The Royal Australian
College of General
Practitioners

Diabetes management in general practice

A small group learning activity for practice teams

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Disclaimer

These activites have been designed for information purposes only and are intended to assist practices to implement changes in practice systems which improve the care of patients with type 2 diabetes.

Further clinical information should be obtained from the RACGP publication Diabetes management in general practice: Guidelines for type 2 diabetes.

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College House
1 Palmerston Crescent
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Australia
Tel 03 8699 0414
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Module writing team

Ralph Audehm (module 4)

Patrice Higgins

Review team

Marina Fulcher, The Australian Association of Practice Managers

Dr Beres Joyner, RACGP National Standing Committee – Quality Care

Christine Mathieson

Lisa Scholes

RACGP staff

Helen Bolger-Harris
Tania Lim
Lynne Walker

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Foreword

The Royal Australian College of General Practitioners is pleased to present the *Diabetes management in general practice: A small group learning activity for practice teams*.

The impact of type 2 diabetes on the Australian community is significant, and it therefore impacts on general practice. As our population increases and ages, the numbers of people requiring care will increase, but the resources required to prevent and manage this condition, which is often complex and challenging, are limited.

The diabetes small group learning modules are designed to assist practices to make efficient use of the resources that they currently have. By using time, staff, communication and technology more efficiently, we will be able to manage patients with existing disease and prevent the onset of what is largely a preventable disease.

Quality of care will improve and outcomes will be enhanced by using a whole of practice approach to care for people with diabetes. By involving all staff in the practice in the care of patients with this condition, the shared responsibility with lighten the load for the busiest of general practices.

I hope you enjoy the small group learning approach to the redesigning of diabetes care in your practice and benefit from this ongoing continuing professional development.

Dr Chris Mitchell

President, The RACGP

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Introduction

Diabetes management in general practice: a small group learning activity for practice teams is designed to support general practitioners and practice teams in undertaking a Category 1 QA&CPD activity, based on the joint Royal Australian College of General Practitioners (RACGP), Diabetes Australia publication, *Diabetes management in general practice guidelines*. This education module is a small group learning (SGL) activity designed to provide general practice teams with the ability to successfully manage patients with diabetes and implement systems for care into every day practice.

As diabetes management requires a team approach, the modules have been designed for the entire practice team: GPs, general practice registrars, practice managers, practice nurses, and other practice staff.

General practice teams will have the opportunity to work together to improve the consistency of care provided to patients with diabetes. Participation in continuing education by all members of the practice team can be of great benefit to both the team and patients. Involvement of practice nurses and managers can assist GPs to fulfil educational requirements, as well as improve patient outcomes and meet the continuing education requirements of their professional bodies.

Learning objectives

- Understand the role of general practice in the prevention and management of diabetes
- Display increased confidence in implementing diabetes prevention and screening in general practice
- Appreciate the pivotal role of general practice in diabetes management
- Proactively and systematically care for patients with diabetes
- Improve competence and performance in the delivery of diabetes care
- Understand how to implement diabetes management systems in general practice using a team based approach
- Develop a system for ensuring diabetes patients meet management guidelines and encourage people with diabetes to participate in achieving these targets
- Develop clinical approaches for managing behavioural risk factors in patients with diabetes
- Understand the Diabetes Cycle of Care and systems to support the Diabetes Service Incentive Payment.

About this activity

This SGL activity has eight modules. The modules use structured learning notes, questions, resources, case studies, reflective activities, and guidelines for discussion. Learning in SGL is encouraged through sharing and collaboration.

The activity is designed as a guide only. Participants need not necessarily work through all of the eight modules. You may choose to undertake the modules as outlined, or use them as a base for further discussion or activities within your practice. Each module might end with a discussion on possible changes in your practice. You might choose to develop systems or programs within your practice, or expand on one module and skip another.

Case studies are provided for discussion, with some suggested responses for additional ideas. There are several ways to approach the answers to the discussion points, so although the sample answers presented are helpful, they are not the only correct answers.

It is suggested that you form a group from within your practice so that you can use the module to develop systems relevant to your practice. However, this is not essential, as the key element of group learning is to share ideas. You may wish to appoint a facilitator from within the group to lead the discussions.

Quality assurance and continuing professional development

This module has been designed as an RACGP Category 1 QA&CPD activity and can be undertaken by groups as part of an SGL program. Practice nurses should refer to the *Australian Practice Nurse Association CPD* handbook to determine the number of points for which they are eligible. Practice managers may be eligible for points through the Australian Association of Practice Managers.

Please read the SGL application guide (available at www.racgp.org.au/qacpd/20082010triennium/gpforms#sg) before commencing the module activities to ensure that you meet the necessary requirements. Practice nurses and practice managers participating in the activities should contact the Australian Practice Nurse Association or Australian Association of Practice Managers regarding obtaining continuing professional development (CPD) points.

These modules can be used in a flexible way to gain CPD points:

- **SGL activity based entirely on the suite of modules on diabetes management:** small groups can choose to meet their 8 hour requirement for an SGL activity by completing all eight modules (40 Category 1 points)
- **SGL activity based partly on diabetes:** small groups can choose to do one or a number of the modules as part of a wider SGL program managed by the small group, ie. they may also do other modules (eg. cancer or musculoskeletal conditions) to meet their 8 hour requirement (part of the requirement for 40 Category 1 points)
- **SGL activity less than 8 hours in total:** small groups may choose to meet and complete a number of these modules totalling less than 8 hours (two Category 2 points per hour)
- **Individual learning program:** GPs can undertake the modules as an individual activity (two Category 2 points per hour).

Module 1

Using a team approach to achieve high quality diabetes care

Introduction

Teamwork is an integral part of general practice. Practice teams can include GPs, receptionists and practice managers, and increasingly, practice nurses. Multidisciplinary care teams can include other primary healthcare providers such as diabetes educators, physiotherapists, dieticians, psychologists and exercise physiologists.

Roles of GPs and other members of the practice team, especially that of practice nurses, have evolved; in part as a response to advances in scientific and technological knowledge, workforce shortages, the growing burden of chronic disease and the increasing focus on prevention and a population health approach in primary care.

These factors are challenging practice teams to adapt to their changing roles, to re-examine their scope of practice, and to acquire the skills necessary to improve health outcomes in chronic disease, eg. diabetes. It is anticipated that these new demands will continue to come from factors such as changing relationships among providers within primary care, changing work routines and environments, advances in the team approach to healthcare, and partnerships with patients, their families, community members or other health providers.[1]

Improving practice

What is important?

- Leadership and vision
- Regular and effective communication between team members
- Clearly defined roles and responsibilities
- Good information and IT systems
- Support and ongoing education for team members

Case study 1
Teamwork in a small rural practice

Case study 1 provides an example of how teamwork is fostered in a small rural practice, with a core practice team comprising GPs, a practice manager, and a receptionist, where there is limited access to other health professionals (eg. a diabetes educator and practice nurse). This case study highlights some of the key elements needed to develop a team culture.

A small practice in a country town employs two full time male GPs and one part time female GP. There are four part time receptionists and a practice manager. There is a wide spectrum of patients, including a significant indigenous population. All pension holders are bulk billed. The local division of general practice provides the diabetes educator and the counsellor (once per month), and funds the practice nurse through the More Allied Health Services (MAHS) program.

The practice has a focus on developing a team culture as the practice GPs think that chronic disease care involves a lot of paperwork and is time consuming, so they cannot do all that is required without the involvement of other practice staff. Nonmedical staff and the practice nurse assist with facilitating communication between patients and the GPs, and with aspects of practice administration: Enhanced Primary Care (EPC) paperwork, billing, recall/reminder systems, and appointments. The diabetes educator provides additional information and indepth education for patients with diabetes.

Roles and responsibilities are contained in written job descriptions and staff multitask so that they can carry out some parts of each other's roles. Practice meetings involve all medical and nonmedical staff. They are held every 3 months, and casual staff are paid to attend. The practice shows it values non-GP staff by paying for the cost of any professional development and support. The practice is computerised with electronic chronic disease registers, referral systems, patient resources and a combination of practice and division templates for EPC. Good organisation and IT systems within the practice make this way of providing care financially viable.

Adapted from: Bernard D, Hermiz O, Powell-Davis G, Proudfoot J, Zwar N, Harris M. Teamwork for chronic disease care: case studies from general practice. Centre for Primary Health Care and Equity, August 2005

Small group discussion

- Discuss some of the benefits of a team approach for GPs and practice care teams.
- What are some of the barriers to teamwork in a small general practice?
- What can be done to encourage teamwork and cooperation between practice team members?
- Do you think a team culture could be better facilitated within your practice? You may like to complete a self assessment tool (see below) before answering this question.
- How does your practice show that it values non-GP team members?

Team self assessment tools

Complete the 'How well is your team functioning' self assessment at www.wipp.nhs.uk/uploads/GPN%20tools/Tool6.6-Teamwork.pdf

Case study 2
Teamwork in a large general practice

Case study 2 provides an example of how teamwork is managed in a large multidisciplinary environment. It highlights how a large multidisciplinary practice team is working effectively together in the same building, and some of the benefits of this model of care.

The practice team of a large general practice is led by three GP principals. The practice has six full time and 10 part time GPs (ranging from 2–8 sessions per week). The practice manager has responsibility for human resources and finances. There are eight part time reception and administration staff. The practice employs all staff, including a chronic disease coordinator, diabetes educator, smoking cessation nurse (part time), dietician and a psychologist.

The practice has focused on developing teamwork through strong leadership from the practice principals and practice manager. Teamwork is supported by having very clearly defined roles and responsibilities, and protocols and processes that are recorded in an electronic practice manual that is regularly updated. Team members know that they are a valued part of a larger group as their opinions are sought on all aspects of the practice through meetings.

The chronic disease coordinator coordinates all patients with chronic diseases across their entire care pathway, including maintaining accurate patient disease registers and being responsible for the recall and reminder systems. The diabetes educator looks after diabetes education for all patients with diabetes. Once recalls have been generated by the GPs, administrative staff implement them using the IT system. These roles have been in place at this practice for over 7 years. All staff know their respective roles, which facilitates a seamless process of care.

General practitioners and practice staff have learnt that teamwork involves flexibility, willingness to adapt, communication and mutual learning. They have found that it provides a happy working environment where GPs share responsibility with other members of the team.

This gives GPs more time and less pressure, while other members of the team have a greater sense of responsibility and involvement and as a result are more committed to the practice.

Adapted from: Bernard D, Hermiz O, Powell-Davis G, Proudfoot J, Zwar N, Harris M. Teamwork for chronic disease care: case studies from general practice. Centre for Primary Health Care and Equity, August 2005

Small group discussion

- Are larger multidisciplinary teams financially viable and desirable in general practice to achieve high quality diabetes care?
- What are some of the teamwork issues that may arise in a large multidisciplinary team environment?
- Discuss ways to provide professional leadership across professions/disciplines working in a large multidisciplinary team environment in general practice.
- What are some of the educational needs of GPs and practice team members in order to enable them to function in a large multidisciplinary environment at their best capacity, and to allow them to contribute to team initiatives?
- Do you think co-location of health professionals is the most effective way to implement multidisciplinary team care for people with diabetes?
- What steps need to be taken if forming a multidisciplinary team within a practice?

Case study 3
Teamwork in an inner urban practice

Case study 3 provides an example of how teamwork is managed in a medium size practice and highlights the expanded role of the practice nurse in diabetes care.

A medium size practice situated in an inner urban area of Melbourne has two full time female principals and three part time GPs. There are two practice nurses and three part time receptionists, two of whom share the role of practice manager – an arrangement that has been in place for the past 9 years. The practice has a good information system, which includes a chronic disease register, referral system and computerised templates for EPC items.

Nurses play an important part in the team care provided by the practice. They do much of the assessment work for care plans, Aged Care Assessments and diabetes and cardiovascular assessments. When a patient is recalled for diabetes assessment, one of the nurses spends 35–45 minutes with them before they see the GP. The assessment sometimes uncovers important information about the patient and their treatment, or identifies those who could benefit from a care plan. This information is then passed on to the GP. Nurses are involved in the recall reminder system and patient education.

The nurses run immunisation and diabetes clinics and have their own patient load, with the doctor used as a consultant. The practice has an onsite dietician who makes a significant contribution to care planning, and has linkages with other allied health professionals such as podiatrists and diabetes educators. Patients are also regarded as part of the team. They are kept up-to-date with practice developments and activities via in-house newsletters and notices, and there is a mechanism for patient feedback via the practice manager.

Adapted from: Bernard D, Hermiz O, Powell-Davis G, Proudfoot J, Zwar N, Harris M. Teamwork for chronic disease care: case studies from general practice. Centre for Primary Health Care and Equity, August 2005

Small group discussion

- What are the educational and role development needs of nurses working in general practice to support their current role in the provision of diabetes care?
- Identify any online support available to assist general practices that are considering including a practice nurse within their team.
- What are some of the barriers to the expansion of the professional role of nurses in general practice?
- What can be done to promote the practice nurse's role with patients who have diabetes?
- Discuss the future role of nurses in the provision of high quality diabetes care.

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

Discuss some of the benefits of a team approach for GPs and non-GPs working in general practice.

Teamwork involving the GP.

- Increases GPs' understanding of the roles of others (eg. nursing staff)
- Allows GPs more time to use advanced skills[2]
- Improves job satisfaction[3]
- Results in less pressure and stress for GPs
- Can decrease the GP's workload
- Increases efficiency
- Aids quality improvement[4]
- Improves patient satisfaction[3–5]
- Improves patient care
- Enhances the holistic model of care.

Teamwork involving the practice nurse, practice managers/ administration staff.

- Increases knowledge and skills
- Increases job satisfaction[3]
- Greater commitment to the practice
- Increases motivation
- Increases satisfaction with nursing role in general practice, aiding recruitment and retention issues.

What are some of the barriers to teamwork in general practice?

- GP attitudes/lack of knowledge of benefits
- Patient attitudes, for example, about nursing care
- Lack of knowledge/training of individual staff (eg. practice nurses)
- Lack of time
- Volume of paperwork
- Funding structures (eg. not enough reimbursement to GP or nurse for nursing tasks)
- Lack of support systems (eg. IT)
- Small business (eg. need for financial viability)
- Lack of policies and procedures
- Lack of structured communication systems.

What can be done to encourage teamwork and cooperation between practice team members?

- Provide a strong focus on team culture and development, based within values of integrity, trust, open communication and valuing difference, accountability, and interprofessional respect
- Set up a process for regular communication with the team via regular team meetings and meetings with individual team members[6]
- Ensure that accurate information is provided to practice team members necessary and appropriate, to allow good flow of communication
- Set expected standards of behaviour
- Establish regular forums for team communication
- Enable the inclusion of nonmedical staff in team activities and decision making
- Provide opportunities for knowledge and skill development, guidance and coaching to develop staff and promote workforce development
- Identify and utilise staff strengths, valuing their unique contributions.

