

Banyule Nillumbik Primary Care Alliance

STRATEGIC PARTNERSHIP GROUP

Appendix 2

CHRONIC DISEASE MANAGEMENT

Literature Review

Marie Gill

gill + willcox
PO Box 9163 Brighton 3186
t 03 95335369
m 0419 953 030
e marie@gillandwillcox.com.au

Contents

Introduction	3
Chronic disease care models	3
Chronic disease policies	
National Chronic Disease Strategy.....	3
Levels of care.....	4
General Practice Initiatives.....	4
Care in your community: a planning framework for integrated ambulatory health care.....	5
Chronic Disease Management Program Guidelines for Primary Care Partnerships and Community Health Services.....	6
HARP Chronic Disease Management.....	7
The Chronic Care Model	8
Specific interventions	9
The Flinders Model.....	9
The Stanford Model.....	9
Self-Management 5As (Kaiser Permanente).....	10
Health coaching.....	10
Motivational Interviewing for Behaviour Change.....	10
Organising health care to meet patients' needs	11
Summary	12
Key components of care	
Strategies for organising and delivering care	
References	14

Introduction

Chronic disease care models

'Models of care' set out a framework for the planning and provision of care for a specific condition/s. They should aim to achieve equity, parity and consistency in care, support coordination of services and a systems approach across local services. Models of care should aim to be patient centred, support service providers to develop efficient and effective treatment and care systems, reflect professional consensus of what works best, and be based on current evidence, quality standards and good practice. ¹

The definition above suggests a 'model of care' takes a very comprehensive approach that encompasses both the planning and delivery of care across a number of services.

In Australian and international literature on the care of people with chronic diseases, the term 'model of chronic disease care' is used to describe a wide range of entities from well-defined interventions in a specific target group, to broad overarching principles for health service provision at government policy level.

Chronic disease policies

National Chronic Disease Strategy

The Australian National Chronic Disease Strategy² (National Health Priority Action Council [NHPAC], 2006a) has been formulated to meet the objectives of preventing or delaying chronic disease, reducing disease progression and complications, maximising wellbeing of individuals, avoiding hospital admissions and health care procedures, implementing best practice across the continuum of disease prevention, detection and management, and improving the capacity of health services to meet predicted chronic disease care demands.

The National Chronic Disease Strategy is based on the following principles:

- A population-based health approach to reduce health care inequality
- Giving a high priority to health promotion and illness prevention
- Person-centred care and optimal self-management
- Effective health care
- Integrated multidisciplinary care through coordination between health services, settings and sectors
- Continual improvement in the current health care system
- Monitoring progress.

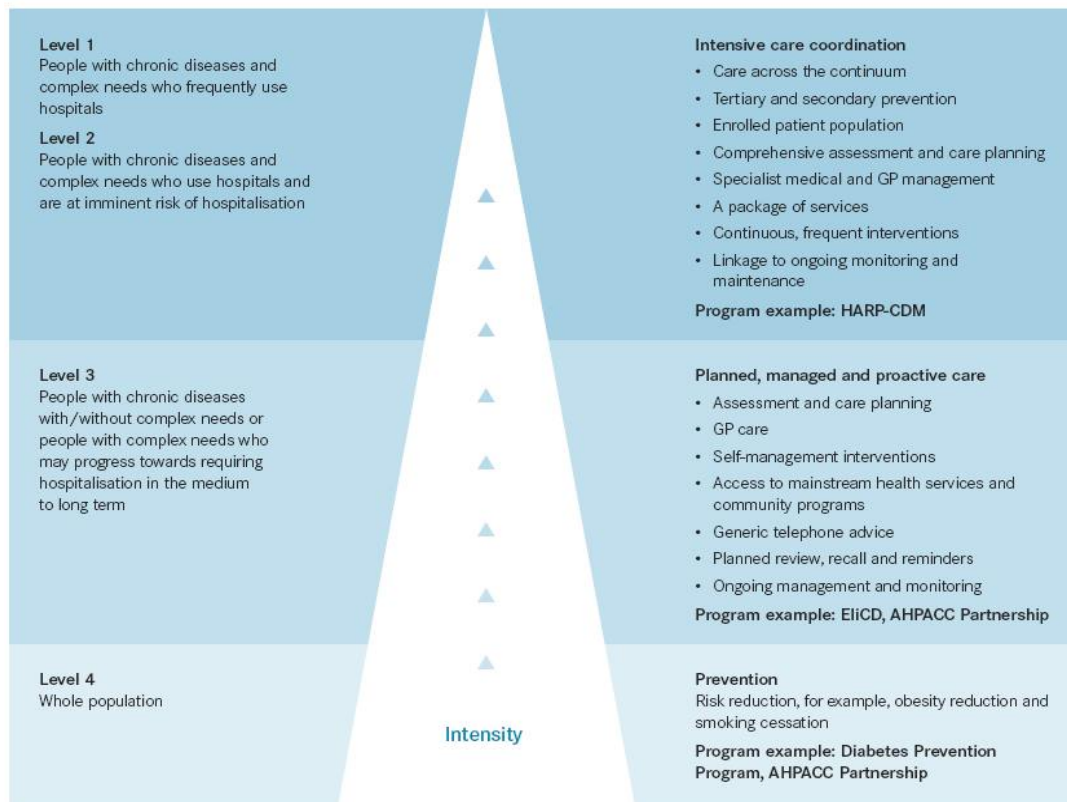
The following action areas have been identified for implementing the above principles:

