?

Care plans are comprehensive, longitudinal plans for the care of the individual client, whereas a case conference usually involves immediate management plans to address short term or urgent problems.

**Care plans** can be developed over time and contribution may be by:
- Telephone
- Fax
- Email
- Written correspondence
- Face-to-face meeting
- Mail

**Case conferences** require all service providers to communicate at the one time by either:
- Face-to-face
- Phone link
- Video conference

If you require further information about the MBS items and the Enhanced Primary Care package, contact the Commonwealth Department of Health and Ageing, the Royal Australian College of General Practitioners or your local Division of General Practice.
Section 8 - Level and Strength of Evidence

<table>
<thead>
<tr>
<th>Improving health outcomes for people with chronic conditions by:</th>
<th>Quality of evidence</th>
<th>Strength of Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting and encouraging self-management</td>
<td>II</td>
<td>A</td>
</tr>
<tr>
<td>Reducing lifestyle risk factors of obesity, physical inactivity and smoking</td>
<td>I</td>
<td>A</td>
</tr>
<tr>
<td>Defining problems, setting goals and developing plans through a collaborative approach between providers and the client</td>
<td>III</td>
<td>B</td>
</tr>
<tr>
<td>Regular follow-up at timed intervals to monitor health status</td>
<td>III</td>
<td>B</td>
</tr>
<tr>
<td>Educational programs directed at client to improve knowledge relating to the condition</td>
<td>II</td>
<td>B</td>
</tr>
<tr>
<td>Targeting interventions using the Stages of Change approach</td>
<td>III</td>
<td>B</td>
</tr>
</tbody>
</table>

Where given, the level of evidence is based on the following criteria (National Health and Medical Research Council 1998):

<table>
<thead>
<tr>
<th>Level</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Evidence obtained from a systematic review of all relevant randomised controlled trials.</td>
</tr>
<tr>
<td>II</td>
<td>Evidence obtained from at least one properly-designed randomised controlled trial.</td>
</tr>
<tr>
<td>III-1</td>
<td>Evidence obtained from well-designed pseudo randomised controlled trials (alternate allocation or some other method).</td>
</tr>
<tr>
<td>III-2</td>
<td>Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case controlled studies or interrupted time series with a control group, more that one centre or research group.</td>
</tr>
<tr>
<td>III-3</td>
<td>Evidence obtained from comparative studies with historical control, two or more single arm studies or interrupted time series without a parallel control group.</td>
</tr>
<tr>
<td>IV</td>
<td>Evidence obtained from case series, either post-test or pre-test and post-test.</td>
</tr>
<tr>
<td>Level</td>
<td>Explanation</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>V</td>
<td>Opinions of respected authorities, based on clinical experience, descriptive studies or reports of expert committees</td>
</tr>
<tr>
<td>No</td>
<td>After thorough searching, no evidence was found regarding recommendations in general practice for the target disease or condition.</td>
</tr>
</tbody>
</table>

**Where given, the strength of evidence is based on the following criteria:**

A: The recommendation is supported by scientific evidence from properly designed and implemented controlled trials providing statistical results that consistently support the guideline statement.

B: The recommendation is supported by scientific evidence from properly designed and implemented clinical series that support the guideline statement.

C: The recommendation is supported by expert opinion.
References