Discuss ways of developing teamwork in general practice.

- Developing greater understanding of benefits (patient outcomes)
- System changes (IT, protocols and processes, communication)

- Item numbers for chronic disease management (including nurse care)
- Greater role clarity
- Clinical benchmarking
- A designated leader in the practice
- GP champions and case studies of success
- Support from divisions of general practice and medical institutions (eg. the RACGP)[3]
- Involvement of divisions of general practice with smaller practices (eg. contract practice nurse)[3]
- More physical space
- Journal clubs
- Social activities.

Do you think a team culture could be better facilitated within your practice?

Participants to share their own ideas and experiences.

How does your practice show that it values non-GP team members?

- Pay and conditions
- Involvement in decision making
- Professional development.

Case study 2

Are larger multidisciplinary teams financially viable and desirable in general practice to achieve high quality diabetes care?

- A study by Baum et al[7] found that there were many benefits to be gained by GPs working in multidisciplinary teams, such as:
  - improved access to other allied health professionals
  - longer consultation times for patients
  - an increased role in preventive work and health promotion
- The use of larger multidisciplinary primary care teams may be a way of addressing some of the difficulties and demands associated with rural practice.[8]

There have been a number of government initiatives, for example, the Medicare Benefits Schedule Enhanced Primary Care items for care planning, case conferencing and health assessments designed to encourage GPs to work more collaboratively with other disciplines. Other initiatives include the More Allied Health Services program and the Better Outcomes in Mental Health initiative. These initiatives provide some financial assistance to support general practice.

What are some of the teamwork issues that may arise in a large multidisciplinary team environment?

- Role clarification
- Involvement in decision making
- Professional recognition
- Different approaches and perspectives
- Communication
- High workloads
- Fee for service structure of general practice
- The need for GPs to see all patients in order to claim payment from MBS.

Discuss ways to provide professional leadership across professions/ disciplines working in a large multidisciplinary team environment in general practice.

- Motivate and inspire practice team members to always do their best
- Promote a positive attitude toward change
- Encourage teamwork and cooperation between team members
- Make sure practice team members know what is expected of them
- Communicate often with practice team members about their performance and progress
- Recognise and reward good performance
- Address any poor performance or inappropriate behaviour immediately, openly and directly
- Personally put time into coaching and mentoring team members
- Give practice team members the opportunities and freedom to develop
- Consider development needs when delegating work to practice team members
- Ensure there is a clear understanding of the role of each health professional in the patient's care
- Ensure processes are in place for the direction and delegation to practice team members for safe service delivery and patient care

- Ensure practice team members are aware of, and practise according to, the practice's mission, objectives, core values and strategies
- Allocate tasks according to skills and joint responsibility for outcomes.

What are some of the educational needs of GPs and practice team members in order to enable them to function in a large multidisciplinary environment at their best capacity, and to allow them to contribute to team initiatives?

For example, education in:

- interdisciplinary and multidisciplinary care training commencing with entry level education and continuing throughout the professional life
- team management
- change management
- training in team based care
- developing competences required in performing safe, and effective delegation.

Do you think co-location of health professionals is the most effective way to implement multidisciplinary team care for people with diabetes?

For example:

- Co-location of providers can have benefits for patients by providing greater and/or immediate access to other health professionals, particularly in rural areas.[9] It facilitates integration of services and improved communication and teamwork building among providers, enabling better understanding and management of a person's illness and improving quality of care, higher patient satisfaction levels, more preventive care and better continuity of care
- Communication between team members can occur even when they are in different locations, but it is usually easier if they are co-located and increases the likelihood of casual communication, which can be valuable
- Multidisciplinary clinics held in general practices are aimed at coordinating care between GPs and allied health professionals and improving patient access to local care
- The multidisciplinary health delivery team does not have to be within a practice, although this arrangement makes the care of the patient easier for both the practice and the patients
- There is a range of models, eg. some members of the team may be located in a community health centre or in a private allied health practice.

What steps need to be taken when forming a multidisciplinary team within a practice?

For example:

- Ensure the commitment of practice principals/leaders
- Gain support from other practice team members
- Identify potential new team members
- Clarify roles and responsibilities
- Assess resources (eg. adequate space, equipment)
- Determine available reimbursement for other health provider services
- Develop a system for coordinated, continuous quality care, eg. create a secure information system, hold regular team meetings, ensure ongoing documentation and communication, and create systems for monitoring achievement of specific performance measures
- Ensure members of your general practice team are covered by appropriate professional indemnity insurance.[10]

Case study 3

What are the educational and role development needs of nurses working in general practice to support their role in the provision of diabetes care?

For example:

- continually developing both personally and professionally to meet the changing needs of their role

- continually developing their knowledge, understanding and experience in diabetes education
- commitment to maintaining current knowledge and clinical proficiency in nursing care, in accordance with best practice, legal and professional standards
- good communication skills and the ability to develop cooperative relationships
- a high level of organisational and time management skills
- ability to work autonomously and function effectively as a member of a multidisciplinary team
- computer skills with proficiency in using Microsoft Office and operation of the practice's clinical software system
- ability to apply quality improvement activities and research findings to the practice setting
- current understanding of all relevant external legislation and internal policies and procedures that relate to this position and the practice.

Identify any online support information available to assist general practices considering including a nurse within their practice team.

There is a great deal of information and useful online resources available including:

- nursing in general practice information kit: the aim of this kit is to provide the general practice team with guidance on roles and responsibilities, legislative, regulatory, employment and human resource support information to assist general practices to effectively include a nurse within their general practice team. Available at http://generalpracticenursing.com.au/demonstration-divisions-projects
- business case models: the Australian Divisions of General Practice (ADGP) has developed a series of business case models to assist general practices in their assessment of the benefits and financial implications of employing a practice nurse. Available at http://generalpracticenursing.com.au/nursing-in-general-practice-business-case-models
- Australian Nursing Federation. *Competency standards for nurses in general practice*, 2006. Available at www.anf.org.au/nurses_gp/resource_03.pdf
- Delegation and Supervision for Registered Nurses and Extended Scope of Practice for the Division 2 Registered Nurse. Available at www.health.vic.gov.au/__data/assets/pdf_file/0009/268227/Division-2-Strategy-October-2008.pdf.

What are some of the barriers to expanding the professional roles of nurses?

There is evidence to support the expansion of the role of nurses working in general practice. However, taking on a greater role may be dependent on:

- current workload
- experience/qualifications/skills
- provision of appropriate training and CPD activities
- availability of space within the practice
- Medicare issues
- limited recognition in current funding arrangements
- insurance issues
- a need for more research into the appropriate role of primary healthcare in addressing the lifestyle risk factors for chronic disease
- desire to embrace a greater role
- funding constraint when an employer is funding staff to undertake CPD
- availability of educational opportunities especially for remote and rural nurses.

What can be done to promote an expanded practice nursing role to patients with diabetes?

In 2002 a funded research project was completed exploring consumer perceptions of nursing in general practice.[12] Recommendations from this study include:

- consumers want information that will help them to have trust in the ability of nurses, eg. information from

appropriate nursing associations about nursing qualifications and scope of practice in the general practice setting

- consumers want to see that there is a good working relationship between nurses and GPs, and that there exists respect for each other's contribution when providing services to patients.

Discuss the future role of nurses in the provision of high quality diabetes care in general practice.

There are a number of potential roles that nurses could play in general practice, enhancing rather than replacing GPs.

The scope of nursing in general practice is evolving, perhaps nurses will be doing:

- more clinical care
- clinical organisation and integration with other health providers both in the practice[13] and external to the practice
- health promotion
- chronic illness management[2]
- less practice administration.

Definitions

'A team is a group with a specific task or tasks, the accomplishment of which requires the interdependent and collaborative efforts of its members.'[14]

Multidisciplinary teams are those in which 'multiple disciplines work in the same site and serve the same patients, but each discipline operates with considerable independence – ie. each generates its own assessment and treatment plan [and] implements the plan... Team members share information with each other, but there is no attempt to generate or implement a common plan. Multidisciplinary teams are also hierarchically organized, with a designated program leader... who is responsible for overseeing the program, leading meetings, resolving conflicts, allocating caseload... team members feel responsible only for the clinical work of their discipline and need not share a sense of responsibility for program function and team effectiveness.'[15]

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Diabetes screening and prevention

Introduction

Diabetes is frequently not diagnosed until symptoms or complications appear, and approximately one-third of all people with diabetes may go undiagnosed. Increasing numbers of people are at risk of developing diabetes, therefore finding and treating diabetes early can improve health outcomes for this group. Routine screening and an accurate diagnosis are essential.

General practice already undertakes a range of targeted and opportunistic preventive care activities, including screening for certain diseases. For example, an estimated 22.4% of all clinical treatments provided by general practitioners in 2007–2008 involved health advice, education and counselling that could be considered preventive (eg. advice about lifestyle, smoking, alcohol, exercise and diet).[1]

Improving practice

What is important?

Using a team based approach

Using Enhanced Primary Care services to increase screening for diabetes, and to ensure effective multidisciplinary care

Accessing screening and information gathering materials (eg. surveys)

Using a range of delivery options (eg. delegation to a practice nurse)

Using The Royal Australian College of General Practitioners publications such as:

- *Diabetes management in general practice*
- *Guidelines for preventive activities in general practice* (the ‘red book’)

Case study 1
Screening and preventive activities

Case study 1 focuses on screening and the use of the AUSDRISK tool and preventive activities. It also illustrates how the practice team can be actively involved in screening for diabetes.

In a practice where GPs are too busy to carry out all the work of the practice, three part time nurses, six part time reception staff and a practice manager are employed. The practice has a good IT system, including a chronic disease register (which is used to recall patients and send reminders), access to computerised Enhanced Primary Care (EPC) templates to assist with care planning, and computerised patient education resources. There is a treatment room for nurses and the practice is accredited and enrolled in the Practice Incentives Program (PIP), and claims both Service Incentive Payment (SIP) and Enhanced Primary Care (EPC) items.

The roles and duties of non-GP staff are continuously changing and expanding. It is the non-GP staff who make the chronic disease management system work. Receptionists make appointments, organise follow up, complete paperwork and manage the data. Nurses play an important role in education and carry out the preliminary assessments.

One of the practice nurses identifies that a new patient, Jenny, may be at risk of developing diabetes due to her current lifestyle and family history. Jenny's blood pressure is 140/95, height 1.74 m, and her weight is 85 kg (body mass index [BMI] = 28). She has no history of high sugar levels, but her mother has type 2 diabetes. The practice nurse discusses with Jenny her risk of developing type 2 diabetes and suggests she completes the Australian Type 2 Risk Assessment (AUSDRISK).

Adapted from: Bernard D, Hermiz O, Powell-Davis G, Proudfoot J, Zwar N, Harris M. Teamwork for chronic disease care: case studies from general practice. Centre for Primary Health Care and Equity, August 2005

Small group discussion

- What patients are likely to benefit most from screening for type 2 diabetes?
- In planning a screening program, what should be discussed within the practice team?
- What are some of the potential obstacles to delivery of a screening program within general practice?
- How can practice team members work effectively together to implement a diabetes screening program?
- Discuss whether type 2 diabetes can be prevented.

Case study 2
Challenges in undertaking preventive activities

Case study 2 highlights some of the challenges (eg. time constraints) of undertaking preventive activities such as lifestyle behavioural counselling in general practice.

Dr Smith is with Jenny to discuss her results of the AUSDRISK assessment. She has a high risk score of 16. Jenny had initially thought little about the result and had downplayed her risk factors, including being overweight. She does not perceive type 2 diabetes as a serious condition and her lack of concern about her result worries Dr Smith, who tries to convey to Jenny enough information about the potential consequences of the disease to justify lifestyle changes. Dr Smith provides Jenny with some patient information resources and some brief advice on risk factors, particularly focusing on the need for Jenny to lose some weight and increase her level of physical activity. If Jenny is ready to make some changes, the practice can provide access to a wide range of health services, including a diabetic educator, dietician, physiotherapist, podiatrist, optician, and other staff and specialists as required.

Small group discussion

- Do you think giving advice will result in Jenny making lifestyle changes?
- What do you think Dr Smith could have done to address Jenny's risk factors and perform lifestyle counselling within the time constraints of a short (10 minute) consultation?
- What techniques have you found to be useful when trying to encourage a patient at risk of diabetes to change their behaviour?

Case study 3
Involving practice nurses in preventive activities

Case study 3 illustrates how a practice nurse can be involved in preventive activities, and highlights the importance of having appropriate training to undertake this role. It also gives an example of the type of tools/resources that can be utilised.

A general practice had the opportunity to trial an electronic Lifescripts tool. The tool enabled an assessment and prescription for lifestyle risk factors to be carried out for individual patients as well as a population lifestyle risk factor search to be carried out for groups of patients. Patient resources were also available electronically, which could be downloaded and printed out.

The practice nurse had an opportunity to attend a workshop run by the local division of general practice, which showed a DVD about motivational interviewing with patients with diabetes. The DVD showed several roleplays as well as presenting the theory behind the methodology. The tool was trialled initially by the practice nurse with 10 patients with diabetes. Eight of the 10 patients were given a prescription and recommendations to increase their physical activity, one was referred to a QUIT counsellor for smoking cessation. The practice nurse followed the patients up 1 month later and found that four of the nine patients that had been given a Lifescripts prescription had made some positive changes to their lifestyle.

Small group discussion

- How might a practice nurse assist in improving prevention in general practice?
- What skills are integral to the implementation of preventive care in general practice?
- What other programs, tools, items numbers and resources are available to support preventive activities in general practice?
- What systems could be used to support preventive activities?

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

Which patients are most likely to benefit from screening for type 2 diabetes?

The RACGP *Guidelines for preventive activities in general practice* (the 'red book') provides the most recent evidence on screening (see *Resources*).

Patients should be screened for diabetes every 3 years from 40 years of age using AUSDRISK. Aboriginal people or Torres Strait Islanders should be screened from 18 years of age. Those with a risk score of 15 or more should be tested by fasting plasma glucose.

The AUSDRISK tool (see *Resources*) is used to identify those at high risk of having undiagnosed pre-diabetes or type 2 diabetes. To help prevent diabetes, some divisions of general practice offer programs to patients who score highly for pre-diabetes.

There are RACGP guidelines available to guide clinicians in the care of patients with diabetes (see *Resources*).