- Chronic disease prevention
- Early detection and treatment
- Integration and continuity of prevention and care
- Self-management.

Levels of care

Planning and delivery of chronic disease care according to level of care needed has been highlighted in both the Australian National Chronic Disease Strategy and the UK National Health Service Social Care long-term conditions model. Both policies refer to the US Kaiser Permanente model (www.kaiser.permanente.org), which outlines three levels of care according to severity of disease and intensity and complexity of care needs (see Figure 1). The Victorian state chronic disease management guidelines also include these principles.

Figure 1: Levels of chronic and complex care prevention and management



Adapted from Kaiser Permanente. Source: Chronic Disease Management Guidelines for Primary Care Partnerships and Community Health Services. Victorian Government, Department of Human Services, 2007.

General Practice Initiatives

The role of general practice in the delivery of effective and efficient chronic disease care has been recognised at both federal and state and territory levels. There are a number of general practice initiatives aimed at improving chronic disease.

The *Medicare Chronic Disease Management (CDM) items* on the Medicare Benefits Schedule (MBS) provide support for GPs to manage the health care of patients with chronic medical conditions, including patients needing multidisciplinary care by expanding patient eligibility and increasing the assistance that Practice (PNs), Aboriginal health workers and other allied health professionals can provide. General practice can use a number of MBS items to support care planning for people with chronic illness including:

- Preparation/ review of a GP Management Plan
- Preparation/review of Team Care Arrangements
- Contribution to a multidisciplinary care plan or Team Care Arrangements

Individual Allied Health Services

Medicare rebates for allied health service are available to patients that have a chronic condition and complex care needs being managed by their GP. The need for allied health services must be identified in the patient's care plan and GP referral is required.

45 Year old Health Check

Medicare Benefits Schedule (MBS) item to support general practitioners, to provide a focused health check for patients aged around 45 years with identifiable risk factors to aid the early detection of chronic disease.

Lifescrpts

The lifescrpt tools have been developed to assist GPs, practice nurses and staff in the general practice setting in providing lifestyle advice such as smoking cessation, increasing physical activity and maintaining healthy weight.

Primary Care Collaboratives projects

The National Primary Care Collaboratives Program is currently being piloted by over 20 Divisions of General Practice across most states. The program aims to assist individual general practices with the creation of care pathways, adoption of best practice guidelines and proactive secondary prevention to develop the capacity of the practices to deliver rapid, sustainable and systematic improvements in the care they provide to patients and their communities.

Although the Collaboratives program is not being piloted by NEVDGP some practices are involved in the program with the NDGP. NEVDGP is working with practices to support GPs to improve information management systems so that they can accurately identify patients with a chronic disease and practice populations, develop systems to capitalise on funding for CDM and to systematically deliver and evaluate chronic disease care is work consistent with many of the activities undertaken by practices involved in the Collaboratives programs.

Primary Care Integration Program

This program has not been officially launched yet but DHS representatives have discussed the program at recent PCP forums. It is anticipated that through this program funding will be provided to Divisions of General Practice to support work with local PCPs to support service coordination and integrated chronic disease prevention and management.

