The team approach to diabetes in general practice
A guide for practice nurses
The team approach to diabetes in general practice: A guide for practice nurses

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## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>4</td>
</tr>
<tr>
<td>Resources</td>
<td>5</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Diabetes in Australia</td>
<td>6</td>
</tr>
<tr>
<td>Chronic care model</td>
<td>6</td>
</tr>
<tr>
<td>Preventive care</td>
<td>8</td>
</tr>
<tr>
<td>Nurse contribution to managing diabetes</td>
<td>9</td>
</tr>
<tr>
<td>Team based management of diabetes</td>
<td>10</td>
</tr>
<tr>
<td>Patient disease registries and patient data</td>
<td>11</td>
</tr>
<tr>
<td>Clinical pathways</td>
<td>12</td>
</tr>
<tr>
<td>Health equity</td>
<td>13</td>
</tr>
<tr>
<td>Delivery system design</td>
<td>13</td>
</tr>
<tr>
<td>Continuous quality improvement: the PDSA cycle</td>
<td>14</td>
</tr>
<tr>
<td>Scope of practice and continuing professional development</td>
<td>15</td>
</tr>
<tr>
<td>The consultation</td>
<td>15</td>
</tr>
<tr>
<td>Stages of change</td>
<td>16</td>
</tr>
<tr>
<td>Self management and goal setting</td>
<td>17</td>
</tr>
<tr>
<td>Motivational interviewing</td>
<td>19</td>
</tr>
<tr>
<td>The 5As of self management support</td>
<td>19</td>
</tr>
<tr>
<td>Health literacy</td>
<td>21</td>
</tr>
<tr>
<td>Psychosocial factors</td>
<td>21</td>
</tr>
<tr>
<td>Cultural and community diversity</td>
<td>21</td>
</tr>
<tr>
<td>Patient support and resources</td>
<td>22</td>
</tr>
<tr>
<td>Diabetes management</td>
<td>23</td>
</tr>
<tr>
<td>Annual Diabetes Cycle of Care</td>
<td>24</td>
</tr>
<tr>
<td>GP Management Plans and Team Care Arrangements</td>
<td>24</td>
</tr>
<tr>
<td>Type 2 diabetes risk evaluation</td>
<td>25</td>
</tr>
<tr>
<td>Case study 1: how to get started</td>
<td>25</td>
</tr>
<tr>
<td>Case study 2: the role of the practice nurse</td>
<td>26</td>
</tr>
<tr>
<td>Conclusion</td>
<td>27</td>
</tr>
<tr>
<td>References</td>
<td>28</td>
</tr>
</tbody>
</table>
Foreword

General practice is where patients with type 2 diabetes receive most of the clinical care required to manage this complex medical condition. Evidence tells us that quality care for patients with type 2 diabetes is best delivered by a multidisciplinary team that is supported by practice systems and evidence based guidelines.

Nurses make a strong contribution to the quality of care provided in general practice and provide key educational and clinical support to patients as they work towards optimal diabetic glucose management and the prevention of complications.

The Royal Australian College of General Practitioners *Team approach to diabetes in general practice: A guide for practice nurses* provides a framework to building excellence in clinical practice and promotes and advocates the role of team care with a central patient focused approach. This guide provides practical and useful information and specific resources for practice nurses and practice teams.

The aim of this practice nurse guide is to increase knowledge and understanding of diabetes management and to raise awareness of the value of evidence based strategies for the implementation of prevention in the general practice setting. This guide forms part of a suite of educational resources that The Royal Australian College of General Practitioners offers for general practice teams.

Dr Chris Mitchell

President

The Royal Australian College of General Practitioners
Introduction

This guide has been written for practice nurses and practice teams to further support the development of a team based approach to the management of patients diagnosed with type 2 diabetes.

The guide is a companion to the Diabetes management in general practice 2009/10 and the National Health and Medical Research Council's National evidence-based guidelines for the management of type 2 diabetes.

Type 2 diabetes is a complex and common disease, and patients benefit from care delivered by a range of health care professionals. Evidence supports a team based approach in the management of patients with chronic and complex conditions. The incorporation of nonclinical staff in patient management has been shown to improve teamwork and help fulfil important administrative roles.

More than 80% of the Australian population visit their general practitioner at least once a year. The Enhanced Primary Care Program (EPC) chronic disease management Medical Benefits Schedule (MBS) item numbers were introduced in 1999 in recognition of the value of multidisciplinary teams and coordinated care as a method of improving patient health outcomes.

The EPC Program was introduced with the aim to:
• improve preventive health care delivery
• promote coordinated care
• align with the chronic care model, and
• facilitate care delivery system design change.

As identified by Phillips et al., practice nurses are often engaged in the design and monitoring of practice systems that support the delivery of care to patients. The management of chronic diseases, including diabetes, requires a paradigm shift from acute episodic care to a system of care that is more suitable for the needs of those with chronic conditions. This practice nurse guide has been written to provide a framework that facilitates this change, both at a patient and practice systems level.