Who is at higher risk of type 2 diabetes?	What should be done?	How often?
Increased risk • All patients >40 years of age • Aboriginal people and Torres Strait Islanders	AUSDRISK	Every 3 years
High risk • Any one of following risk factors: ◦ all people with a history of a previous CV event (acute myocardial infarction or stroke) ◦ women with a history of gestational diabetes mellitus (GDM) ◦ women with polycystic ovary syndrome ◦ those on antipsychotic drugs ◦ those with impaired glucose tolerance test (IGT) or impaired fasting glucose (IFG) (not limited by age)	Fasting plasma sugar	Every 3 years

Test	Technique
Fasting blood sugar	Measure plasma glucose levels preferably on a fasting sample, although a 'random' sample is acceptable for screening purposes. • <5.5 mmol/L – diabetes unlikely • 5.5–6.9 mmol/L fasting – may need to perform an oral glucose test • 7.0 mmol/L or more fasting (>11.1 nonfasting) – diabetes likely, repeat fasting blood sugar to confirm on a separate day The test should be performed on venous blood and tested in a laboratory. However, capillary blood and a properly calibrated point-of-care device may be used for screening (if a laboratory is used to confirm a positive result)
Oral glucose tolerance test	Two hours after a 75 g oral glucose load is taken, the plasma glucose is measured. If this is >11.1 mmol/L, diabetes is likely. If it is between 7.8 and 11.0 mmol/L then there is impaired glucose tolerance. If it is <7.8 mmol/L diabetes is unlikely
Diabetes risk (AUSDRISK assessment tool)	Diabetes risk may be calculated using the AUSDRISK assessment tool. This calculates a score related to the risk of developing diabetes over a 5 year period based on cohort data for that population. (The tool may underestimate risk below the age of 25 years)
Glycosylated haemoglobin (HbA1c)	This is not currently recommended as a test to diagnose diabetes as the appropriate cut off is still to be determined

Target group	Intervention
Pre-diabetes (IGT, IFG, GDM) and those with identified risk factors with negative screening test	• Increasing physical activity (eg. 30 minutes brisk walking 5 times per week) and/or weight loss reduces risk of developing diabetes by 40–60% in those at high risk • Give advice on a healthy low fat diet (<30% kcal from fat and <10% from saturated fat). High fibre, low glycaemic index with cereals, legumes, vegetables, fruits, weight loss and increased physical activity (see the 'SNAP' guide) • Refer patients to a dietician and a physical activity program • Provide pre-conception advice to women with a history of gestational diabetes

In planning a screening program, what should be discussed within the practice team?

- What are the benefits of a screening program for diabetes for our patients, and for us?
- What are our goals?
- What changes do we need to make, and in what order?
- Who will be responsible for each step?
- What are the barriers to implementing a screening program for diabetes?
- What would facilitate implementing a screening program?

What are some potential obstacles to the delivery of a screening program within general practice for patients with type 2 diabetes?

- The acceptability and accessibility of the screening program; inaccuracy of the patient register and poor quality screening[2]
- Practice infrastructure, such as lack of consulting rooms/private space in the practice
- Increased workload: follow up requirement for patients, increased demand on GPs and practice nurses for behavioural advice
- Willingness of patients to return to have a fasting blood test
- Competing pressures on the time of both GPs and their patients
- Lack of system support
- Psychological impacts of screening on patients.[3]

How can practice team members work together to implement a diabetes screening program?

For example:

- Practice nurses could identify at risk patients; provide support and advice to patients diagnosed with diabetes or pre-diabetes; create and monitor recall and reminder systems and disease registers; and provide counselling to patients with diabetes
- Administration staff could check for patients that require recalls/ reminders; make appointments; ask eligible patients to complete the AUSDRISK survey and record those who have completed it.

Discuss whether type 2 diabetes can be prevented.

- Evidence from a range of different studies conducted in Australia and overseas, such as the Finnish Diabetes Prevention Program, have shown that sustainable lifestyle interventions in people at high risk of developing type 2 diabetes led to significant reductions in the incidence of diabetes
- The 'red book' recommends the preventive activities outlined below for people at risk of diabetes.

Target group	Intervention
Pre-diabetes (IGT, IFG, GDM) and those with identified risk factors with negative screening test	• Increasing physical activity (eg. 30 minutes brisk walking 5 times per week) and/or weight loss reduces risk of developing diabetes by 40–60% in those at high risk • Give advice on a healthy low fat diet (<30% kcal from fat and <10% from saturated fat). High fibre, low glycaemic index with cereals, legumes, vegetables, fruits, weight loss and increased physical activity (see the SNAP guide) • Refer patients to a dietician and a physical activity program • Provide pre-conception advice to women with a history of gestational diabetes

Case study 2

Do you think giving advice will result in Jenny making lifestyle changes?

- Giving advice may not be the best approach to changing health behaviour because telling patients what to do could undermine their sense of autonomy, generate resistance, may not consider what is important to them, and does not work in the majority of cases[4]
- It assumes that patients should change their behaviour, want to change, and that their health and their prescribed regimen are major priorities for them
- What can you do?
  - Encourage more active patient involvement
  - Adopt a patient centred approach[4]
  - Introduce patient self management strategies to complement a patient centred approach.

What do you think Dr Smith could have done to address time constraints of a short (10 minute) consultation for risk factor management/lifestyle counselling?

For example:

- The average general practice consultation takes around 10 minutes; therefore it is important to choose a strategy that is likely to be both effective and efficient
- Brief interventions. According to the RACGP *Putting prevention into practice: guidelines for the implementation of prevention in the general practice setting* (the 'green book') the evidence suggests GP recommendations or brief advice (even 1 minute or less) can have a positive influence on both patient intentions and prevention related behaviour. One minute inventions can be achieved using the 5A framework.[4]

Other options

- Schedule individual planned self management visits to set goals and create plans
- Provide information about community resources
- Make another appointment for risk counselling
- Refer to another health professional (eg. practice nurse or diabetes educator) for advice on behavioural risk factors or other allied health
- Enlist the help of a professional/ program (eg. Lifestyle Modification Program).

What techniques have you found to be useful when trying to encourage a patient to change behaviour?

- Share ideas and experiences with participants, eg. brief interventions and motivational interviewing.

Case study 3

How might a practice nurse assist in improving prevention in general practice?

Increasingly practice nurses appear to be engaged in a range of tasks within general practice.

For example:

- identifying eligible patients through examination of patient records and patient information systems
- information collection, such as measuring height, weight, blood pressure and lifestyle risk factors
- at the direction of the GP, providing patients with information about recommended interventions such as information about community resources and support services in the local area, referral options, and lifestyle counselling
- accessing information systems that record and monitor patient risk factors, and collect and analyse data on the practice population at the local, community and regional level
- installing recall and reminder systems and disease registers
- initiating quality improvement activities related to preventive activities
- identifying assessment and educational tools to assist with risk management.

What skills and knowledge are integral to the implementation of preventive care in general practice?

For example:

- motivational theories, interviewing
- behavioural change theories and behavioural counselling skills
- patient centred goal setting
- techniques to recognise barriers and develop effective communication between GPs (or other health professionals) and patients
- self management education knowledge and skills
- organisational skills
- IT and information management skills.

What programs, tools, item numbers and resources are available to support preventive activities?

A range of programs, initiatives and tools are available for the delivery of preventive healthcare. For example, the RACGP *Guidelines for preventive activities in general practice* (the red book), *Putting prevention into practice: guidelines for the implementation of prevention in the general practice setting* (the green book) and the SNAP guide)

Medicare items: the Australian Government has introduced a range of structured health checks aimed at improving preventive healthcare delivered through primary health care services.

The following time-based MBS health assessment items can be applied to people aged 40-49 years (inclusive) with a high risk of developing type 2 diabetes, as determined by the Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK).

A medical practitioner may select MBS item:

701 (brief or not greater than 30 minutes)

703 (standard – more than 30 minutes but less than 45 minutes)

705 (long – at least 45 minutes but less than 60 minutes), or

707 (prolonged – a health assessment lasting at least 60 minutes)

715 Aboriginal and Torres Strait Islander people health assessments for children, adults and older people.

A health assessment should generally be undertaken by the patient's 'usual doctor'. Practice nurses and registered Aboriginal health workers may assist medical practitioners in performing health assessments.

Where the patient is a Commonwealth concession cardholder or a child under 16 years of age and the service is bulk billed, the GP can also claim a bulk billing incentive payment (MBS Items 10990 and 10991).

Subsidised lifestyle modification programs

Patients aged 40-49 years at high risk of developing type 2 diabetes, as determined by the AUSDRISK tool, and who have undertaken a health assessment provided as a type 2 diabetes risk evaluation, are eligible for referral by a medical practitioner to a subsidised lifestyle modification program as one of a number of possible intervention strategies.

What systems could be used to support preventive activities in your practice?

For example:

- systems to identify and screen patients at risk of developing diabetes and recall for planned care
- system supports such as availability of up-to-date information and clinical guidelines, risk assessment tools, the development of referral pathways, electronic recall and reminder systems, electronic templates and written procedures and protocols
- expanded role for non-GP staff (eg. diabetes clinics run by nurses)
- e-health tools to ensure that preventive activities can be appropriately targeted and implemented, and to improve the ability to track progress and monitor performance.

Definitions

Prevention is defined as 'action to eliminate or reduce the onset, causes, complications or recurrence of disease'.[6] Prevention is often conceptualised as being primary, secondary or tertiary.

- Primary prevention reduces the likelihood that a disease or disorder will develop
- Secondary prevention interrupts, prevents or minimises the progression of a disease or disorder at an early stage
- Tertiary prevention focuses on halting the progression of damage already done.
- AUSDRISK is the acronym for the Type 2 Diabetes Risk Assessment Tool that was released in July 2008 as part of an Australian Government health initiative to assess a person's risk of developing type 2 diabetes within 5 years. Available at www.health.gov.au/internet/main/publishing.nsf/Content/C73A9D4A2E9C684ACA2574730002A31B/$File/Risk_Assessment_Tool.pdf.

Resources

- The RACGP has a number of resources available at www.racgp.org.au:
    - *Guidelines for preventive activities in general practice* (red book)
    - *Putting Prevention into practice: guidelines for the implementation of prevention in the general practice setting* (green book)
    - *Smoking, Nutrition, Alcohol and Physical Activity (SNAP): a population health guide to behavioural risk factors in general practice* (the SNAP guide)
    - *Chronic condition self management guideline for GPs*
- Your local division of general practice can direct you to resources in your area and provide details of accredited lifestyle modification programs. Available at www.agpn.com.au
- The Lifescripts resource kit can help identify lifestyle risk factors and implement early intervention strategies to modify behaviour. Available at www.agpn.com.au
- Diabetes Australia provides a range of resources at www.diabetesaustralia.com.au.

Useful websites

Measure Up Campaign

www.australia.gov.au/MeasureUp

Department of Health and Ageing guidelines:

Physical activity guidelines
www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines

National Physical Activity Recommendations for Older Australians
www.health.gov.au/internet/main/publishing.nsf/Content/phd-physical-rec-older-guidelines

Standard Care Pathway for Type 2 Diabetes
www.t2d.com.au

National Obesity Guidelines
www.health.gov.au/internet/main/publishing.nsf/Content/obesityguidelines-index.htm

Copies of the AUSDRISK tool and GP referral form to lifestyle modification programs can be downloaded from the AGPN website at www.agpn.com.au or ordered by emailing resourcekits@health.gov.au

Type 2 Diabetes Risk Evaluation (Item 713)
www.health.gov.au/internet/main/publishing.nsf/Content/Diabetes-Risk_Evaluation

Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK)
www.health.gov.au/internet/main/publishing.nsf/Content/73A9D4A2E9C684ACA2574730002A31B

Recall letter for diabetes risk test (suitable for Medical Director)
www.gppartners.com.au/content/Document/template_recalldiabetes.rtf.

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Module 3

Practice nurse models and patient self management support

Introduction

The role of the practice nurse is diverse and is influenced by patient needs; the practice's needs; the practice nurse's individual level of competence, education and qualifications; and the expectations and understanding of the role of the practice nurse by other team members and patients.

Self management empowers a patient to monitor and manage their healthcare and take responsibility for their own health outcomes. It has been shown to be effective in improving the quality of life of patients.

Improving practice

What is important?

- Take a systematic approach to diabetes care
- Utilise team based care
- Make effective use of practice nurses
- Use guidelines, protocols and computer templates to support team based care
- Support self management

Case study 1
Making better use of practice nurses

Case study 1 presents a practice nurse model showing how to make better use of practice nurses in the general practice setting.

In a small rural practice that only started 4 years ago, there are three part time receptionists, two of whom share the role of practice manager; two full time, and three part time GPs.

The practice does not advertise, but word of mouth has brought them a large patient base. Patients are of all ages and conditions, however the practice is seeing a growing number of patients with diabetes and/or at risk of developing diabetes. The practice is accredited and enrolled in the Practice Incentives Program (PIP); however, GPs are struggling to process claims for both Service Incentive Payment (SIP) and Enhanced Primary Care (EPC) items. The two practice principals agree on the need to make changes to improve diabetes care, the overall efficiency of the practice and to generate more income.

Both principals agree to employ a practice nurse to establish more effective systems; make better use of chronic disease management (CDM) items and to coordinate care for patients with diabetes. They employ a practice nurse for four sessions per week, mainly in a clinical support role. This involves undertaking tasks delegated by all the GPs working in the practice. With the assistance of the practice manager and other administrative staff, the practice nurse starts a process of identifying patients with diabetes and developing a diabetes patient register.

Small group discussion

- What are some possible practice nurse models that could be used in the general practice setting?
- Which nurse model do you think is likely to have the most benefits for this practice?
- Identify online support information to assist general practices considering including a nurse within their practice team.
- What can be done to promote an extended practice nursing role to patients with diabetes?
- Discuss what might be the impact of adding a nurse to a general practice team?
- What are the potential roles that a practice nurse, practice manager and/or receptionist could play in improving processes related to the Diabetes SIP in your practice?

Case study 2
Nurse led clinics

Case study 2 illustrates the model of a nurse led clinic and how a practice nurse can play an extended role in diabetes care.

The practice established a nurse led clinic and a letter was sent out to all patients with diabetes on the practice database. The clinic nurse makes all the appointments for patients using the practice's clinical software.

At each initial assessment the nurse:

- notes the patient's height and weight and takes blood pressure and blood glucose
- asks the patient about his/her understanding of diabetes
- provides appropriate additional information
- listens to patients' ideas and feelings about their diabetes and corrects any misinformation
- develops a shared understanding of problems, goals of care, and the roles of other participants involved in their care
- Provides appropriate lifestyle information and education.

The nurse discusses the clinic appointments with the GP and confirms which patients will need to be seen by the GP.

Small group discussion

- What are some of the benefits for a practice of nurse led clinics?
- What core activities should be undertaken by the clinic?
- What are some of the key guidelines for a diabetes clinic?
- What systems are required to support a diabetes clinic?
- What are some of the Medicare items that can be used in nurse led diabetes clinics?