Care in your community: a planning framework for integrated ambulatory health care

The overarching policy direction and planning framework for ambulatory care service delivery models and facilities in Victoria, is outlined in the policy document - *Care in your community: A planning framework for integrated ambulatory health care.*

Key principles of the framework include:

- Health care provided in community-based settings, where it is safe and cost-effective to do so.
- The delivery of health care will incorporate a population health approach that recognises the social determinants of health and prioritises health promotion and illness prevention.
- Care will be 'person and family centred', focusing on the needs of the whole person as these change over time and support for self management
- People will have equitable, timely and appropriate access to health care regardless of where they live.

- The delivery of health care will be based on the best evidence available and will be planned on an area basis to meet the needs of defined populations.
- Information about people and the services they receive will be consistently managed and coordinated across health care services to protect privacy and support integrated service delivery and continuity of care.
- There will be a consistent, planned approach to developing the infrastructure for the delivery of integrated health care, including information and communications technology (ICT), standard tools and protocols, facilities and equipment.

The approach to integrated area-based planning incorporates four elements:

1. Population health planning - population health profiling and building on existing local government planning activities.
2. Integration planning- working with other partners to plan for service system integration, service coordination and implementation of local area workforce development strategies and projects.
3. Community-based service configuration planning - this planning should set out, at a catchment level, what services will be delivered where and by whom, including looking at opportunities for co-location and integration and for delivering services in new modes.
4. Regional and statewide planning - undertaken by DHS central and regional offices.

Consumer and carer involvement is seen as integral to health planning, the policy states people using health care services should be involved in service planning and decisions about their local health care system.

The aim of integrated area-based planning is to:

- Build up and consolidate easily accessible health care services in community-based settings, with services delivered in hospital settings complementing community-based services.
- Maximise equitable distribution of services, based on the characteristics and needs of local populations, with a focus on addressing disadvantage (including the needs of socioeconomically disadvantaged communities, Aboriginal people, people with a disability and people with a mental illness).
- Maximise people's capacity for health and wellbeing in the local community, by focussing on:
 - management of chronic disease and complex care
 - streamlined, effective and appropriate delivery of episodic and urgent care
 - integrated health promotion and illness prevention.

Chronic Disease Management Program Guidelines for Primary Care Partnerships and Community Health Services

The Victorian Chronic Disease Management (CDM) Program Guidelines for Primary Care Partnerships and Community Health Services³ targets people at level 3 of the chronic disease hierarchy, described in Figure 1. Levels 1 and 2 are targeted by Hospital Admission Risk Program – HARP CDM.

The CDM program guidelines set out guiding principles for local service models for integrated chronic disease and/or complex needs management that are person centred, support self management and target population subgroups of greatest need.

The Chronic Disease Management Program guidelines are based on the Chronic Care Model discussed below.

HARP Chronic Disease Management

The target population for HARP CDM⁴ are frequent hospital attendees who are most likely to benefit from integrated care and have the potential to reduce avoidable hospital use. This includes:

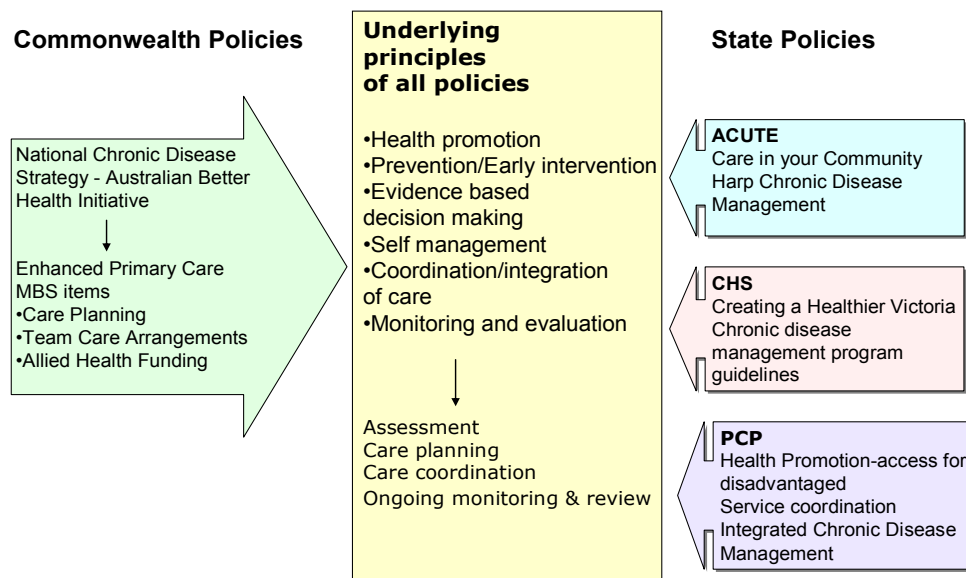
- People with chronic heart disease
- People with chronic respiratory disease
- Older people with complex needs
- People with complex psychosocial needs.