Resources

The Royal Australian College of General Practitioners (RACGP) has a range of resources that supports the implementation of planned management of diabetes in general practice. These resources should be read in conjunction with this practice nurse guide:


Diabetes in Australia

Type 2 diabetes is the most common form of diabetes and occurs mostly in people aged 50 years or older. Although uncommon in childhood, it is becoming increasingly recognised in that group. People with type 2 diabetes produce insulin but may not produce enough or cannot use it effectively. Type 2 diabetes may be managed with changes to diet and exercise, oral glucose lowering drugs, insulin injections or a combination of these.6

Diabetes is the sixth leading cause of death in Australia and the prevalence has more than doubled in the past two decades.7

- In Australia around 1 million people have diabetes, with prevalence estimates ranging from 0.3% in the 25–34 years age group, to 23.6% in people over 75 years of age8
- In Aboriginal people and Torres Strait Islanders, the reported prevalence of diabetes is 2–4 times greater than in the nonindigenous population. After adjusting for age, Aboriginal people and Torres Strait Islanders are almost 4 times more likely than their nonindigenous counterparts to develop diabetes9
- At an individual level ‘diabetes places extraordinary responsibility on people for management of their condition using a therapeutic regimen that requires constant decision making and action in respect of self monitoring of blood glucose, medication intake, nutrition and physical activity’.10

Diabetes is one of five national service improvement frameworks. The National Chronic Disease Strategy (2006) has been developed to provide an overarching framework for a national approach to the improvement of chronic disease management across Australia. This model is intended to ‘encourage the delivery of more person centred, equitable, timely, effective, affordable and cohesive health care for all Australians’.11

The aim of the National Service Improvement Framework for Diabetes is to:

- prevent and limit the progression of diabetes
- slow the onset of complications that can cause severe disabilities and be life threatening
- reduce preventable hospital admissions
- reduce variations in care that appear:
  - across different clinicians and health services
  - across people from metropolitan, regional, rural and remote areas
  - in the care provided to disadvantaged groups.12

Chronic care model

The chronic care model13 (Figure 1) has been used to inform policy, both within Australia and in international health sectors. It provides a conceptual framework for understanding the elements considered essential for the management of chronic disease.
Figure 1. The chronic care model
The chronic care model identifies six essential areas for improving care for people with chronic conditions (Table 1).

Table 1. Essential areas for improving care for people with chronic conditions

<table>
<thead>
<tr>
<th>Area</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery system design</td>
<td>Teams with a clear division of labour; separating acute from planned care</td>
</tr>
<tr>
<td>Self management support</td>
<td>Helping patients and their families to acquire skills and confidence to manage their condition</td>
</tr>
<tr>
<td>Decision support</td>
<td>Integration of evidence based clinical guidelines into practice and reminder systems</td>
</tr>
<tr>
<td>Clinical information systems</td>
<td>Computer information systems; reminder systems; chronic disease registries</td>
</tr>
<tr>
<td>Community resources</td>
<td>Links to other providers</td>
</tr>
<tr>
<td>Health care organisation</td>
<td>Structure, goals and values of the provider organisation</td>
</tr>
</tbody>
</table>
All practice team members contribute to the implementation of effective chronic disease management. Team care requires teamwork supported by practice systems and evidence based guidelines. Nurses play an important role in the design and implementation of systems to support the delivery of effective chronic disease care.

Implementing systems of care in general practice requires:

- systems to ensure that patient clinical information is readily accessible in a useful format, and includes disease registers and effective systems for recalling patients
- systems to ensure clinical expertise and decision making is appropriate
- provision of education and support to assist patients in managing their health
- establishment and maintenance of good community links
- teamwork between health providers.

Source: Adapted from Managing chronic disease: what makes a general practice effective?

Preventive care

The implementation of successful preventive health activities within the practice involves three levels:

1. Patient consultation
2. Practice and the broader community
3. Health system.

Prevention can be divided into three categories (Table 2).

Table 2. Categories of prevention

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Primary – promotion of health and the prevention of illness</td>
<td>Health promotion and prevention activities can have a positive impact on reducing patients’ exposure to risk factors of disease or by acting to change the environment in which they live</td>
</tr>
<tr>
<td>Secondary – early detection and prompt intervention</td>
<td>Reduce the impact of a disease by intervening after the disease process has started but before the disease starts to impact on the patient</td>
</tr>
<tr>
<td>Tertiary – reducing the risk of death and disability once a disease has become evident</td>
<td>The focus is on prevention of the complications of a disease and is usually the dominant component of chronic care</td>
</tr>
</tbody>
</table>

A comprehensive approach to managing diabetes requires addressing prevention and management across the continuum of care. Prevention and health promotion have been identified as major contributors to the quality of life of people with chronic conditions such as diabetes.
Key messages identified in the ‘green book’ for promoting prevention activities in general practice include:

- Identifying and instituting a prevention coordination role within the practice
- Securing the services of a general practice nurse
- Developing a strong teamwork approach
- Ensuring good information management systems for efficiency
- Having a patient centred approach to one’s practice
- Using motivational interviewing techniques
- Making the best possible use of existing partnerships, including divisions of general practice, other health care providers, and community supports.