Case study 3
Patient self management

Case study 3 illustrates the approach to self management taken in a practice and how the practice team can support self management in patients with diabetes.[1]

A practice team decides to support self management by developing a patient support group that will meet at the practice. With assistance from practice staff the support group is formed with 10 participants who are interested in improving, and/or maintaining good management of their diabetes. With the help of the practice nurse, they organise a range of activities including cooking demonstrations. The support group discussed their general lack of knowledge about diabetes when first diagnosed. The practice team decides to develop a brochure that could provide useful information in plain English about diabetes and lifestyle behaviours that promote health and that assist in maintaining good management.

The practice nurse writes a brochure. Practice team members and patients provided feedback on the brochure, GPs in the practice ensured that it was consistent with the latest clinical evidence, and it was checked by support group members for readability. The brochure includes contact details of local programs and services. The brochure is now displayed in the waiting room and consultation rooms. The practice nurse also runs regular education sessions for all newly diagnosed diabetes patients attending the practice.

Small group discussion

- What are five key principles for self management?
- What self management approaches/ models do you use in your practice?
- Discuss some of the challenges and issues that you have faced trying to integrate self management into every day care in your practice.
- Identify some of the skills and knowledge needed by team members practising self management.
- What can a practice team do to support self management by patients with diabetes?
- What systems are needed to support self management in general practice?

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

What are some possible practice nurse models that could be used in general practice?

- The Special Session Model: a practice could employ a diabetes trained nurse educator for one session per week
- The Generalist Practice Nurse Model: as described in case study[1]
- The Advanced Practice Nurse Model: a nurse practitioner or specialist diabetes nurse educator.[2]

Which practice nurse model do you think is likely to have the best results for this practice?

Different models will have different results. There is no one right answer in terms of financial and workload benefits and patient care. However, it is important to consider that some general practices are struggling to cope with increasing numbers of patients with chronic diseases, including diabetes, particularly in areas where there are not enough doctors, leading to increased pressure on already limited resources. One solution, which is supported by Federal Government initiatives, is to make better use of practice nurses. Almost 60% of general practices now employ at least one practice nurse.

Identify useful support information to assist general practices considering including a nurse within the team.

Useful online resources include:

- Nursing in general practice information kit: the aim of this kit is to provide the general practice team with guidance on roles and responsibilities, legislative, regulatory, employment and human resource support information to assist general practices to effectively include a nurse within their general practice team. Available at http://generalpracticenursing.com.au
- Business case models: The Australian Divisions of General Practice has developed a series of business case models to assist general practices in their assessment of the benefits and financial implications of employing a practice nurse. Available at www.health.vic.gov.au/__data/assets/pdf_file/0009/268227/Division-2-Strategy-October-2008.pdf
- The RACGP. *The team approach to diabetes in general practice: a guide for practice nurses*.

Discuss what might be the impact of adding a nurse to the general practice team.

Based on the findings from a study by Laurant et al:[3]

- there was no reduction in GP workload as measured by reduction in consultation rates; however, no such reductions were expected if the nurse practitioner was used to supplement and extend GP care not replace it
- benefits could include:
  - increased patient satisfaction
  - improved access
  - improved GP job satisfaction.

What can be done to promote the practice nursing role to patients?

Consumer perceptions of nursing in general practice, a funded research project, completed in 2002, explored consumer perceptions of nursing in general practice and made the following recommendations:

- produce materials for patients to inform them about the nurse's role
- don't refer to nurses as 'practice nurses' as some consumers think the nurse is in training
- put into place a peer endorsement strategy to make obvious the value of, and respect for, nursing and the medical role at the practice level.

What are the potential roles that a practice nurse, practice manager and/ or receptionist could play in improving processes related to the Diabetes SIP in your practice?

Practice nurse role

The practice nurse could assess the patient, assist with preparing a general practice management plan (GPMP), identify the patient's needs, facilitate communication between the GP and other health providers, discuss costs with the patient, and provide patient education and self management information.

Practice staff

Managing the processes, including maintaining written processes; identification of diabetes patients requiring planned care; identifying patients requiring reminders; contacting patients; managing appointments; billing; compiling; maintaining and reviewing contact lists; sourcing and compiling appropriate education materials for the development or review of the patient's health plan.

Case study 2

What are some of the benefits for practices of nurse led clinics?

For example:

- increased income and profit, contributing to the long term viability of the practice
- increased range of services offered at the practice
- improved systems such as appointment bookings, billing, and recall and review
- improved integration and partnerships with the acute sector and the primary care system
- improved working relationships and a multidisciplinary approach within the practice, and with external health professionals
- improved quality of care for patients, including meeting clinical guidelines and systematically delivering the requirements of the annual cycle of care
- reduced patient waiting times
- improved management of patients with a chronic disease including self management support
- improved health outcomes through screening, prevention, assessment, patient education, management, care planning and reviews
- enhanced patient satisfaction

What are the possible roles of staff employed in a nurse led diabetes clinic?

Role of the GP

- Medical management, eg. medications, pathology and diagnostic requirements
- Identify and refer suitable patients to the clinic
- Promote the clinic to patients
- Provide ongoing medical care for patients involved in the clinic
- Prescribe medications and assess effectiveness
- Effective communication and liaison with all team members
- Sign off on MBS items such as GPMPs and team care arrangements (TCAs).

Role of the practice nurse

This will depend on the nurse's individual scope of practice. It may include:

- providing advanced clinical support to the patient and the practice
- managing and running the clinic in conjunction with practice staff
- providing quality care to patients with a chronic disease
- ensuring systems support the effective operation of the clinic.

Role of the practice manager

- Facilitate reception staff support of the clinic
- Establish and maintain systems that support the effective operation and funding of the clinic
- Ensure access to the clinic room, clinic equipment and resources
- Ensure appropriate billing practices
- Support the nursing role and a team based approach to care
- Review and continuously improve the systems that support the clinic.[3]

What are some of the key guidelines for a diabetes clinic?

The key clinical guidelines for nurse led chronic disease clinics are listed below:

- The RACGP, Diabetes Australia publication, *Diabetes management in general practice guidelines*. Available at www.diabetesaustralia.com.au and www.racgp.org.au
- Clinical guidelines produced by the National Health and Medical Research Council, such as the *Evidence based guidelines for the management of type 2 diabetes*, and *Diabetes and coronary heart disease: Best practice guidelines for diabetes type 1 and 2*. Available at www.nhmrc.gov.au
- Pharmaceutical Benefits Scheme www.pbs.gov.au
- *Medicare Benefits Schedule Book*. Available at www.health.gov.au/internet/mbsonline/publishing.nsf/Content/2F23FAD028B1699CCA2574E50003C125/$File/Medicare%20Benefits%20Schedule%20-%201%20Nov%202008.pdf
- Professional organisations, such as The Australian Diabetes Educators Association, core competencies and guidelines for diabetes
- Self management guidelines such as the Flinders self management guidelines. Available at www.flinders.edu.au
- Stanford model of patient chronic disease management . Available at www. education.stanford.edu/programs.

What systems are required to support a diabetes clinic?

For example:

- clinic marketing
- appointment booking
- clinic billing
- systems to support self management systems
- recall and review.

What Medicare items can be used in nurse led diabetes clinics?

There are a number of Medicare Benefits Schedule (MBS) items which can be used to support and finance a nurse led chronic disease clinic including:

- Chronic Disease Management (CDM) items
- Allied Health and Dental Services items
- Diabetes SIP
- Diabetes Education Service (Item 10951)
- Health Assessments (Items 700–706)
- CDM Item for Practice Nurses (Item 10997)
- Annual ECG (Item 11700)
- Ankle Brachial Indices and Arterial Waveform Analysis (Item 11610)
- Immunisation Item for Practice Nurses (Item 10993).

For up-to-date information on items and rebates refer to www.health.gov.au/mbs.

Case study 3

What are five principles of self management?

- Know condition and various treatment options
- Negotiate a plan of care and review and 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.[3]

What self management approaches do you use in your practice?

For example:

- Group education
- Group clinics
- Motivational interviewing
- The 5As model
- The Flinders University model
- Health coaching
- The COACH program
- Better health self management.[4]

Discuss some of the challenges and issues you have faced trying to integrate self management into every day care in general practice?

- Cost implications (eg. initial training of practice team members and of tools/resources/establishing systems to support self management)
- Trying to juggle demands of seeing more patients for self management
- Need for good systems to support self management (eg. recall and reminder systems)
- Deciding on the best self management approach/model
- Patients who do not want to self manage
- Difficulties related to making the changes needed to help the team adopt a self management model.[4]

Discuss some of the skills and knowledge needed by practice team members that are important to practising self management.

For example:

- target, goal setting, planning
- problem solving
- open ended questions
- assertiveness skills
- identifying people's willingness to change
- depression screening
- suicide screening
- knowledge of community support resources
- identification of patient's strengthens
- recognition of health literacy status of patients.

What can a practice team do to support self management by patients with diabetes?

For example:

- develop systems to support self management
- ensure practice team members are provided with evidence on the effectiveness of various self management programs/approaches
- inclusion of negotiation of self management support as part of patient care plans
- inclusion of self management support in allied health services that are provided on referral of a patient with diabetes under a TCA
- maintain referral pathway over time and facilitate direct communication and a continuing role for practice team members in supporting self management.[5]

What systems are needed to support self management in general practice?

- Develop systems that enable team members to initiate follow up. Good recall and review systems should contain reminders
- Embed self management goals into registries to act as prompts for reminders and planned visits
- Redesign practice to make the most of the entire visit
- Good information systems promote patient satisfaction and self management
- Ensure there is an effective system for the identification of patients who would benefit from self management from practice records.

Definitions

Service Incentive Payment (SIP) is an incentive paid to the GP once a year (per diabetes patient) when they have completed an annual cycle of evidence based care and a means of measuring GP management.

Practice Incentives Program (PIP) replaced the Better Practice Program in 1998 to provide incentives for accredited general practices to improve the quality of care provided to patients.

Guidelines are a method of optimising and standardising care and their use facilitates evaluation of specialist and GP practice as well as patient health outcomes.

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Initiation of insulin in general practice for patients with type 2 diabetes

Introduction

There are many well run trials that demonstrate the need to treat patients to obtain a target HbA1c of around 7% to prevent long term complications.[1,2] However, there have been many barriers identified to helping patients achieve HbA1c targets by increasing medication in a timely manner.[3] This is moreso with the initiation of insulin with diabetes. These factors include issues for both the patient and the treating GP.

Evidence shows that many patients with diabetes are commenced too late on insulin.[3] Yet insulin is an excellent medication (but it could also be considered as hormone replacement therapy) with a proven track record.

Initiating insulin with modern devices and protocols is straightforward and safe for people with type 2 diabetes. The following module highlights some of the issues faced by patients and GPs in commencing insulin, highlighting the issues that commencing insulin in general practice may raise for the practice team.

Improving practice

What is important?

- Understanding the pathophysiology of type 2 diabetes, in particular why insulin production in the pancreas declines
- Why use insulin early
- Which insulin to choose
- A practice approach to starting insulin
- Safety of insulin use
- Ongoing titration

Case study 1
Identifying the patient with immediate needs

Case study 1 provides an example of identifying a patient who needs insulin immediately.

Mr KD is 65 years of age. He is active and plays golf most weekends. He has had type 2 diabetes for 10 years. He has associated hypertension and dyslipidaemia for which he takes medication, and both are controlled. Concentrating on his glycaemic control, his HbA1c is 8.5%. He is on metformin (1 g twice daily) and glyclazide MR 90 mg/day. He has minimal complications on screening (microaneurysms on fundoscopy, urine – no microalbuminuria, eGFR normal, feet examination normal, body mass index 36).

Small group discussion

- What are the possible causes of Mr KD's poor control?
- How much of his problem is insulin resistance versus a defect in insulin secretion?
- What medications can be added to improve his glycaemic control?
- What does the evidence tell us about the various choices?

Case study 2
How to commence a patient on insulin

The following case study provides an example of how to commence a patient on insulin.

You have discussed the possibility of commencing insulin with Mr KD. He is reluctant to agree to this treatment. He thinks he has failed and wants to have another try at changing his lifestyle. He also thinks that insulin is a bad treatment: it makes you put on weight, it hurts, it means that he is going to die (after all that happened to his mother when she started on insulin), it is too complicated and he will get lots of hypos! He doesn't want the inconvenience of injecting himself at each mealtime.

Small group discussion

- Are Mr KD's concerns about insulin correct?
- How do you deal with patients who express these concerns?

After discussion with you and your practice nurse, Mr KD returns in 2 weeks, ready to commence insulin.

- How would you start him on insulin?
- How often would you see him?
- How do you adjust his dose of insulin?
- What is his risk of hypoglycaemic episodes?
- What role can the practice nurse have in initiating the new treatment, monitoring, and supporting the patient?

Mr KD has achieved a fasting blood glucose (FBG) of 5.8 mmol/L but his HbA1c remains at 7.8%. He is on 28 units of insulin at night.

- What does this HbA1c represent as an estimated average blood glucose reading?
- How would you explain the high HbA1c despite the FBG reading?
- What would you do to his therapy now?
- What do you do with his sulphonylureas?

Case study 3
Teamwork and initiating insulin

The following case study provides an example of teamwork and highlights the expanded role of the practice nurse in initiating insulin in general practice.

After commencing Mr KD on insulin you realise how straightforward it is. He has done very well and appears confident with his new regimen. His HbA1c is now 7.3% and he is adjusting his insulin dosages himself. You now decide that you would like to do this for all patients in your practice who aren't well controlled. You find that you have 15 patients who could possibly benefit from initiation of insulin immediately.

Small group discussion

- How can you identify patients in your practice that would benefit from insulin?
- What systems could you implement to facilitate this?
- What roles could your practice nurse have?
- What can be done to promote an expanded practice nursing role to patients with diabetes?
- How could you engage with diabetes educators to do this?

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

What are the possible causes of Mr KD's poor control?

- Poor medication adherence
- Lifestyle factors (increasing weight, poor diet, sedentary lifestyle)
- Increasing beta-cell failure
- Even though unlikely in this scenario, latent autoimmune diabetes in adults is always a possibility in people who seem to rapidly progress through medication without much improvement
- Other rarer medical problems (eg. haemochromatosis, hypopituitism, hypogonadism, low testosterone, long term steroid use).

How much of Mr KD's problem is insulin resistance versus loss of insulin secretion?