The objectives of HARP CDM are to:

- Improve patient outcomes
- Provide integrated seamless care within and across hospital and community sectors
- Reduce avoidable hospital admissions and Emergency Department presentation
- Ensure equitable access to healthcare.

Figure 2 below summaries the key polices influencing chronic disease policies at a national and state level and highlights the commonalities across policies.

Figure 2: Summary of key chronic disease care policies



The Chronic Care Model

Over the past 10 years there has been a strong worldwide interest in developing and defining sets of principles for structuring health care planning and delivery across all levels of service provision. The most influential of these frameworks is the Chronic Care Model; the details of this model are outlined below.^{5,6,7,8,9} Other major frameworks for the delivery of care for people with long-term conditions include the Innovative Care for Chronic Conditions Model, the Public Health Model and the Continuity of Care Model all of which have strong similarities with the Chronic Care Model.¹⁰ All of these models set out ideals for coordinating health care, designing services, organising information and supporting patients to manage their care.

The Chronic Care Model is developed from research attempting to identify the common elements of effective chronic disease care, from the health care provider level to the system level. The framework was developed on the assumption that individuals with a chronic disease share a common set of problems that include dealing with symptoms, disability, emotional effects, complex medication regimens, difficult lifestyle adjustments and getting helpful medical care. The following components of the Chronic Care Model are most directly relevant to primary care (www.improvingchronicillness.com):

- Delivery system design – organisation of care teams to deliver systematic, effective, efficient clinical care and self-management support
- Decision support – promoting clinical care that is consistent with scientific evidence and patient preferences
- Clinical information system – organising patient and population data to facilitate efficient and effective care
- Self-management support – preparing patients to manage their health and health care.

The Chronic Care Model acknowledges the wider community as the context of health care services, and involves mobilising community resources to meet the needs of people with long-term conditions, e.g. other service providers, non-medical support services.

An Australian review of evidence for elements of the Chronic Care Model¹¹ suggested that:

- Multidisciplinary teams are effective in improving disease measures and adherence to guidelines, particularly for diabetes, hypertension and lipid disorders
- The combination of self-management support and delivery system design is particularly effective (e.g. nurses acting as case managers for diabetes, combined with self-management education)
- Clinical information systems that provide audit and feedback encourage the use of decision support.

Importantly the literature highlights that improvements in clinical outcomes depends on close adherence to some or all aspects of a framework, and achieving this often requires an intensive process of continual change within health services to adjust existing practices.¹²

Programs such as the Kaiser, EverCare and Pfizer approaches, Program of All-Inclusive Care for the Elderly (PACE) use a range of service delivery models from those that focus on case management or disease management through to population health management but the underlying principles are similar to those of the Chronic Care Model.

The approaches share a proactive approach to managing care for people with long-term conditions. Key components include the following:¹³

- Patient education via internet, telephone, face-to-face focussed education, follow-up mentoring
- Risk assessment to identify people at highest risk
- Care planning aimed at proactive care of those at high risk, avoiding inappropriate referrals to services, individualised care plans
- Staff coordination to set up partnerships between clinicians and managers, placement of general practitioners (GPs) in emergency departments and specialists in general practice clinics, case management by specially trained nurses
- Information management tools such as reminders, clinical evidence database, computerised risk assessment tool, patient data shared between services and disciplines, computerised decision-support based on local guidelines for use in telephone follow-up
- Hospital discharge management to ensure continuity, online discharge summaries, staff assigned as discharge planners, a single point of contact for patients to access all services.

Weingarten and colleagues conducted a meta-analysis of published reports on chronic disease care delivery programs incorporating many of the above components. They found that all strategies may contribute to improvements in provider adherence to guidelines and disease control measures, but it was not possible to predict which would be most effective.¹⁴

Specific interventions

A number of intervention models are highlighted in the literature and key characteristics of some of these models are summarised below.

The Flinders Model

A one-on-one model, with a systematic assessment process that provides support to the practitioner to develop interventions /actions in the care planning process that are tailored to the identified needs and priorities of the individual. Clinicians are trained; to use a structured assessment/interview process, and use problem definition, goal setting to develop care plans for people with chronic conditions.