This tool will quickly evaluate patients who are at risk and would benefit from preventive interventions.

### Nurse contribution to managing diabetes

The role of the practice nurse is diverse and will be dependent on the individual practice, as well as:

- Patient needs
- Practice needs
- Level of competence, education and qualifications of the individual practice nurse
- Expectations and understanding of the role of the practice nurse by other team members and patients.

Four areas of skill have been identified as important for nurses working in general practice:

- Clinical skills
- People skills
- Organisational skills
- Small business orientation.

It has been demonstrated that nurses provide effective health care, contribute to patient knowledge, achieve good patient adherence to health plans, and achieve positive health outcomes for patients.

Phillips et al. identified six key roles of nurses in general practice. Each one of these contribute significantly to patient health outcomes and to creating ‘resilient’ general practices (Table 3).

<table>
<thead>
<tr>
<th>Role</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient carer</td>
<td>Clinical care, advocacy and nurture</td>
</tr>
<tr>
<td>Organiser</td>
<td>Clinical care, practice management and services</td>
</tr>
<tr>
<td>Problem solver</td>
<td>Scanning, observing and rapid response strategies</td>
</tr>
<tr>
<td>Quality controller</td>
<td>Compliance with quality, safety and risk management</td>
</tr>
<tr>
<td>Educator</td>
<td>Patients, other nurses, GPs and other practice staff</td>
</tr>
<tr>
<td>Agent of connectivity</td>
<td>Agents of connectedness between different disciplines within the practice; balancing patient needs within the team</td>
</tr>
</tbody>
</table>
Team based management of diabetes

The delivery of team based care requires teamwork and organisational support. Practices vary in their ability and motivation to embrace the effort and time required to build effective practice teams. General practice needs to be well organised to implement effective team based management of chronic disease. Taggart et al.\textsuperscript{22} found that the roles of practice team members were poorly defined and suggested a range of strategies necessary for optimal teamwork, which included:

- engaging practice clinical leaders
- formal team meetings and regular support from divisions of general practice
- training different team members together so they can appreciate each other’s skills.

Successful teamwork is characterised by:\textsuperscript{23}

- leadership
- a shared sense of responsibility
- common goals
- cooperation
- trust and respect
- use of skills of all team members
- clear roles and responsibilities.

The practice team can vary depending on the practice size, demographics, and availability of a range of professionals to deliver services to patients. The team could include:

- GPs
- practice nurses
- administration staff
- practice manager
- receptionists
- pharmacist
- diabetes educator
- community health and local government support services
- family and carers
- allied health (eg. dietician, exercise physiologist, mental health worker, occupational therapist, physiotherapist, podiatrist, psychologist, optometrist)
- other medical specialists (including endocrinologist and ophthalmologist).

Teamwork requires support by practice policies and systems. Organisational policy can provide a framework that maximises planned or episodic care by detailing:

- roles and responsibilities of the team and individual team members
- aims of planned health interventions
- measurement and evaluation methods
- use of evidence based clinical guidelines
- establishment of clinical referral pathways
- method of data entry, extraction and tracking
- communication pathways
- a business model.
Although evidence supports teamwork as a desirable method of health care delivery, research has shown that barriers to teamwork often exist in general practice. Teamwork takes time and requires leadership, effective communication, training, and monitoring of the team culture within the practice. Barriers can include: 24,25

- time constraints
- lack of systems that promote teamwork
- fragmentation due to a predominantly part time workforce
- lack of understanding about how teams function
- professional issues such as individual accountability.

Teamwork and the team culture have been associated with better processes of care for patients with diabetes, and with better continuity of care, access to care, and patient satisfaction. 26

Teamwork can be linked to delivering three levels of care that have been identified by the **Chronic Disease Strategy**: 27

- **Level 1**: with the right support, the vast majority of people (70–80%) with chronic disease can self manage by actively shaping their own health care
- **Level 2**: people who require disease/care management have access to multidisciplinary teams that provide high quality evidence based care. This means proactive management of disease, following agreed protocols and pathways for managing specific diseases
- **Level 3**: if complications and comorbidities exist or become more complex, key health care worker activity is in the management and joining up of care providers.

Implementing system change at a practice level is seldom a single action; it usually requires robust planning and a combination of different interventions. Individual practices will find differing tolerances for the motivation and acceptance of change. Grol 28 developed a model for implementing change that includes:

- developing a concrete proposal for change
- identifying obstacles to change
- linking interventions to obstacles
- developing a plan
- carrying out the plan and evaluating progress.

### Patient disease registries and patient data

Gaining an understanding of the health status and demographics of the practice population and the implementation of disease registries will strengthen the ability of the team to manage chronic disease effectively. During a patient consultation, there are opportunities to gather patient information and also to 'clean' data that is already held in the patient's medical file. A better understanding of the patient population creates the capacity for a practice to plan for the future and set relevant targets.
Chronic disease is characterised by gradual onset, and therefore early detection can be effective in preventing the progression of disease. However, early detection 'can only be effective if there are ways to actively follow up people who have been identified as having risk factors or early markers of disease'.