- Insulin resistance is the initial problem with pre-diabetes (impaired fasting glucose or impaired glucose tolerance) and those at risk of type 2 diabetes. During this period, levels of insulin are higher than normal, ie. the beta-cell is compensating for the insulin resistance
- Development of diabetes occurs as a result of progressive beta-cell dysfunction and death. This means that insulin needs are no longer being met (*Figure 1*)
- By the time a person is diagnosed with type 2 diabetes, 50% of beta-cell function in the pancreas has been lost (*Figure 2*)
- It is the progressive death of beta-cells that leads to the progressive nature of type 2 diabetes

Figure 1. The United Kingdom Prospective Diabetes Study (UKPDS) slide of loss of beta-cell function[1]

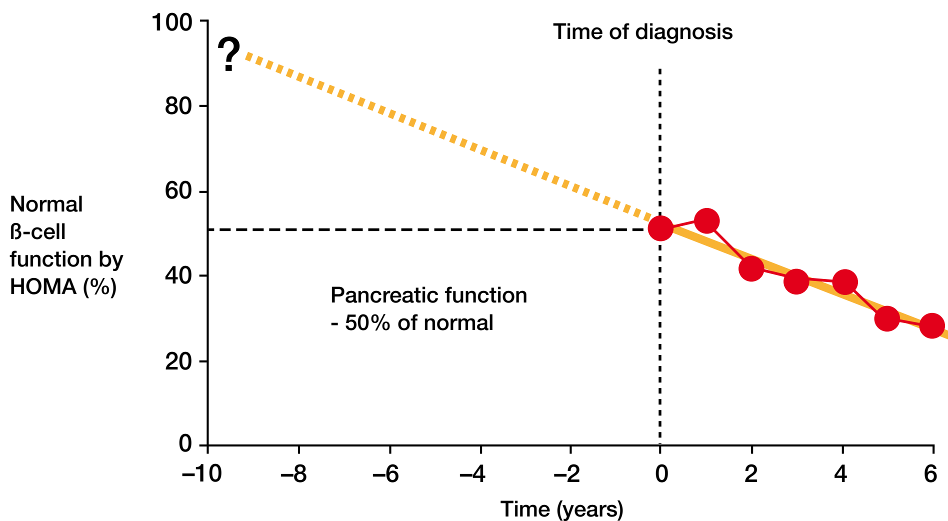
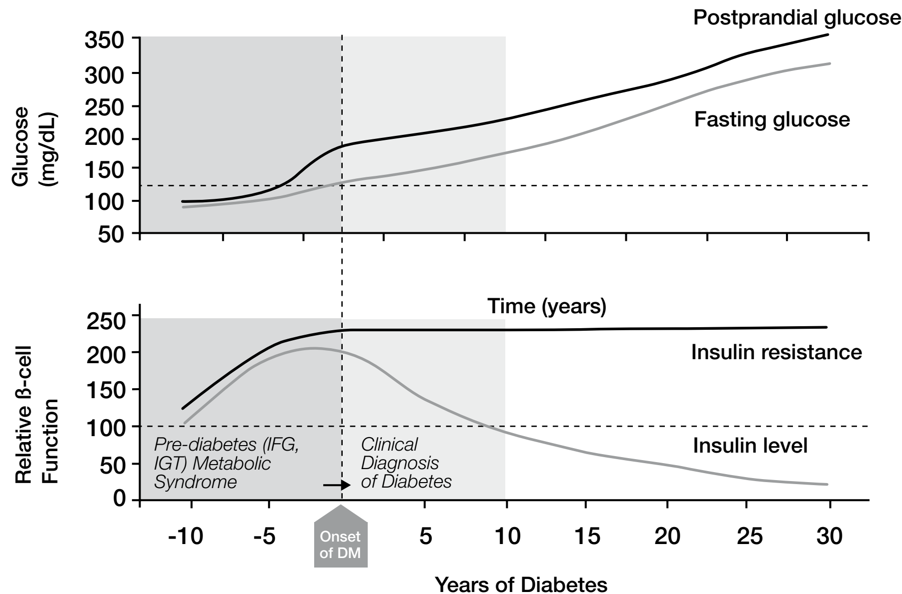


Figure 2. Map of insulin resistance versus secretion in the development of type 2 diabetes[1]



- To date, nothing has reversed this loss of beta-cells, which is why all people with type 2 diabetes eventually need insulin.

What medical treatments can be added to improve Mr KD's glycaemic control? (*Table 1*)

- According to RACGP guidelines, there are a range of choices for Mr KD, which include increasing his sulphonylureas, adding in acarbose, a glitazone, a sitagliptin or insulin
- Increasing the sulphonylurea to maximal dose (120 mg/day) will not be sufficient to reduce his HbA1c to target (maximal effect of sulphonylureas are about 1.5–2.0%; increasing by one tablet is unlikely to have a significant effect)
- Adding a glitazone will reduce the HbA1c by about 0.5–1.0% and is unlikely to get him to target. It also has a range of important side effects such as weight gain and fluid retention. Other problems such as osteoporosis are also becoming an issue. It does not have a proven mortality benefit. A glitazone is unlikely to get him to target
- Acarbose could reduce his HbA1c by up to 1%. However, side effects are unlikely to allow you to use acarbose at full dose
- Adding in DPP-4 inhibitor: these are relatively new medications that have little long term data. To date there is no evidence to indicate that they improve mortality. However, there are some beneficial side effects such as being weight neutral. On average, expect about a 0.75% drop in HbA1c. Again this would not get Mr KD to target
- Gliptins: these are relatively new medications with no long develop nausea. Expect a 0.75% drop in HbA1c
- Insulin is a well known drug with proven long term benefits. It will decrease HbA1c by up to 3.5%.

Case study 2

Are Mr KD's concerns about insulin correct?

- Patients experience a range of emotions when insulin is needed. This ranges from guilt to fear[4] (*Table 1*). However, patients need to understand that type 2 diabetes is a progressive disease with progressive death of the beta-cell. With time, all patients need insulin if they live long enough. Addressing lifestyle and losing weight may delay the need for insulin in people with diabetes. Mr KD clearly has poor glycaemic control and this needs to be remedied. He should still tackle his lifestyle issues while commencing insulin to reduce the amount of weight gain and improve his health. Patients can be linked to diabetes educators, dieticians,

Table 1. Barriers to use of effective therapy[4]

Intervention	↓ A1c	↓ FBGL	Advantages	Disadvantages
Insulin	1.5–2.5%	Varies, but enough insulin will achieve target BGL levels	No dose limit, inexpensive, improved lipid profile	Injections, increased monitoring required, hypoglycaemia, weight gain
Sulfonylurea	1.5%	3.3–4.0 mmol/L	Inexpensive	Weight gain, hypoglycaemia* Worsened hyperinsulinism
Thiazolidinediones	0.5–1.4%	2.0–2.2 mmol/L	Improved lipid profile, central adiposity mobilisation, decreased fatty liver	Fluid retention, weight gain, expensive
DPP-4 inhibitors GLP-1 agonists	0.5–1.0%	Glucose responsive	Weight neutral	Authority prescription, no long term data, no data to support monotherapy
Alpha-glucosidase inhibitors (acarbose)	0.5–1.0%	1.0–1.7 mmol/L	Weight neutral	Gastrointestinal side effects when consuming excess carbohydrates, 3 per day dosing schedule, expensive
Glinides	1.0–1.5%	(Addresses postprandial BGL)	Short duration	3 per day (with meal dosing) Expensive, not available on the PBS

The Diabetes Attitudes Wishes and Needs (DAWN) study revealed that psychosocial barriers to the use of effective therapy such as insulin is widespread and common across countries. Among the 2061 type 2 diabetes patients studied who were not using insulin, 57% were very worried about starting insulin therapy, 48% would blame themselves for having failed to manage their diabetes adequately if they were told they needed to begin insulin therapy, and only 27% believed that insulin could help them manage their diabetes better. Half of the diabetes physicians said they used insulin as a threat to encourage their patients to follow their existing diabetes treatment plan, which may contribute to the problem of self blame. Diabetes physicians were generally not aware of the magnitude of the problem of self blame associated with progression of the disease and initiation of insulin therapy.[4]

exercise physiologists, as well as to resources from organisations such as Diabetes Australia
- Insulin therapy in type 2 diabetes is associated with an increase in weight. This weight gain is related to HbA1c at commencement of insulin. The poorer the control the larger the weight gain
- The new insulin needles are very fine and cause minimal pain – far less than using a lancet for self blood glucose monitoring. (The National Diabetes Services Scheme provides these needles free of charge to patients)
- Insulin is a very safe treatment. The UKPDS demonstrated that insulin did not cause any increase in mortality compared to sulphonylureas
- Insulin devices have been modernised and are very simple and safe to use – invite a diabetes educator to demonstrate the various devices
- Insulin regimens are easy for people with type 2 diabetes. Most patients can be readily started on a once daily injection of a mixed or basal insulin[5]
- Hypoglycaemia is very uncommon in type 2 diabetes treated with insulin. As extra insulin is injected, if glycaemic levels decrease too rapidly or go too low, any remaining endogenous insulin secretion is suppressed.

How do you deal with patients who express these concerns?

- Discuss the progressive nature of type 2 diabetes
- Refer to a diabetes educator. Diabetes educators can be found on the Australian Diabetes Educators Association website at www.adea.com.au
- Upskill your practice nurse in motivational interviewing. Courses are conducted through divisions of general practice or through the Australian Practice Nurses Association (APNA)
- Discuss barriers to insulin initiation and provide your practice nurse with answers to frequently asked questions
- Help your patients to access information on diabetes through Diabetes Australia or support groups: www.diabetesaustralia.org.au and contact your state or territory based organisation
- Regular review and support.

How would you start him on insulin?

- Before commencing on insulin it is important for the health professionals involved to be coordinated in their approach. This will include recommendations for monitoring (how often to monitor, when to monitor, checking meters, recording readings), type of insulin, how often to adjust dosing, who will do the adjustments and how often the patient needs to be reviewed
- Choice of insulin – while there is a different profile for the available insulins, it seems to have relatively little effect on their use in type 2 diabetes. Both basal and mixed insulins have very similar outcomes with only minor differences in HbA1c and risk of hypos[5]
- Insulin can be initiated with the help of a diabetes educator, endocrinologist or the general practice team. More patients are commenced on insulin in general practice than by diabetes educators
- One of the simplest regimens to initiate insulin is 10 units of insulin once daily. The timing of the insulin is before the evening meal for a mixed insulin, or at any time during day for a basal insulin, but usually given in the evening. Patients self titrate by increasing the dose of insulin by 2 units every 3 days until the fasting blood glucose is <6.0 mmol/L. Patients record their fasting glucose over 3 days, if the average is >6 mmol/L, the dose of insulin is increased by 2 units
- If patients have difficulty with self titration, a diabetes educator, practice nurse or GP can assist the patient to adjust the insulin dose by providing advice over telephone. Patients may benefit from telephone coaching/support with access to the practice nurse or GP with the first adjustment

- Review of the patient – this can be done by either the practice nurse or the GP, after the first week of starting insulin. Review can then take place at levels consistent with the patient's confidence. Involvement of a diabetes educator may mean less of a need for early review.

What is his risk of hypos?

- The risk of hypos with type 2 diabetes is low. Patients can expect between 1.5–3.0 hypoglycaemic events per year[15]
- The risk of hypos is low due to residual insulin production in the beta-cells. If the dose of insulin is too high, the endogenous production of insulin is switched off (this does not happen in people with type 1 diabetes due to the absence of endogenous insulin and hence, the risk is much higher).

What role can the practice nurse have in initiating new treatment, monitoring, and supporting the patient?

- Currently more patients are commenced on insulin with the support of practice nurses than diabetes educators. As long as there are appropriate guidelines and protocols for the nurse to follow, and with the support of the GP, this can be done safely. Practices would benefit from having a written practice policy for the initiation of insulin
- Practice nurses can discuss the need for insulin, demonstrate the various pens, discuss protocols, ensure the understanding of the patient, and help with titration
- Practice nurses can identify patients with poorly controlled diabetes who may need to progress to insulin therapy. They can recall patients to discuss their diabetes control, and use the care planning process.

What does this HbA1c value represent as an estimated average blood glucose?

- A HbA1c of 7.8% represents an average blood glucose of just under 10 mmol/L (*Table 2*).

Table 2. Estimated average glucose

	mg/dl*	mmol/L†
A1C(%)		
5	97 (76–120)	5.4 (4.2–6.7)
6	126 (100–152)	7.0 (5.5–8.5)
7	154 (123–185)	8.6 (6.8–10.3)
8	184 (147–217)	10.2 (8.1–12.1)
9	212 (170–249)	11.8 (9.4–13.9)
10	240 (193–282)	13.4 (10.7–15.7)
11	269 (217–314)	14.9 (12.0–17.5)
12	298 (240–347)	16.5 (13.13–19.3)

Data in parentheses are 95% CIs. *Linear regression eAG (mg/dl) = 28.7 x A1C – 46.7. †Linear regression eAG (mmol/L) = 1.59 x A1C – 2.59

How would you explain the high HbA1c despite the FBG reading?

- There must be significant postprandial blood glucose readings to account for the high HbA1c.

What adjustments would you make to Mr KD's therapy now?

- Mr KD needs another dose of insulin
- If he is on a basal insulin, he can check his blood glucose reading through the day to identify the problem areas. This can help on deciding the timing of the next insulin dose. If pre-meal glucose is high (eg. before lunch) then giving a prandial dose of human insulin before breakfast would improve his control (Apidra, Humalog, Novorapid). (If before dinner is highest, then use a prandial insulin before lunch; if before bed time is high then dose before the evening meal)
- As you would expect, Mr KD's highest reading usually occurs at the largest meal of the day. The dose of the insulin can be started at 4 units, increasing by 2 units every 3 days until his postprandial glucose is near 8 mmol/L or his next pre-meal glucose is <6 mmol/L

- If he is on mixed insulin with his evening meal, mixed insulin could be commenced before breakfast, starting at 4 units increasing by 2 units every 3 days until his postprandial glucose is near 8 mmol/L or his next pre-meal glucose is <6 mmol/L – in this case, looking at the pre-lunch readings.

What do you do with his sulphonylureas?

- Once Mr KD is using insulin more than once daily, his sulphonylureas are no longer of much benefit and can be ceased.

Case study 3

How can you identify patients in your practice that could need insulin?

- Most general practice software programs allow practices to identify patients with high HbA1cs. If not, use of third party software can easily identify patients with a high HbA1c (eg. PCS Clinical Audit Tool™ (CAT), Canning extraction tool and DAVE software (CAT is available at www.diabetesvic.org.au/HealthProfessionals/GeneralPracticeProgram/ClinicalAuditTool/tabid/351/Default.aspx). Predetermined searches which may assist practice staff in using CAT are available at www.clinicalaudit.com.au
- Another option is to obtain HbAa1c levels from the pathology company the practice uses
- Once patients have been identified, organise with your manager/practice nurse to develop a process of recalling these patients. Patients can be seen by the practice nurse to develop care plans which include goals for the patient for the next 12 months. One of these goals may be to progress to insulin. Supports identified in the care plan can include diabetes educators, endocrinologists or practice nurses
- Once the plan is developed, attendance to the diabetes educator can be funded through the Enhanced Primary Care (EPC) items to commence insulin using the above guidelines. Alternatively, the practice nurse may be involved if they have participated in further training.