My personal observations from discussions with organisations who have trained practitioners in this model and feedback from practitioners would suggest the model provides a good framework for systematic assessment and client centred care planning. The assessment process takes approximately one hour and many organisations have struggled to integrate it into care delivery processes. Practitioners have indicated that the assessment works well for clients with complex needs but may not be as suitable for clients who require minimal intervention. Practitioners have indicated that additional skills in goal setting and motivational interviewing are needed to provide adequate support for the ongoing care planning.

The Stanford Model

The Stanford Model is a group based six week program that aims to help people gain self-confidence in their ability to control their symptoms; it focuses on building skills such as goal setting, problem solving, and action planning. There is a strong emphasis on sharing experiences and providing support within the group. The program can be run by peer educators as it has standardised structured sessions. Group leaders must undergo training to deliver the program.

My personal experience and feedback from practitioners is that the program is very effective in promoting self management for group participants but it does not provide an organisation wide approach to self management. Organisations have identified that the program is not suitable for many clients for a variety of reasons including; those that don't like groups, literacy and language issue and other common access to care barriers. Many practitioners report that if the program is offered in isolation of other changes within organisations to support chronic disease care it is difficult to get other team members to refer into the program and for practitioners to use the skills learnt in other aspects of practice.

Self-Management 5As (Kaiser Permanente)

The '5As' model of behaviour change counselling, is an evidence-based approach that provides a sequence of behaviours (Assess, Advise, Agree, Assist, Arrange) that can be applied in primary care settings to address a broad range of behaviours and health conditions.

The 5As are as follows: *assessing* patient level of behavior, beliefs and motivation; *advising* the patient based upon personal health risks; *agreeing* with the patient on a realistic set of goals; *assisting* to anticipate barriers and develop a specific action plan; and *arranging follow-up* support

The '5As' approach is integrated into the Lifescrpts program and is the basic framework for many interventions used in counselling.

Many health professionals use this framework in their care delivery but often the approach is not consistently used within organisations. If this approach is adopted without integrating the overall philosophy of a client centred care there is a risk that the goals set are focussed more on clinical guidelines for care rather than priorities of the individual. This approach is limited by the framework in which the health professional is operating i.e. capacity to spend sufficient time, pressure to provide treatment and capacity to provide ongoing timely review.

Health coaching

The 'coaching' model is an emerging approach to chronic disease care and prevention.

Health coaching is 'a discipline in which trained health professionals apply evidence-based coaching principles and techniques to assist their clients or patients to achieve positive health and lifestyle changes'.¹⁵

Coaching generally involves a health professional, other than the main prescriber or clinician, who provides individualised support for self-management.

The health coach model has been used for diabetes and cardiovascular disease in Victoria both programs involved regular personal coaching via telephone and mailings and the published literature demonstrates positive outcomes for lifestyle changes and quality of life^{16, 17}.

Motivational Interviewing for Behaviour Change

Motivational Interviewing (MI) is a style of patient-practitioner communication that is specifically designed to resolve ambivalence about, and build motivation for, behavior change. MI focuses on creating a comfortable atmosphere without pressure or coercion to change it involves careful listening and strategic questioning, rather than teaching, in order to help patients resolve their ambivalence about change. MI is *patient-centered*, in that it

focuses on the concerns and the perspectives of the patient, rather than those of the practitioner.

Organising health care to meet patients' needs

The culture and structure of health service delivery systems in Australia focus primarily on illness diagnosis, patient-initiated consultations, and curative and/or symptom relieving treatments. Federal and State funding arrangements often result in a lack of health service integration or coordination. People with long-term conditions who rely on multiple health services must organise and link their care themselves.¹⁸

This focus on disease management and episodic care suggests the system is not well aligned with what people with chronic conditions have identified as important to them in managing their condition. When people with chronic conditions are asked what they want from the general practitioners, the focus seems less on treatment and more on relationships, communication, access to information and coordinated care (see Figure 3).¹⁹

Figure 3: Consumer/patient expectations of GPs and general practice

- *An improved level of communication between consumers/patients and GPs.*
- *An increased and active role for GPs in linking consumers/patients to a variety of health and support services.*
- *An improved level of communication between GPs and consumers/consumer organisations within general practice.*
- *Appropriate, timely and high quality health care for consumers.*
- *General practice to provide, or facilitate access to, a wider range of services to meet consumers' needs.*
- *Accessible general practice services for consumers/patients.*
- *Better use of information technology in general practice to meet consumers' needs.*