Disease registries and effective practice based recall and reminder systems are vital to improving screening and early detection. The first step is to identify those at risk within the practice population. For patient data to be useful, it must be accurately entered and coded into the patient's medical record. The practice team needs to establish a clear, consistent and agreed approach to data entry. Agreement also needs to be reached on common codes/terms used; this ensures consistent and quality data entry. Practice staff can then feel confident that data extracted is accurate and useful.

Data extraction (analysis) tools such as the Clinical Audit Tool (CAT) and Canning Tool are used to aggregate and display data. These tools can assess and measure practice population trends. They offer practices the opportunity to improve data management, business outcomes and quality of patient care. These tools enable practice staff to become familiar with the practice population and to look at the quality of the data currently held in the patient record. For example, if a practice has 5230 active patients, but there are only 78 coded with diabetes, a practice can easily determine if they are either underdiagnosing or coding incorrectly. A process of data cleansing and the establishment of disease registers will ensure that interventions are targeted to patients who will benefit the most.

Data collected can be used for quality improvement activities such as 'plan, do, study, act' (PDSA) cycles. See the RACGP QA&CPD Program Handbook on page 15 for details. Quality improvement activities may improve efficiencies, maximise the quality of service provision and create financial value for the practice.

**Clinical pathways**

Clinical pathways provide an innovative framework in which coordinated care can be managed. They require an organised and integrated approach engaging different providers across several disciplines, detailing who is responsible for each aspect of clinical care and when patients are referred to other allied health professionals.

'Clinical pathways provide a framework for clinicians to guide them in the provision of care through the identification of interventions and measurable outcomes along a timeline. Within the changing health environment, service providers must develop systems at all levels that will enable the concept of integrated and coordinated care to be operationalised'.

Clinical pathways map the patient's journey through diagnosis, medication management, collection of essential biometric measurements (eg. blood glucose, blood pressure, urinalysis, body mass index, waist circumference), education and promotion of self management, lifestyle counselling, and referral to other health care providers. Care by the practice nurse can be provided at various points throughout this journey.

Clinical pathways ensure that the practice team can clearly identify internal and external referral processes. Undertaking a process of mapping the availability of services, internal and external to the practice, will work toward the development of timely and appropriate referrals.
Health equity

Health equity involves ‘active policy decisions and programmatic actions directed at improving equity in health or in reducing or eliminating inequalities in health’. Health inequalities are experienced by many people and account for as much as 17% of the total disease burden in the Australian community. Particularly vulnerable are socioeconomically disadvantaged communities; Aboriginal people and Torres Strait Islanders; culturally and linguistically diverse communities; and rural and remote communities.

Effective practice systems can identify high risk groups and individuals. Engaging with vulnerable and disadvantaged patients should include a decision making process that addresses how clinical services are provided, how billing practices are put in place and the range of support services that could be provided.

Delivery system design

Designing appropriate care delivery systems has been found to improve patients’ use of services, improve patient outcomes and physiological measures of disease, and improve quality of life, particularly for diabetes. Reorienting health care delivery to support chronic disease management requires a shift from a reactive to a proactive system of health care.

Zwar et al in a review of chronic disease management identified that care delivered by multidisciplinary teams, especially utilising practice nurses, reminder systems, and proactive follow up, is important in the management of chronic disease and effective in improving disease measures.

Delivery system design can include:

- **space and privacy** – can the practice allocate a consulting room for the practice nurse that offers patient privacy during consultations?

- **appointment systems** – is there a booking process where appointments can be made with the practice nurse? Patients may benefit from seeing the practice nurse and the GP during the same visit

- **protected time** – does the appointment system reflect the allocation of protected and uninterrupted time for the focus of chronic disease consultation?

- **training and continuing professional development** – is there access and encouragement for staff to be involved in education both in clinical work and multidisciplinary teamwork, with a focus on having clear roles and responsibilities for the team members?

- **financial sustainability** – ensure billing via the MBS reflects the planned care provided to the patient. A number of example business cases have been developed by the Australian General Practice Network

- **recall and reminder systems** – facilitated timely recalls will ensure that goals are reviewed, progression of disease is identified, and screening is undertaken for potential comorbidity

- **disease registers** – this allows identification of patients at risk and tracking patients’ clinical need for ongoing care.
Continuous quality improvement: the PDSA cycle

Continuous quality improvement (CQI) provides a framework for planning, implementing and monitoring changes within the practice; CQI includes:

- identifying what will be accomplished
- identifying what will be measured
- assessing whether the change constitutes improvement
- identifying alternatives to current practice
- being able to test changes on a small scale.

The *plan, do, study, act* [PDSA] cycle\(^\text{24}\) (Figure 2) is a tool that encourages practices to undertake small and incremental changes. A PDSA cycle evaluates the effectiveness of changes in roles or processes over time, and reflects on the successes and possible identification of areas for further improvement.