How would you set up your practice to do this?

- A designated time could be allocated to a nurse or diabetes educator to set up a 'mini clinic'. At this time, the diabetes educator or practice nurse may see a new patient to set up a management plan. Recalls can then be set for reviews every 3 months to check on the progress of the care plan
- Alternatively, multiple allied health practitioners could be invited to attend a morning session where patients can be seen in a rotating process.

What roles could the practice nurse have?

- The role of practice nurses in supporting the coordination of care of patients with diabetes is increasing, by taking on new skills such as diabetes assessments, care planning and insulin initiation. There are now a range of courses practice nurses can attend to be upskilled in this area. Courses can be located on the APNA website or through local divisions of general practice
- Supporting patients in starting insulin.

What can be done to promote an expanded practice nursing role to patients with diabetes?

- The practice nurse may be interested in coordinating care for people with diabetes. Authorise the practice nurse to take a lead on developing the systems and clinic design to achieve agreed goals
- The practice nurse may need more education to gain confidence in being more involved in patient care in this area
- Defining what the role of the practice nurse is and discussing this role with the patients

- Promoting his/her role to your patients through handouts and discussions with receptionists
- Allowing time for the practice nurse to manage the workload associated with system changes and patient contact.

How could you engage with a diabetes educator to do this?

- With 15 patients that will benefit from insulin initiation, you could invite a diabetes educator to consult from your rooms and fund this service through EPC referrals
- You could engage a diabetes educator to undertake care planning and fund their time for the initiation of insulin
- You could approach a local community centre or a private diabetes educator to partner in establishing a service to patients in your community.

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Management of behavioural risk factors

Introduction

Enhancing preventive care and supporting a healthy lifestyle is important in improving diabetes care. Primary prevention of diabetes requires accurate assessment and effective management of its modifiable risk factors. Two-thirds of the disease burden for diabetes is attributable to modifiable risk factors.[1] The most significant common risk factors for diabetes are: overweight and obesity, physical inactivity, poor nutrition and tobacco smoking. Effective strategies that address these 'SNAP' (smoking, nutrition, alcohol and physical inactivity) behavioural risk factors are known to reduce diabetes in the at risk population.

Improving practice

What is important?

- Practice systems for the prevention and management of behavioural risk factors
- Training for team members
- Well defined practice policies
- Availability of appropriate resources (eg. a practice nurse), including the allocation of time to plan and implement prevention
- Effective information management and IT systems[2]
- Expansion of practice staff roles[3]
- Use of motivational interviewing techniques and the 5As approach
- Patient education materials[4]

Case study 1
Use of a patient register

Case study 1 gives an example of supportive systems such as the use of a register of patients with prediabetes that would assist the GP to systematically identify patients with SNAP risk factors, make use of a practice nurse to help educate patients, and work collaboratively with other health professionals, ie. sharing roles and responsibilities among members of the practice team.

A practice developed a register of patients with prediabetes that were obese. These patients could then be targeted to participate in tailored healthy living clinics aimed at promoting healthy lifestyle behaviours. The healthy living clinics aimed to assist patients to develop strategies to manage stress and anxiety; emotional eating; change lifestyle habits; and develop social support networks, as well as providing other tips to promote healthy lifestyle changes. Each program was of 10 weeks duration, with one individual consultation each week.
The clinics were facilitated jointly by a practice nurse and diabetes educator. The involvement of both the practice nurse and the diabetes educator was key to the program's success.

Adapted from: Central Highlands General Practice Network's Population health kit. Available at www.chgpn.com.au/user-categories/general-public-area/31

Small group discussion

- What activities are effective in supporting the implementation of behavioural risk (SNAP) interventions in general practice?
- What are some of the barriers to implementing behavioural risk interventions at the practice level?
- How can these barriers be overcome?
- What Commonwealth Government programs provide financial support for a behavioural risk program in general practice?
- What are some of the key roles for practice team members in supporting provision of lifestyle advice and support in general practice?

Case study 2
Patient education

The practice nurse provides education and resources to motivate patients who have been newly diagnosed with type 2 diabetes. This helps patients to make lifestyle changes, particularly by improving their diet.

The practice nurse wanted to promote healthy eating but noted that one of the barriers was patients' lack of knowledge about healthy food choices, appropriate ingredients and recipes. She found that her patients were often consuming meals with high carbohydrate and high glycaemic index content. She reviewed some standard dietary education brochures and decided to carry out her own research to look for a recipe book for people with diabetes. The book needed to have recipes that were nutritionally balanced, would assist them to lose weight and were tasty and pleasurable to eat.

She visited the Diabetes Australia website and found a useful recipe book and fact sheets on health food options designed for people with diabetes. The practice nurse also approached a dietician based at the local community health service to see if she would assist by conducting a number of supermarket tours to help her patients with the identification of healthy ingredients. The practice nurse provided details on how to obtain copies of the recipe book and booking details for the supermarket tours. The recipe book and supermarket tours proved very popular with patients and a valuable educational resource and experience.

Adapted from: Central Highlands General Practice Network's Population health kit. Available at www.chgpn.com.au/user-categories/general-public-area/31

Small group discussion

- What are some of the decisions a practice team needs to make specifically related to patient education and resources in order to develop and implement a systematic approach?
- In what ways can practice team members be involved in patient education and resources?
- What factors should be considered when selecting education programs and resources?
- Give some examples of effective strategies you have used to provide patients with diabetes with education and support in making lifestyle changes.

Case study 3
Motivational interviewing

Case study 3 looks at brief interventions on lifestyle risk factors using motivational interviewing and the 5As approach.

Scenario 1 – Susan

Susan, aged 32 years, is an office worker who presents with symptoms of tiredness and nausea. She lives alone and goes out drinking with friends or colleagues 4–5 times each week. She reports drinking about five drinks on each occasion, often more on weekends. She says that she does not enjoy being at home alone and goes out in order to stay in touch with people.

Scenario 2 – John

John, aged 57 years, was diagnosed with diabetes 2 years ago. He is overweight (body mass index 31) and his blood sugar control has been inconsistent. He attends the practice infrequently and has not attended follow up appointments in the past. He presents complaining of fatigue and tells you that he is unable to keep up with his young grandchildren.

Small group discussion

- Discuss how you would conduct the consultation for each of these scenarios.

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

What activities are effective in supporting the implementation of behavioural risk SNAP (smoking, nutrition, alcohol, physical activity) interventions in general practice?

For example:

- the entire practice needs to commit to collecting, recording and documenting appropriate information about a patient and accessing information on patient risks (eg. searching records to identify patients for assessment or follow up of previous behavioural interventions)
- training of practice team members, including nurses, GPs and allied health professionals in 'motivational interviewing' and SNAP brief intervention techniques[3]
- updating and managing tools to assist in patient assessment and management within the consultation (eg. assessment tools, patient education materials and aids)
- educating patients and carers about their risk factors and self management (eg. patient education sessions, managing access to information, practice newsletters)
- managing referral and communication of patient information (eg. directories and reports)
- recalling patients for follow up and assistance with maintaining lifestyle changes (eg. searching registers, telephone and mail recall, flagging records)
- quality improvement (eg. audit, rview of existing practices).

What are some of the barriers to implementing SNAP at the practice level?

- Perceived lack of staff time (especially consultations). Assessing or intervening in a consultation for single risk factors can take 2–10 minutes
- Practice information systems not geared to support SNAP assessment and management[5]
- Lack of organisation within the practice, including a team approach to management with responsibilities shared by many providers
- Lack of human resources[5]
- Difficulty linking with, getting support from, and referring to community health services
- Lack of financial incentives or funding to pay for involvement of nonmedical staff.

How can these barriers be overcome?

These barriers can be overcome to some extent by the development of a preventive program including:

- greater use of practice team members, especially practice nurses[5]
- setting practice priorities
- sharing roles and responsibilities among team members, eg. listing what roles each practice member currently undertakes and how SNAP interventions can be integrated into these existing roles and responsibilities
- reviewing the way in which appointments and follow up are arranged
- establishing information systems to support SNAP interventions[2,6]
- conducting ongoing quality improvement programs
- developing links with local services (eg. health promotion services).

What Commonwealth Government programs provide financial support for a SNAP program in general practice?

SNAP interventions can be part of a successful business model for general practice and an attractive component of practice programs encouraging patients to attend the practice. There are also a number of commonwealth programs that may help provide financial support for people with chronic conditions. These include:

- the Practice Incentives Program (PIP) incentives for establishment of chronic disease register and recall systems: www.hic.gov.au/providers/incentives_allowances/pip/new_incentives.htm
- the program to help fund practice nurses in rural practices: www.hic.gov.au/providers/incentives_allowances/pip/new_incentives/nurse_incentive.htm
- Medicare rebatable Enhanced Primary Care (EPC) planning services. An EPC multidisciplinary care plan may only be provided to patients with at least one chronic or terminal medical condition and complex care needs, requiring multidisciplinary care from a team of health care providers including the patient's GP: www.health.gov.au/epc/careplan.htm.

What are the key roles for members of the practice team in implementing SNAP at the practice level?

The roles and responsibilities for SNAP need to be shared among members of the practice team. For example:

The GP

- Leadership within the practice, confirming the importance of behavioural risk management (SNAP) interventions
- Identifying patients for risk assessment opportunistically
- Conducting assessments of the risk factors and readiness to change
- Providing brief interventions, especially behavioural counselling and risk assessment.

The practice manager or receptionists

- Managing the practice information system, including monitoring
- Identifying training needs (to ensure all staff understand the system)
- Developing a recall and reminder system practice protocol
- Ensuring patient education resources are available and up-to-date, both in the consulting rooms and waiting room
- Including SNAP material in the practice newsletter
- Managing the directories and referral communications to and from the practice
- Setting up and maintaining systems for patient recall and reminders
- Managing appointments for GP, nurse, and special education programs.

The practice nurses

- Managing the process, including maintaining written processes
- Sourcing educational and resource materials
- Identifying suitable patients
- Educating and informing patients, either individually or in groups
- Identifying SNAP risk factors that can be incorporated into plans for the care of the patient (eg. assessment and management goals for patients with diabetes)
- Following up patients by telephone, mail, visits or recall
- Ensuring the practice has appropriate tools available to conduct assessments and management
- Providing a link with self help and other community organisations
- Quality improvement
- Working with other services to reach disadvantaged groups
- Working with population health programs.

Case study 2

What are some of the decisions related to patient education and resources in order to develop and implement a systematic approach based on teamwork?

For example:

- the types of education and resources the practice will use
- the sources for the material and how to identify quality resources
- how to identify patients requiring education and resources
- how and when to deliver patient education, and distribute resources
- where to store them
- how often to update materials
- how to dispose of old materials
- how often to review the system.

In what ways can practice staff be involved in patient education and resources?

Practice staff can be invaluable and extensively involved in patient education and resources. Many of the clinical and administrative requirements can be allocated to a practice nurse or other appropriate staff member.

For example:

- disseminating information
- contacting patients when necessary and making appointments
- collecting, ordering, maintaining and updating materials
- communicating with practice staff about patient education and resources
- organising patient education
- updating standards and guidelines and informing the practice team of any changes
- reviewing the system
- actioning queries or problems.

Adapted from: The Team Work Research Study. Enhancing the roles of non-GP staff in chronic disease management in general practice

What are some of the factors to consider when selecting patient education and resources?

Factors to consider:[4]

- who is the target audience?
- are the messages relevant to the needs of the patient?
- is it written clearly and concisely, yet adequately detailed?
- is the content current, unbiased and evidence based?
- does the print size and layout render it 'reader friendly'?
- is it written with a positive tone?

Case study 3

Scenario 1 – Susan

For example:

- engage Susan in a discussion about her drinking levels, remaining nonjudgmental
- link Susan's symptoms to her lifestyle
- assess Susan's motivation and confidence to reduce her alcohol intake
- provide advice to reduce Susan's alcohol intake
- assist Susan by providing information and discussing ways in which she can reduce her intake, such as social activities that are alternatives to drinking with friends and other activities to occupy her
- arrange a follow up appointment.

Scenario 2 – John

For example:

- ask John about lifestyle factors such as diet, physical activity and diabetes management that may be affecting his health
- allow John to make the link between his fatigue and the poor management of his diabetes
- examine the benefits of improving John's lifestyle and improving his self management of his diabetes
- highlight any discrepancies
- assess John's level of motivation and confidence to change his lifestyle and manage his diabetes

- advise John to make changes to his lifestyle
- assist John with information on nutrition and diabetes self management
- arrange referral to services that may assist (eg. dietician, diabetes educator, exercise programs)
- arrange a follow up visit.

Definitions

Preventive care is a proactive intervention that promotes the health and wellbeing of individual patients and society. Given the steady increase in demand for healthcare, it is important to implement strategies that reduce the burden of illness in the community rather than only provide more care.[4]

Prevention can be classified into three types:

- primary: reduces likelihood of disease occurring
- secondary: aimed at an early detection before symptoms appear
- tertiary: attempts to prevent or minimise complications or disability resulting from established disease.

SNAP is a model for the general practice management of four common behavioural risk factors: smoking, nutrition, alcohol and physical activity. The SNAP program was developed for the Australian Government in 2002.

Self management can be defined as the patient 'engaging in activities that protect and promote health, monitoring and managing symptoms and signs of illness, managing the impacts of illness on functioning, emotions and interpersonal relationships and adhering to treatment regimes.'[7] In other words, patient self management involves the patient undertaking activities encompassing medical, physical and psychosocial elements that protect and promote their own health.

Resources

The RACGP launched *SNAP: a population health guide to behavioural risk factors in general practice* on 3 October 2004. This guide contains current best practice clinical and business strategies for supporting patients to change their risk factor status in the general practice setting. The SNAP guideline is available at www.racgp.org.au/guidelines/snap.

The RACGP. *Putting prevention into practice: guidelines for the implementation of prevention in the general practice setting* (the 'green book'). 2nd edn. Available at www.racgp.org.au/guidelines/greenbook.

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Practice systems and tools for improving care of patients with diabetes

Introduction

Diabetes is a chronic disease and as such presents as a long term, multifactor clinical challenge to both general practice teams and patients. Effective use of systems and tools in the management of diabetes can empower practice teams to assist GPs to make good clinical judgments; involve patients in self management; and provide timely, efficient, cost effective care, all of which contribute to improved outcomes, including the wellbeing of patients with diabetes.