Reproduced from Consumers' Health Forum, 1999, pp. 8–16

Consumer groups have identified what is needed to make the system more responsive to their needs.²⁰ The issues include:

- Users of the health system should be involved in planning and evaluating services
- Consumer organisations should be provided with the resources to produce information for their members
- The most consistent complaint that consumer organisations receive is that there is not one health system but many uncoordinated health systems
- People with chronic illnesses face a series of co-payments and associated costs that make having a chronic illness a very expensive exercise
- Consumers need to be involved in helping to address quality and safety issues
- Whenever there is a gap in service provision, the responsibility for caring for the person falls to their immediate carer or family
- The gap in quality and accessibility between public and private systems is widening.

Summary

In summary chronic care policies and models highlight key elements in the care delivery process for chronic disease care that are needed to support consistent comprehensive approaches to care and highlight organisational changes and care delivery processes needed to support delivery of planned systematic proactive chronic disease care.

Key components of care

The key components of chronic disease care are:

- Assessment
- Care plans
- Regular review
- Self-management support.

Assessment

Accurate diagnosis and assessment according to best practice is fundamental to initiating appropriate treatment and optimising ongoing care²¹.

Common assessment forms should collate minimum data for all chronic conditions, including identifying lifestyle risk factors, self management skills and depression.

The Chronic Care Model also highlights the importance of exploring patient's perceptions of their health problem, fears and priorities for care as fundamental to the assessment process.

Care plans

- All clients with chronic conditions should have a documented care plan that:
- Is based on a comprehensive assessment
- Is developed collaboratively with individuals(s) with chronic disease, their support systems(s) and interdisciplinary team members
- Identifies issues/problems, risk profile and develops appropriate strategies to address these
- Includes appropriate treatment regime and education interventions according to best practice guidelines
- Encourages and supports self-care strategies
- Identifies appropriate follow up and review
- Documents individual's progress, including goals and achievement of them.

Regular review

Systematic monitoring and review has been identified as a key component to improving outcomes for chronic disease. Recall mechanisms should be in place including protocols for early identification and treatment of complications.

Self-management support

Self-management involves the patient with the chronic condition working in partnership with their carers and health professionals so that they can:

- Know their condition and various treatment options
- Negotiate a plan of care (i.e. care plan) and review/monitor the plan
- Engage in activities that protect and promote health
- Monitor and manage the symptoms and signs of the condition
- Manage the impact of the condition on physical functioning, emotions and interpersonal relationships.²²

Health care services provide support for self-management by:

- Emphasizing the patient's central role in managing their health
- Using effective self-management support strategies that include assessment, goal-setting, action planning, problem-solving and follow-up
- Organizing internal and community resources to provide ongoing self-management support to patients.²³

Strategies for organising and delivering care

Equally as important is consideration of strategies for organising and delivering care to ensure the identified key elements are systematically integrated into care delivery processes. This involves attention to care delivery practices and systems within individual general practices and cooperative planning at regional, state and national levels.

A number of key drivers for integrating the identified key elements into care delivery processes have been identified. These include:

Proactive systematic care: identification and implementation of strategies to support more systemised, coordinated, proactive care and embedding self-management support into the delivery system as well as specific strategies for engaging with the priority groups.

Appropriately trained health professionals: delivery of care incorporating the identified key elements requires health professionals with specialised skills that are not routinely included in medical or allied health undergraduate training.

Increased community awareness: a lack of awareness among health professionals and the general public of effectiveness of self-management have been identified as a key barrier to accessing self-management

Readily accessible accurate information and support: the importance of linking with community organisations in chronic disease care, particularly in relation to providing access to information and peer support is emphasised in the literature.

Person-centred health care: The promotion of more 'person-centred' care is a central aim of the improvement in health service delivery outlined in the National Chronic Disease Strategy a more person centred approach is a key principle of self management support.