![PDSA model](image-url)
Scope of practice and continuing professional development

As with all health care professionals, practice nurses are required to undertake ongoing continuing professional development (CPD). Scope of practice (including delegation and supervision between nurses) and CPD are fundamental components of competency to practise. The domains of nursing competence provide a framework for assessing competence and identify areas where further professional development is required. The domains include:  
- professional practice  
- critical thinking and analysis  
- providing and coordinating care  
- collaborative and therapeutic practice.

The role of the practice nurse can expand as the practice provides new services to patients and can change the way in which care is delivered. Clearly identifying the clinical roles to be undertaken by each team member allows expectations to be agreed upon and scope of practice to be defined.

The responsibility of the registered nurse is to assess, plan, implement and evaluate nursing care in collaboration with the multidisciplinary health care team. Defining scope of practice will contribute to safe and high quality care for patients, and ensure a consistent approach to care delivery and the delegation of care to other health care providers. The determinants of practice include:  
- legislation and regulation  
- professional standards  
- evidence for practice  
- individual knowledge, skill and competence  
- contextual/organisation support.

Decision making within a sound risk management, professional, regulatory and legislative framework is a considered, rational process that enables nurses to work to their full potential scope of practice. Utilising a decision making framework provides guidance to nurses about processes that will help to ensure that safety is not compromised when making decisions about nursing practice and whether to delegate activities to others.

The Australian Nursing and Midwifery Council has developed a national framework that sets out the principles that form the development and evaluation of decision making tools. The framework also provides templates for decision making tools.

The consultation

Control of modifiable risk factors, such as being overweight, obesity and physical inactivity, is central to preventing type 2 diabetes and can help reduce the complications associated with diabetes. Many cases of diabetes are not diagnosed: the most recent national data on this indicates that there is one undiagnosed case of diabetes for every case that is diagnosed. The consultation provides an opportunity to incorporate a patient centred approach which encourages patients to acquire and apply knowledge, and build confidence and the appropriate skills to manage life with diabetes.
The time spent with patients during the consultation provides an opportunity to establish an open and ongoing relationship. Skills that can be valuable when developing a relationship with patients include:

- reflective listening
- open ended and exploratory questioning
- identifying a patient's readiness to change
- assessing a patient's sociocultural needs and networks
- engaging family, carers or other significant social supports
- health literacy assessment
- goal setting, prioritising and planning of care.

Patients may be more receptive to change and adhere to treatment plans if they believe there are benefits. An important component to achieving optimal outcomes in chronic illness is a patient's ability to, and interest in, managing their own condition. Creating a collaborative relationship empowers patients to maximise their own wellbeing and quality of life.38,39

**Stages of change**

The stages of change describe a patient's journey through predictable stages of change before reaching an action stage. Each stage of change is necessary because people learn from each stage and one intervention cannot be applied to all patients as some will be at different stages of 'readiness' than others.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>The patient is not intending to change their behaviour for at least 6 months</td>
</tr>
<tr>
<td>Contemplation</td>
<td>The patient has not begun to change their behaviour but intends to do so within 6 months</td>
</tr>
<tr>
<td>Determination</td>
<td>The patient has not begun to change their behaviour but intends to do so in the next 30 days</td>
</tr>
<tr>
<td>Action</td>
<td>The patient has changed their behaviour within the past 30 days</td>
</tr>
<tr>
<td>Maintenance</td>
<td>The patient has practiced new behaviour for at least 30 days</td>
</tr>
</tbody>
</table>

The stages of change model (Figure 3) is widely used to determine patient motivation or readiness for change, and is key to behavioural change in chronic disease management. The patient's journey through the change cycle is not linear; patients may relapse or repeat stages. A patient's motivation and readiness to change may vary depending on life and health factors.
Interventions and self management techniques need to consider where the patient is on the change continuum, eg. a patient may be very motivated to give up smoking but less interested in engaging in a program of physical activity.

**Self management and goal setting**

Self management empowers a patient to monitor and manage their own health care through gaining a better understanding of the disease physiology and pharmacology. It encourages the patient to be involved in daily management, goal setting, problem solving, and taking responsibility for health outcomes. Self management has been shown to be effective in improving quality of life for patients and requires a patient centred focus rather than a disease specific focus.

The MBS chronic disease management item numbers offer an opportunity for patients to be involved in care planning and the time during the consultation to discuss health issues and therefore promote self management.

The steps to self management include:

**Problem definition**
- Identify impact of illness
- Identify specific symptoms and signs of illness
- Identify factors leading to the preservation and promotion of a healthy lifestyle.

**Identifying barriers to self management**
- Motivation
- Knowledge of condition
- Knowledge of symptom management
- Comorbidities
- Health beliefs
- Self efficacy
- Social context.
Planning (setting of goals) – SMART
- Specific
- Measurable
- Achievable
- Realistic
- Timely.

Development of management strategies
- Education
- Support and motivation
- Monitoring
- Clinical outcomes
- Quality of life
- Physiologic measures.

Patients may have more success and be motivated to continue self management if they select and focus on one or two specific goals (often targeted toward similar factors) at any one time. Clinical management aims to avoid short and long term complications, as well as optimise wellbeing.