Improving practice

What is important?

- Practice organisation and systems
- Planned care
- A team environment and defined team roles
- Taking a systematic approach to diabetes care
- Making effective use of information systems
- Use of guidelines, protocols and computer templates to support team based care

Case study 1
Establishing a patient register

Case study 1 provides an example of why and how a practice established a register of patients with diabetes. It highlights some of the issues and decisions that need to be made by practice teams related to setting up and maintaining a diabetes patient register and the use of a practice nurse to manage the patient registers.

The practice team wanted to create a register so that they could target patients with diabetes. This would ensure that each patient was provided with appropriate treatment and optimal ongoing management of their healthcare. A practice meeting was scheduled to discuss some of the issues related to creating a register, including what information it should contain. The practice manger was delegated responsibility for creating the register and she investigated several processes before deciding on the most appropriate one for the practice.

As the practice utilised Medical Director, an accurate diabetes register was achieved by recording patient histories, downloading pathology results, and using the diabetes record module where diabetes assessment and/or relevant measurement values were filled out. Patient histories were edited to add a diagnosis, retrospective history and prescriptions. The practice nurse was nominated to manage the system.

Small group discussion

- What are some of the decisions practice teams need to make when setting up and maintaining an accurate, complete and current diabetes patient register?
- What patient information do you think should be collected and included in the patient register?
- What forms of patient registers have you established in your practice?
- What roles, responsibilities and tasks do you think need to be allocated in the establishment and maintenance of a register?
- Who in your practice is responsible for the quality of the patient disease register?
- What are some potential coding and patient issues common to a patient disease register?

Case study 2
Setting up a recall system

Case study 2 illustrates why and how a practice team sets up a recall system for diabetic patients.

The practice wanted to set up a recall system for patients with diabetes. A practice team meeting was organised to discuss the new system and a business model involving the practice nurse (ie. a 15 minute appointment with a nurse and 15 minutes with a GP). The practice team decided to trial a model involving both nursing and reception staff. The reception staff were asked to search the diabetes patient register and create a recall list of patients with diabetes and then pass this information on to the nursing staff.

A recall letter template and a mail merge recall list was created. The nursing staff took responsibility for sending out recall letters to each patient. If there was no response from the patient to this letter, follow up calls were made by reception staff. An appointment was made, and after the patient was seen by the nurse and then a doctor, the recall was removed from the system.

The system was trialled for 2 months and the staff reported that they were satisfied that it was working well with very little extra workload. The practice decided that the diabetes patient register would be searched every 3 months for patients who had not had a recall for 12 months, so that nobody could fall through a gap in the system. They also ensured that the patient was scheduled for a separate visit required to finalise the Service Incentive Payment (SIP) procedure. The protocol was finalised and distributed to all practice team members. New practice team members were given copies of the protocol.

Adapted from: Central Highlands General Practice Network's Population health kit. Available at www.chgpn.com.au/user-categories/general-public-area/31

Small group discussion

- How are patients with diabetes who would benefit from planned care approached in your practice?
- What are some of the decisions practice teams need to make related to setting up and maintaining a recall and reminder system?
- Does your practice have an active recall system of patients with diabetes?
- Describe the roles of various practice team members in creating and managing a recall and reminder system in your practice.
- Discuss tools/systems (besides registers) that optimise care for people with diabetes.

Case study 3
Use of guidelines, protocols and templates to support team based care

In a large practice there are nine partner GPs (all full time) and eight assistant doctors, together with six full time nurses, a dietician, diabetes educator and psychologist. One part time nurse works as the asthma educator. There are also two part time and one full time practice managers, who are each responsible for different aspects of management. The practice is accredited and has comprehensive protocols and processes. There are regular team meetings for the whole practice, including the other health professionals.

The practice wanted to ensure that their practice protocols for diabetes management were aligned with current best practice guidelines. At a team meeting, a consensus on what guidelines the team should follow was reached following a review of three sets of guidelines for clinical management of patients with diabetes. A decision was taken to use the RACGP, Diabetes Australia, *Diabetes management in general practice guidelines*.

The practice manager then produced for each work station a wall chart listing the protocols and organised for computerised prompts to be set up. The practice then used the patient register/recall system to facilitate the evaluation of care against standards prescribed in the guidelines, and to identify patients with diabetes that were overdue for review, prompting GPs to recall these patients.

Small group discussion

- What are key elements of a practice's information system that successfully supports team based diabetes care?
- Why use clinical practice guidelines and protocols?
- What clinical guidelines do you use in your practice? How do you access them?
- Do your practice protocols align with best clinical practice as defined in the RACGP Diabetes management guidelines 2009–2010?
- What are some of the benefits of using computer templates?
- Discuss strategies for maximising use of templates in your practice.
- How often do you analyse practice data to see if using the templates and standard protocols has improved patient outcomes?

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

What decisions relating to setting up systems for a diabetes patient register need to be made by practice teams?

For example:

- what disease codes the practice will use
- how often pathology results are downloaded and collated
- the interval between receiving results, checking them for clinical significance, and identifying patients who should be included in the register
- how data is stored, eg. paper or computer
- who has access
- how often should records be searched
- how often should the register be updated
- how often should the system be reviewed.

What type of patient registers have you established in your practice?

There are different types of registers, for example:

- age-gender registers (eg. patients over 65 years of age)
- at risk register (eg. abnormal HbA1c)
- prevention register (eg. immunisation)
- disease register (eg. diabetes).

What information should be collected and included in the patient register?

The minimum amount of information should include the patient's name, identifier (eg. practice file number) and contact details.[1] Some patient registers contain additional information such as gender and any conditions or assessments that need follow up.

What roles, responsibilities and tasks need to be allocated?

For example:[2]

- managing the process, including maintaining written processes
- identifying training needs (to ensure all staff understand the system)
- managing the results (obtaining and processing) of investigations
- identification of patients to be included in a patient disease register
- compiling the register
- contacting patients when necessary and making appointments
- updating register details
- designating the person responsible for further action in the event of queries or problems
- reviewing the system

Who in your practice is responsible for the quality of the patient disease register?

All members of the practice team contribute to the patient disease register and in many instances the records generated by one staff member will affect another. Therefore, each practice staff team member has equal responsibility for the quality of the patient disease register. The practice team members need to record in a manner that will enable other members of the team to access and utilise the records as the need arises.[2]

What are some potential issues and errors that could arise?

- Coding issues, eg. nonexistent codes, nonstandard codes and/or free text
- Patient related issues, eg. deceased patients, inactive patients
- Data fields missing, eg. year of birth, type of diabetes
- Invalid data entries, eg. the data was not collected accurately or completely.

Case study 2

How are patients who would benefit from planned care approached in your practice?

- Using a reminder system
- Letters, telephone, email, SMS
- Opportunistically
- While at the practice: either before, during or after the GP consultation.

What are some of the decisions practice teams need to make relating to setting up and maintaining a recall and reminder system?

For example:[2]

- how should a reminder be established: by a GP with each patient; by searching the database; or should it be undertaken by an allocated member of the practice team?
- how should patients be reminded and who should be responsible for doing this? Should there be recall letters mailed out, telephone calls made by staff, on screen prompts for the GP when the patient attends for an unrelated consultation?
- types of reminders: chronic diseases; risk management; CVD; diabetes; other activities (eg. physical activity prescription follow up, smoking cessation review, dietary management review, alcohol consumption review)
- how often should patients be recalled?
- how is data stored (eg. paper or computer)?
- who has access?
- when should old recalls from the system be removed?
- how are GPs in the practice going to be alerted if a recall is due?
- when are patients informed and consent sought?
- how often is system to be reviewed?
- how is data protected from misuse, loss or unauthorised access?

Does the practice have an active system of recall of patients for their diabetic care?

Participants to discuss.

Describe the roles and responsibilities of practice team members as they relate to a recall and reminder system.

For example:

GPs are responsible for:[3]

- obtaining patient consent to enrol in the reminder system
- entering reminders on the computer
- checking patient files on the computer for recalls due
- updating or removing recalls as necessary.

Practice staff are responsible for (on an agreed regular time such as fortnightly, monthly):

- printing a list of all reminders due from all doctors for a specified time period
- checking the list with doctors or the medical record to see if any of these reminders need to be deleted due to a recent visit or other reason
- deleting patients from reminder lists if advised by doctors
- printing letters and labels
- posting letters and/or phoning patients

Discuss tools/systems (besides registers) that optimise care for people with diabetes.

Practice organisation and systems, for example:[4]

- information systems
- recall/call systems for patients with diabetes
- structured record systems
- systems to support self management
- communication systems[3]
- planned care
- team climate
- team roles (eg. use of nurses to manage disease registers and recall systems).

Case study 3

What are some key elements of a practice's information system that successfully support team based diabetes care?

Core components related to success include:[5]

- connection to a broad electronic health record system
- decision support in the form of computerised prompts
- guidelines
- an appropriate non-IT system of care and the use of specialised IT components
- useability is essential to successful implementation of a software system.

Other suggestions

Patient register/recall systems facilitate:

- the evaluation of care against standards prescribed in clinical management guidelines
- the identification of patients overdue for review
- prompt GPs or the nominated practice staff member to recall these patients.

Why use clinical practice guidelines and protocols?

- Guidelines are a method of optimising and standardising care and their use facilitates evaluation of specialist and GP practice, as well as patient health outcomes.
- Protocols usually include guidelines, eg. on physical examination, screening for risk status, and how and when to refer patients developing complications to specialist care
- Guidelines and protocols are a crucial first step in maintaining and promoting effective and efficient shared care programs
- Clinical practice guidelines continue to be a topic of debate, particularly in regards to their usefulness and effectiveness in clinical practice.

The National Health and Medical Research Council has put forward the following reasons for using clinical practice guidelines:

- to achieve better health outcomes by informing both healthcare professionals and consumers about the treatment options available
- for the broader education of health professionals and consumers
- to contribute to quality assurance processes
- to possibly assist in the resolution of ethical and legal disputes
- to improve patient care.

The Australian Health Ministry Advisory Council, National Nursing Task Force Position Paper states, the benefits of multidisciplinary guidelines include:

- agreement on clinical aims and alignment of effort
- synchronisation of care and the provision of more consistent information to clients
- less duplication, reduction in effort and cost associated with multiple, separate pathways/protocols
- promotion of innovation and flexible, responsive care options
- greater sustainability of guidelines that improve care.

However, the use of clinical practice guidelines by only one member or one discipline in the healthcare team, such as practice nurses, can have contrary effects.

A risk management approach should be used to identify elements of a team's clinical practice that may warrant the use of a clinical practice guideline.

Do your practice protocols align with best clinical practice as defined in the RACGP, Diabetes Australia publication, *Diabetes management in general practice guidelines.*

The RACGP, Diabetes Australia diabetes management guidelines provide comprehensive management covering most aspects of diabetes care, from diagnosis to complications. It can be used as a general update in diabetes, a reference manual for management issues, and a resource for upskilling programs.

What are some of the benefits of using computer templates?

The use of computer templates allows a systematic, consistent approach to delivering care to patients and improved accuracy and completeness of patient data.

Discuss strategies for maximising the use of templates in your practice.

For example:[6]

- keep it simple and user friendly
- provide one-to-one training and support to the staff using the system
- routinely review the template and amend where appropriate
- regularly use the data from the template to inform the team of its performance.

How often do you analyse practice data to see if using the templates and standard protocols has improved patient outcomes?

Participants to discuss.

Note: there is no right answer (this question is for prompting participants to think about the need to evaluate).

Definitions

A practice patient disease register is a comprehensive list of patients with a particular disease state.[1]

Self management involves engaging in activities that protect and promote health; monitoring and managing symptoms and signs of illness; managing the impacts of illness on functioning, emotions and interpersonal relationships; and adhering to treatment regimens.[7]

Motivational interviewing is a directive, patient centred counselling style that aims to help patients explore and resolve ambivalence towards behaviour change.[8]

Resources

Improving self management

The California Health Care Foundation website has resources to assist with self management. Of note is a 30 minute video that can be downloaded free of charge. This video contains useful steps to improve a person's self management and addresses the topic of designing person centred personal health records, seven models for successful self management support, tips for helping people manage medication costs, self management tools and using telephone support: www.chcf.org/topics/chronicdisease.

The benefits and importance of a systems approach to self management.

Good Life Club offers resources to agencies wishing to embed self management into practice: www.goodlifeclub.info/index.php.

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Referral supports and team care arrangements

Introduction

The increasing number of people with diabetes has meant an increasing demand on services and resources. Shared diabetes care has arisen out of recognition of the problems with care when provided solely by a diabetes service or by a GP for example. Some patients with diabetes require multidisciplinary care involving other providers such as a diabetes educator, endocrinologist, and podiatrist. Specialist resources are limited and need to be utilised by those with complications or complex problems. Team care integrates the skills of different healthcare professionals with those of the patient, and their family, into a comprehensive lifetime diabetes management program.

Improving practice

What is important?

- A stronger emphasis on team based care arrangements
- Coordinated teamwork
- Delegation of care from the GP
- Expansion of the non-GP role in diabetes management
- Good information systems and better use of clinical software
- Better use of information management and information technology
- Better use of protocols and practice tools
- Good links with other service providers

Case study 1
Chronic disease management

Case study 1 gives an example of how chronic disease management (CDM) items and team care could work for a patient with diabetes. It also highlights the role of the practice nurse and the use of computer systems to support the GP, and points out the difficulties in some areas where there is limited access to other health professionals (eg. a dietician), which can result in limiting access and follow up of patients.

James, aged 49 years, is returning to see his usual GP following the completion of tests which included: GTT; LDL cholesterol; HDL cholesterol; triglycerides; HbA1c; TSH; LFT. Before seeing his GP, James is seen by the practice nurse who assesses him and documents the following: BP 145/95, weight 94 kg, waist circumference 107 cm. He suffers from sleep apnoea, is a social smoker, is overweight (body mass index [BMI] 33.3), and is taking medication for his hypertension and hypercholesterolemia. James has a history of heart problems and has recently experienced atypical chest pains. He has had an echocardiogram. The practice nurse notes that James finds it difficult to manage his weight.

At the consultation the doctor confirms that James is not diabetic but has pre-diabetes and is at high risk of developing diabetes. His GP suggests that he would benefit from a General Practice Management Plan (GPMP) and Team Care Arrangements (TCA) to ensure he gets the best treatment and access to services. The GP explains that James would qualify for TCA services. They discuss his weight problem and James' views about his weight and current lifestyle.

As James is willing to make some lifestyle changes the doctor suggests that he consider seeing a dietician for dietary advice. James agrees and is happy for another health professional to be involved. They set a goal related to weight control and to increase exercise over the next 12 months. His GP uses medical software to document needs, goals, patient actions, treatment services and prints a referral letter for James to give to a dietician who is registered with HIC to provide Medicare Benefits Scheme (MBS) allied health services under the Enhanced Primary Care (EPC) Program. The GP sets a review date. A copy of the TCA and the referral letter are offered to James and also added by administration staff to the James' records.