References

- ¹ UK Department of Health. Models of Care for Substance Misuse Treatment. London: *Department of Health*, 2002. Available at: www.doh.uk/nta
- ² National Health Priority Action Council (NHPAC). *National Chronic Disease Strategy*. Canberra: Department of Health and Ageing, 2006.
- ³ Department of Human Services. Chronic Disease Management Program Guidelines for Primary Care Partnerships and Community Health Services. 2006. Available at: http://www.health.vic.gov.au/communityhealth/downloads/cdm_program_guidelines.pdf
- ⁴ Victorian Government HARP – Chronic Disease Management Guidelines. Available at <http://www.health.vic.gov.au/harp-cdm/>
- ⁵ Wagner EH. Chronic Disease Management: What will it take to improve care for chronic illness? *Eff Clin Pract* 1998; 1: 2–4.
- ⁶ Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. *Health Aff* 2001; 20: 64–78.
- ⁷ Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Milbank Q* 1996; 74: 511–44
- ⁸ Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. The Chronic Care Model, Part 2. *JAMA* 2002; 288: 1909–14.
- ⁹ Bonomi AE, Wagner EH, Glasgow RE, VonKorff M. Assessment of Chronic Illness Care (ACIC): a practical tool to measure quality improvement. *Health Serv Res* 2002; 37: 791–820.
- ¹⁰ Singh D, Ham C. *Improving Care for People with Long-Term Conditions: A Review of UK and International Frameworks*. Birmingham: University of Birmingham Health Services Management Centre and NHS Institute for Innovation and Improvement, 2006. Available at: www.institute.nhs.uk
- ¹¹ Zwar N, Harris M, Griffiths R *et al*. *APHCRI Stream Four: A Systematic Review of Chronic Disease Management*. Australian Primary Health Care Research Institute (APHCRI) and The University of New South Wales School of Public Health and Community Medicine. Canberra: APHCRI, 2006. Available at: www.anu.edu.au/aphcri/Domain/ChronicDiseaseMgmt/index.php
- ¹² Solberg LI, Crain AL, Sperl-Hillen JM, Hroschikoski MC, Engebretson KI, O'Connor PJ. Care quality and implementation of the chronic care model: a quantitative study. *Ann Fam Med* 2006; 4: 310–16.
- ¹³ Singh D, Ham C. *Improving Care for People with Long-Term Conditions: A Review of UK and International Frameworks*. Birmingham: University of Birmingham Health Services Management Centre and NHS Institute for Innovation and Improvement, 2006. Available at: www.institute.nhs.uk
- ¹⁴ Weingarten SR, Henning JM, Badamgarav E *et al*. Interventions used in disease management programs for patients with chronic illness – which ones work? Meta-analysis of published reports. *BMJ* 2002; 325: 925.
- ¹⁵ Gale J. *Health Coaching Australia (HCA) Health Coaching Model for Chronic Disease Self-Management*. Kangaroo Valley: HCA, 2007. Available at: <http://www.healthcoachingaustralia.com>

-
- ¹⁶ Browning CJ, Thomas SA. Six-month outcome data for the Good Life Club project: an outcomes study of diabetes self-management. *Aust J Primary Health* 2003; 9 (2): 1–7.
- ¹⁷ Vale MJ, Jelinek MV, Best JD *et al*. Coaching patients On Achieving Cardiovascular Health (COACH): a multicenter randomized trial in patients with coronary heart disease. *Arch Intern Med* 2003; 163: 2775–83.
- ¹⁸ National Public Health Partnership. *Preventing Chronic Disease: A Strategic Framework*. Background paper. Melbourne: National Public Health Partnership, 2001. Available at: <http://www.nphp.gov.au/publications/strategies/chrondis-bgpaper.pdf>
- ¹⁹ Consumers' Health Forum. *Consumers' Expectations of General Practice in Australia*. Canberra: Consumers' Health Forum, 1999. Available at: http://www.chf.org.au/Docs/Downloads/195_conexpectationGP.pdf
- ²⁰ Consumers' Health Forum. *Getting the Basics Right! Health Policy Proposals for the Next Commonwealth Government*. Canberra: Consumers' Health Forum, 2001. Accessed online: http://www.chf.org.au/publications/all_search3.asp?id=678
- ²¹ National Health Priority Action Council (NHPAC). *National Chronic Disease Strategy*. Canberra: Department of Health and Ageing, 2006.
- ²² Flinders Human Behaviour & Health Research Unit. *What is Self-Management?* Adelaide: Flinders University, 2005. Accessed online May 2007 at: <http://som.flinders.edu.au/FUSA/CCTU/What%20is%20Self%20Management.pdf>
- ²³ Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. The Chronic Care Model, Part 2. *JAMA* 2002; 288: 1909–14.