Setting care goals encourages patients to establish realistic health objectives and priorities and to develop a health care plan. A patient's adherence to advice and medications cannot be assumed so developing a care plan and setting health goals needs to be a collaborative process. Understanding a patient’s readiness to change and their ‘real world’ needs should be part of a collaborative discussion. A challenge for any health professional is the balance between motivating and challenging the patient. The patient will require support through what potentially could be a complex and stressful period. Communication techniques can range from assertive and directive to coaching and encouraging.

Establishment of health goals could focus on:
- medication adherence
- cessation of smoking (where applicable)
- self monitoring of blood glucose levels
- physical activity and appropriate diet
- foot care and checks
- managing all other aspects of their physical health or comorbidities
- continuing to live a participative lifestyle.
Motivational interviewing

Motivational interviewing is a person centred communication style. It applies elements of the interviewer’s style (e.g. empathy and acceptance) to technique (e.g. reflective listening and shared decision making). Motivational interviewing and brief behavioural interventions assist patients to change their behaviours by directing them toward motivation to change, utilising a patient centred and directive counselling style. Motivational interviewing strategies include:

• acknowledging the person’s behaviour as their personal choice
• letting the patient decide how much of a problem they have
• avoiding arguments and confrontation
• encouraging discrepancy.

Understanding and incorporating the patient’s frame of reference into the motivational interviewing process is important and is generally used in the early stages of change. Motivational interviewing can provide further support for patients who experience low motivation, anger obstacles, or where there is a poor prognosis for adoption of self management strategies.

The 5As of self management support

The 5As is a practical, structured and rapid tool for focusing on patients’ risks and identifying interventions. It frames self management support strategies into activities that can be achieved during consultations where there may be limited time. Effective use of the 5As counselling technique includes the ability to build rapport and establish a relationship with the patient.

The RACGP SNAP guide offers examples of how the 5As can be used for lifestyle intervention such as smoking cessation or undertaking physical activity.

The 5As are:

Ask
• Identify patients with risk factors.

Assess
• Level of risk factor and its relevance to the individual in terms of health and readiness to change/motivation.

Advise
• Provide written information
• Provide a lifestyle prescription
• Brief advice and motivational interviewing.

Assist
• Pharmacotherapy
• Support for self monitoring.
Arrange

- Referral to special services
- Social support groups
- Telephone information/counselling
- Follow up with other health providers.

An example of utilising the 5As across risk factors for diabetes is shown in Figure 4.

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**Figure 4. The 5As**
Health literacy

Health literacy refers to the degree to which patients are able to source, process and understand health information; it also encompasses their skills to act on this information in order to maintain their health. Health literacy impacts on a patient’s ability to communicate with health care providers, discern what constitutes good quality advice and translate this into action. Health literacy needs to be a responsibility for all who work in the delivery of health care in order to help ensure that vulnerable groups such as the elderly, disabled, less educated, or socially excluded have equal access to care. Disease self management strategies will fail if the information given to patients is too complex or does not tailor to the communication and education needs of the patient. Health literacy cannot be predicted from a patient’s education level alone. Measuring the health literacy of each patient is impractical; however, it is likely that as clinicians become more attuned to a patient’s needs, communication styles can be adjusted to meet the needs of the patient. ‘Health literacy has important applications in the general practice setting. It underpins the efficiency of consultations, health promotion efforts, and self management programs.’

Psychosocial factors

Psychosocial health considers a range of emotional and mental health conditions including anxiety and depression. Psychological wellbeing is an important component of a patient’s ability to establish goals and maintain the motivation to adhere to them. Psychosocial factors provide an important foundation to good health; interactions with family and friends, carers, community services and other networks enable patients to be reflective, maintain emotional wellbeing, and provide valuable self management support. Potentially there are a range of emotions that a patient will experience with a diagnosis or progression of a chronic condition such as diabetes. Allowing the patient the time and opportunity to express their concerns is important. Emotions will change over the patient’s journey as the condition and its impact on the patient (and their family and friends) changes.

Cultural and community diversity

Considering a patient’s cultural and social context can improve communications and therefore the transfer of critical clinical information. In addition to cultural background, language and literacy barriers may also impact on the ability of the patient to access health care and appropriate information. Cultural competence implies that health professionals work competently in crosscultural care. Being sensitive to the cultural/social factors that could impact on the patient will contribute to the success of any interaction with the patient. Considerations could include the patient’s:

- socioeconomic status
- religion
- education level
- sexual preference/orientation
- country of origin and/or language proficiency
- age and gender
- consultation setting
- personality.
**Patient support and resources**

A patient's ability to access information and health services may be impacted by:

- lack of available resources in the local community
- lack of access to transport to services
- length of waiting lists to obtain an appointment
- costs of services.

It is beneficial to the patient for the practice health care team to be fully aware of the services available, eg. a local gymnasium may have an exercise physiologist who has a particular interest in diabetes.

For rural and remote or isolated patients, access to online services can offer assistance when they are unable to attend regular appointments. Resources offered should always be tailored to meet the needs of the individual patient. Patient resources can include:

- pamphlets using words or pictures
- online or audio/video resources
- community support services and groups.

A chronic condition such as diabetes can be isolating for patients. A number of community resources are available for emotional support. Diabetes Counselling offers comprehensive online support and is funded under the National Diabetes Services Scheme. Other options for emotional support and information about mental health issues include:

- Beyond Blue [www.beyondblue.org.au](http://www.beyondblue.org.au)
- Sane [www.sane.org](http://www.sane.org)
- Lifeline [www.lifeline.org.au](http://www.lifeline.org.au)
**Diabetes management**

Risk factors such as physical inactivity, poor diet and tobacco smoking can influence the health impact of diabetes. Patients will benefit from early interventions and the development of a health care plan. Diabetes is a long term condition and potentially a progressive disease. Because of the nature of diabetes, the focus of management is on control and not cure.

Chronic disease management is supported by a range of [MBS](#) item numbers which provide financial incentives to practices and also provide a framework to improve the prevention and early diagnosis of diabetes and the management of people with diabetes. Many patients will have questions that relate to the progression and impact of the disease; the process of developing a care plan provides the opportunity for patient centred care that will allow these questions to be addressed. A care plan encourages the identification of specific health risks that may be improved with lifestyle change and hopefully can prevent the development of complications.

Optimal care includes achieving control of glucose, blood pressure, lipids and weight (metabolic control). Improving physical activity will improve metabolic control and reduce other cardiovascular risks, and healthy eating is a critical component in the management of diabetes.⁴⁶

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**Figure 5. Diagnosis through to initial management and progress reviews**
Annual Diabetes Cycle of Care

The annual Diabetes Cycle of Care provides a guide to the minimum level of care that needs to be provided to a patient (Table 5). More care will be required for those patients with complications and co-risk factors. The yearly review is a time for more detailed assessment, updating the problem priority list, re-establishing goals and monitoring treatment needs. There needs to be a full system review checking for vascular, renal, eye, nerve and foot problems. As there is an increasing trend toward involving allied health professionals, the yearly visit is a good opportunity to coordinate follow up.

Table 5. Annual Diabetes Cycle of Care

<table>
<thead>
<tr>
<th>Task</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess diabetes control by measuring HbA1c</td>
<td>At least once every year</td>
</tr>
<tr>
<td>Ensure that a comprehensive eye examination is carried out</td>
<td>At least once every 2 years</td>
</tr>
<tr>
<td>Measure weight and height and calculate BMI</td>
<td>At least twice every cycle of care</td>
</tr>
<tr>
<td>Measure blood pressure</td>
<td>At least twice every cycle of care</td>
</tr>
<tr>
<td>Examine feet</td>
<td>At least twice every cycle of care</td>
</tr>
<tr>
<td>Measure total cholesterol, triglycerides and HDL cholesterol</td>
<td>At least once every year</td>
</tr>
<tr>
<td>Test for microalbuminuria</td>
<td>At least once every year</td>
</tr>
<tr>
<td>Provide self care education</td>
<td>Patient education regarding diabetes management</td>
</tr>
<tr>
<td>Review diet</td>
<td>Reinforce information about appropriate dietary choices</td>
</tr>
<tr>
<td>Review levels of physical activity</td>
<td>Reinforce information about appropriate levels of physical activity</td>
</tr>
<tr>
<td>Check smoking status</td>
<td>Encourage cessation of smoking (if relevant)</td>
</tr>
<tr>
<td>Review of medication</td>
<td>Medication review</td>
</tr>
</tbody>
</table>

Reproduced from the MBS. See Medicare Australia for a full explanation of the funding of public and private sector health service provisions and regulatory mechanisms, and MBS online to search for MBS item numbers and explanatory notes.

GP Management Plans and Team Care Arrangements

GP Management Plans (GPMP) and Team Care Arrangements (TCA) are comprehensive documents that set out and enable evidence based management of patients’ health and care needs. Patients with a chronic condition (such as diabetes) are eligible for a GPMP, and patients with complex needs who would benefit from a multidisciplinary team are eligible for a TCA.
Once a GPMP and/or TCA have been implemented, depending on the patient's health and circumstances, a new GPMP and/or TCA can be developed every 2 years with recommended 6 monthly reviews. However, frequency can change depending on a patient's health and disease progression. Regular review of the patient's progress against the GPMP goals and the contribution from the range of health professionals who provide care under the TCA is key to the ongoing management and health outcomes for the patient.

A GPMP outlines care goals and is the basis of planned care. Goals can be agreed upon in partnership with the patient and health care provider. The GPMP can contribute positively to motivate patients to adhere to treatment plans and life style modification. The development of a GPMP can also offer a structure that frames education and self management activities. A practice nurse can work with a GP in preparing or reviewing GPMP and TCA by assessing the patient, identifying needs and making arrangements for services. There are a range of opportunities at different stages of the care planning and review cycle for the practice nurse to apply a range of nursing skills and implement patient education and health interventions.

Type 2 diabetes risk evaluation

There is strong evidence that progression to type 2 diabetes can be prevented or delayed by lifestyle modification. The Australian type 2 diabetes risk assessment tool (AUSDRISK) identifies patients who are at ‘high risk’ of developing type 2 diabetes. Once identified, patients will then benefit from a planned intervention to address the identified risk factors.

Case study 1: how to get started

Goodhaven Medical Practice is a regional city practice that employs five GPs, two practice nurses, one practice manager and three reception staff.

The principal GP is aware that all staff work long hours and feels frustrated that the current management of patients with chronic disease is haphazard, with no clear direction on how to manage complex care. He identified that both the practice and patients would benefit from a system that better targeted patients with diabetes and would hopefully result in improving patients' overall health. Using a data aggregation tool, it became evident that the practice was not reaching targets for patients with diabetes and the Diabetes Cycle of Care Service Incentive Payment was not being claimed due to incomplete patient information and poor billing systems.

The practice decided to introduce a chronic disease model of care focusing on diabetes, with the aim to change and improve the way diabetes was managed. The first step was to identify patients who had a current diagnosis of diabetes and to target clinical management and health promotion to this group.

First steps
• A staff meeting was held to discuss and clearly define the role and purpose of a diabetes disease register, and a recall and reminder system
• Using the data aggregation tool (CAT) the ‘active’ patient population was identified
• A coding system for diagnosing diabetes was agreed upon so that all patients diagnosed could be tracked through the data aggregation tool
• Recall and reminder systems were established.
Patients diagnosed with diabetes were identified and sent a letter detailing the complexity of diabetes and the advantages of planned care. They were offered the opportunity to attend for a review of their current health status.

The practice manager monitored the billing to ensure that all patients were appropriately billed, i.e. GPMP; TCA; Diabetes Cycle of Care; Domiciliary Home Medicine Review; immunisations and practice nurse chronic disease management item numbers.

The team decided to implement a PDSA cycle to establish a baseline of current management practices of patients with diabetes and to measure health outcomes after the intervention.

This example outlines the value of:
- planning for the development, implementation and evaluation of new models of care delivery
- a multidisciplinary approach, which can increase practice capacity and build a cohesive approach to patient care
- planning for comprehensive chronic disease management, which can improve staff satisfaction, practice income and patient health outcomes.

**Case study 2: the role of the practice nurse**

Sue, the practice nurse, consults Joe as part of a health assessment. His score on the AUSDRISK is >15 and he describes symptoms that could indicate diabetes. Sue refers Joe to the GP for clinical review. A series of investigations were ordered and Joe was diagnosed with diabetes.

A GPMP was developed and the GP referred Joe back to Sue for ongoing management, education and support. Sue followed a checklist for a person with newly diagnosed diabetes for the first scheduled appointment, i.e:
- explained what diabetes is and the importance of ongoing monitoring of health
- reviewed the management plan, confirmed Joe's health goals and self management skills
- provided educational material and resources about healthy eating, daily physical activities and foot care
- demonstrated glucose device use, how to take a reading and interpret results, and calibration.

At this appointment it was decided that it would be appropriate to develop a TCA and to initiate a referral to an optometrist and a dietician for nutrition education.

Joe and Sue agreed on an appointment schedule to include a monthly review with Sue and a bimonthly review with the GP. A list of options for future management was discussed, with the medical history ‘flagged’ for addressing over the next few visits.

At each subsequent visit, Sue continued to measure blood pressure, blood glucose levels, urinalysis, weight, physical activity assessment, foot care, review Joe's diabetes knowledge, and encourage his self reflection of progress toward goals identified in the GPMP.

Over the next 6 months, Sue consulted Joe four times. He maintained smoking cessation, lost 4 kg in weight and achieved control of blood glucose. At the 12 month review appointment, Sue checked that the annual Cycle of Care was completed and appropriately billed.

This example outlines the value of:
- a multidisciplinary team based approach to care
- using a systematic and planned approach to managing chronic disease in the practice
- involving the GP, practice nurse and reception staff in managing appointments and recall and reminder systems
• using care planning and regularly reviewing goals to improve patient health outcomes
• using evidence based clinical guidelines
• the role of education and self management.

Conclusion

The management of diabetes in general practice requires a systematic and multifaceted approach. Diabetes is a chronic disease that is complex and can result in poor health outcomes if it is not managed well. General practice and patients will benefit from organisational capacity building, care provided by a multidisciplinary health team, and a systematic approach to the delivery of care. Teamwork, information management, recall and reminder systems, and the use of clinical guidelines will provide a framework to better support patients in the management of their health. The evidence is also clear that practice nurses can make an effective contribution to the management of chronic disease, and specifically diabetes.
References


7. ibid., vii.


10. ibid.

11. ibid., p. 5.

12. ibid.


17. The RACGP. Putting prevention into practice, op. cit., p. 16.


21. ibid.


37. AIHW. op. cit., p. viii.

38. NHPAC. National Chronic Disease Strategy, op. cit.


40. The RACGP. Putting prevention into practice, op. cit., p. 4.

41. The RACGP. Chronic condition self-management guidelines, op. cit.

42. The RACGP. Putting prevention into practice, op. cit., p. 23.