James contacts the dietician, only to be told that there is a waiting period of 3 months before she can see him and advises him to return to his GP and ask for a referral to another dietician if he wants to be seen earlier.

Small group discussion

- What are some of the possible obstacles to using CDM items such as GPMP or TCA service items?
- How could a practice nurse assist with preparation of a GPMP or TCAs?
- What coordination issues can arise when diabetes care is shared between the GP, practice nurse and others external to the practice, or when patients have complex health issues?
- What are the requirements for effective coordination and good team care?
- How can you make better use of clinical software, information management and IT to support diabetes care?

Case study 2
Managing patient needs

The following cases highlight the needs of a patient with diabetes and the needs of a patient with poorly controlled diabetes and complex care needs.

A patient with diabetes

Janet is a 46 year old woman with a BMI of 31. She was diagnosed with diabetes 5 years ago. Today Janet presents with knee pain.

A patient with poorly controlled diabetes and complex care needs

June, a 78 year old woman, visits her GP. At the consultation the GP confirms that she has diabetes. The GP also identifies that June's diabetes has gone undetected for some time and she has complications as a result – leg ulcers and numbness from poor circulation. June is frail and lives alone at home and is therefore at risk of falls.

Small group discussion

- What clinical issues can you identify in each of the above scenarios?
- What referrals could be considered in each of the above clinical situations?
- In your local area, what community support and other health services are available for patients with diabetes? Do you have ready access to this information?

Case study 3
A collaborative team approach

Case study 3 looks at a collaborative team approach and focuses on the preparation of a GPMP (MBS Item 721) and the use of Diabetes Service Incentive Payment (SIP).

Michelle, 69 years of age, has type 2 diabetes, hypertension and high cholesterol. Michelle tells the GP that after years of good control of her diabetes her weight has increased over the past 6 months (BMI now 30) and she has recently been hospitalised for an episode of cellulitis affecting her left leg. Her most recent HbA1c was 7.2. The GP discusses with Michelle the benefits of a GPMP. The goals of the GPMP are weight reduction, better monitoring of blood sugar, and an increase in physical activity. A plan for regular review of Michelle's diabetes was discussed. The GP also arranges for Michelle to see a diabetes educator at the local hospital. Michelle attends for regular follow up, including a review of the GPMP at 6 months. Having completed an Annual Diabetes Cycle of Care at 12 months, the practice manager organises for the Diabetes SIP to be claimed for this patient.

Small group discussion

- What methods have you found to be effective in promoting team cohesion and a common approach to diabetes patient care?
- Discuss how your practice organises follow up care to reduce the need for multiple practice visits and to increase access to care.
- What methods do you employ in your practice to improve team function and patient care for people with diabetes?
- How do you increase participation in the consultation and encourage and support patient responsibility for managing their diabetes?

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

What are some of the possible obstacles to using CDM items such as TCAs and GPMPs?

For example:

- red tape/paper work
- administrative pressures
- availability of referral options for patients
- time constraints
- extra work load
- complexity of government incentives
- poor understanding of EPC Medicare items and their appropriate use[1]
- shortage of trained nurses in rural settings1
- limited awareness and use of EPC software[1]
- criteria for access to services
- difficulties with logistics (eg. arranging case conferences)
- capacity to deliver choice
- amount of time for consultation
- facilities
- poor IT/IM systems
- lack of links between practices and state funded services
- lack of financial incentives
- many rural and urban areas face workforce shortages for GPs and other allied health professionals and specialists.

How could a practice nurse assist with preparation of a GPMP or TCA?

For example:

- assessing patients (GPMP)
- listening to patients' ideas and feelings (GPMP)
- providing information to assist with self management and other patient education needs (GPMP)
- preparing information for GPMP
- documenting GPMP
- scheduling further appointments (GPMP or TCA)
- contacting other providers (TCA)
- documenting TCA
- care coordination under a GP's delegation.

What coordination issues can arise when patient care is shared between the GP, practice nurse and other external health provider, or when patients have complex health issues?

- The more providers involved and the more frequent the attendances required are, the more coordination required
- Coordination is a complex process requiring teamwork
- The current fee-for-service model, whether directed through GPs or broadened to other healthcare providers, limits the capacity to be innovative in developing coordinated care
- A critical element of coordinated care is information gathering and recording.

What are the requirements for effective coordination and good team care?

- The type of coordinated care likely to work best is one which is accepted and understood by all those involved
- Good communication
- Good information gathering systems
- Coordinated teamwork
- Good relationships between service providers
- Use of non-GP staff (eg. chronic disease coordinator or practice nurse) who can assist with identification of referral pathways; improve linkages

with other support programs; create systems for feedback; provide patients with information about recommended interventions (eg. information about community resources and support services in the local area, referral options) and lifestyle counselling
- Awareness of services (use a readily accessible and updated directory of local services)
- Receiving feedback from other health professionals/specialist
- Use of protocols and other practice tools
- Computer information systems where feasible.[2]

How can you make better use of clinical software/information management and IT?

- Use of systems to support the coordination of care (eg. e-referral)
- Use of computer software (eg. many software packages combine relevant information that allows reviews of patients' progress, generates recalls, and conducts an audit of diabetes patients for EPC care plan items[1,2]
- Use of practice registers, reminder systems, screening and information gathering systems, data storage, electronic linkages, imaging and discharge summaries[2]
- Further developing tools, instruments and systems (eg. common assessments, care plans, decision supports) that can be used across a range of providers. For example, contact a division of general practice about local initiatives (eg. projects that propose to design and implement information systems to allow the exchange of clinical information between GPs, community health staff, pathology services and specialist staff).

Case study 2

What clinical issues can you identify in each of the above scenarios?

No one correct answer.

Which referrals could be considered in each of the above clinical situations?

No one correct answer.

Scenario 1 – Janet

For example:

- The 46 year old woman with arthritis would benefit from physiotherapy and dietician review
- An exercise professional to assist with strengthening her quads, and also a program to promote cardiovascular fitness
- Until the knee pain is settled, hydrotherapy may be of benefit.

Scenario 2 – June

For example:

- The 74 year old elderly woman would benefit from seeing a podiatrist and getting advice about the right shoes to wear and how to monitor the condition of her feet herself
- A referral to a diabetes educator for assistance with management of her diabetes and its complications.

What community support and other health services are available in your local area for patients with diabetes? Do you have ready access to this information?

Discuss what support is available with all participants.

For example:

- local support self help groups. Contact the local division of general practice for a list of local services and referral pathways that support patients (eg. community health services)
- allied health providers (public and private), courses offered through primary and community health services
- pharmacist support with Home Medicine Reviews

- lifestyle management programs
- National Diabetes Services Scheme
- Diabetes Australia
- Lifescripts resource kit to support GPs in providing lifestyle modification advice: www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-lifescripts-genpracresources.htm
- MeasureUp website has information to support change: www.australia.gov.au/MeasureUp
- Healthy Active Australia – Get set 4 life healthy weight information and resources: www.healthyactive.gov.au
- Nutrition Australia: www.nutritionaustralia.org.au
- QUIT: www.quit.org.au.

If you don't have ready access to this information, it can be useful to engage with your local division of general practice to access their diabetes resources and prepare a referral directory for dieticians, exercise programs, diabetes educators and other support services.

Case study 3

Give examples of methods that promote cohesion and a common approach to patient care?

- Team members need to communicate with each other and the patient
- Regular communication and sharing of patient information among members of a team. Effective communication can reduce duplication in assessment, treatment and ordering of diagnostic tests and interventions
- Team meetings, small group learning and journal clubs promote cohesion and a common approach to patient care
- Development and use of written plans for treatment goals, disease management, personal goals and patient education and skill development
- A multidisciplinary planning and documentation tool for the medical record can help team members to clarify responsibilities, coordinate care and communicate the patient's progress
- A consistent message from all team members reduces patient's confusion and increases effective self management behaviours
- Use of protocols and other diabetes management tools are important to a collaborative team approach: include standards of care; treatment guidelines; protocols; and algorithms, flow sheets, standing orders, chart stickers and other recording and reminder systems.

Adapted from: National Diabetes Education Program. Team care: comprehensive lifetime management for diabetes. Available at ndep.nih.gov/publications

Other suggestions

- Teamwork skills training[3]
- Team building activities[4,5]

What types of follow up care have you used to reduce the need for multiple practice visits and to increase access to care?

For example:

- follow up care can be in the form of return face-to-face visits or interaction with other team members and community partners/specialists/other allied health providers
- telephone interviews
- fax or email correspondence
- arranging for patients to send self monitored data and to receive telephone counselling and ongoing therapeutic management by nurses and dieticians for example.

What methods do you employ in your practice to improve team function and patient care?

- Shared experiences. Elements of team building include:
  - set clear goals with measurable outcomes
  - define tasks and assign roles
  - communication systems and structures
  - good clinical and administrative systems
  - training.
- The need for a designated leader in the practice who:
  - sets expected standards of behaviour

- enables the inclusion of nonmedical staff in team activities and decision making
- provides opportunities for knowledge and skills development, as well as guidance and coaching to develop staff and promote workforce development
- identifies and utilises staff strengths, valuing their unique contributions.

Source: UNSW Research Centre for Primary Health Care and Equity: Teamwork Research Study. Enhancing the role of non-GP staff in chronic disease management in general practice (Section 5: Planned care)

How do you increase participation in the consultation and encourage and support patient responsibility for managing diabetes?

For example:

- acknowledging patient concerns (eg. billing, confidentiality, time spent waiting, accessibility of providers, and continuity of care) can influence patient satisfaction and encourage involvement
- making patients active partners in their treatment is more likely to make them adhere to treatment plans, ie. working in partnership and demonstrating respect for their ideas and views[6]
- patient centred goal setting
- self management education provides patients with knowledge and skills to actively participate in their care, make informed decisions, set collaborative goals, carry out daily management, evaluate treatment outcomes and communicate effectively with the healthcare provider team.

Definitions

The SIP is intended to remunerate individual GPs for services. This payment is made in addition to the Medicare rebate for consultation, and is paid quarterly via PIP.

Resources

- The RACGP. *Chronic condition self management: a summary for GPs, is a set of guidelines and strategies to assist in the care of patients with chronic diseases*. These guidelines outline a framework to assist GPs and nurses to facilitate self management. They provide prompts and tools to use self management in clinical consults: www.racgp.org.au/guidelines/sharinghealthcare
- How to establish a nurse led chronic disease clinic in general practice: www.centraltas.co.nz/LinkClick.aspx?fileticket=BoFvjc1nli8%3D&tabid=68&mid=378
- Australian Divisions of General Practice. Divisions Nursing in General Practice National Resource Kit, 2005
- Australian General Practice Network. Nursing in general practice recruitment and orientation resource: a guide for general practices, practice nurses and divisions of general practice, 2006.

Useful websites

Australian Practice Nurses Association

www.apna.asn.au

Department of Health and Ageing

www.health.gov.au

Medical Benefits Schedule

www.health.gov.au/mbs/

The Royal Australian College of General Practitioners

www.racgp.org.au

Australian General Practice Network

www.agpn.com.au.

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Diabetes Annual Cycle of Care and systems to support the Diabetes Service Incentive Payment

Introduction

People with diabetes need ongoing medical monitoring.[1] The RACGP, Diabetes Australia guidelines, *Diabetes management in general practice* emphasise the importance of regular quarterly follow up visits and annual reviews, which offer opportunities for the GP and the patient with diabetes to discuss concerns and review the condition. The Australian Government National Integrated Diabetes Program (NIDP) aims to improve prevention, and to promote more effective early diagnosis, and better management of diabetes in general practice through the introduction of funding and support for systematic care, based on 12 key clinical indicators performed as an annual cycle of care.

The Diabetes Service Incentive Payment (SIP) is a major feature of the NIDP. The Diabetes SIP offers a financial reward for appropriate care for people with diabetes and is designed to provide an incentive to provide improved patient care. The incentive payment can be claimed for completion of an annual cycle of evidence based care and is a means of measuring GP management. Research shows that some of the process difficulties associated with the Diabetes SIP (eg. the additional administration burden it imposes) can be overcome with greater involvement of practice team members and the use of good IT systems within practices.[2]

Improving practice

What is important?

- Planned care – regular reviews, investigations
- Referrals to other health providers or specialists
- Coordinated teamwork
- Follow up of patients
- Communication with other team members, and with patients
- Practice organisation and systems
- A systematic approach to diabetes care
- Effective use of information systems
- Use of guidelines, protocols and computer templates to support team based care

Case study 1
The role of the practice nurse in the Diabetes Annual Cycle of Care

Case study 1 illustrates the role of the practice nurse in undertaking specific elements of the Diabetes Annual Cycle of Care.

Jim, a 48 year old male patient with type 2 diabetes, presents at the practice for his annual review. He is seen first by Linda, the practice nurse. Linda welcomes Jim and takes a few minutes to establish a rapport with him and then enquires after his general wellbeing. During the appointment, Linda asks about his smoking, nutrition, alcohol intake and how much he exercises and how often. She checks his weight, waist circumference, blood pressure, and examines his feet. Jim has been experiencing some foot discomfort – she notices he has poor skin condition and makes a note of this so she can pass the information onto his GP. She tells Jim that he may need a referral, as his last podiatry check up was over 1 year ago. They discuss and review goals with Jim to identify specific areas for focus during the GP consultation. After the appointment, the information gathered at the review is entered into the patient record so it can be accessed immediately by Jim's GP.

Small group discussion

- What are the minimum requirements that make up the Diabetes Annual Cycle of Care as described in the current Diabetes Australia, RACGP *Diabetes management in general practice* guidelines?
- What parts of the annual and quarterly reviews can be conducted by a practice nurse?
- What has been shown to enhance nurse management of diabetes patients?

Case study 2

Importance of systems to support undertaking annual cycles of care to claim SIP payments

Case study 2 illustrates how and why a practice is reviewing the number of patients who have completed their Diabetes Annual Cycle of Care which enables the claims to be lodged for Diabetes SIPs.

The practice wanted to identify patients who have diabetes and who were overdue for SIP claims. The practice manager ran a search on the patient database to identify patients who had a cycle of care item claimed in the past 12 months. The information was then checked against patient information in the SIP column of the diabetes register.

Patients with an incorrect date in their SIP column were corrected. Of the 92 patients with a SIP claimed in the past 12 months, 23 patients' records were incorrect and had to be updated. Of the patients on the diabetes register, 92 had a SIP claimed in the past 12 months, 53 had a SIP claimed more than 12 months ago, and 92 patients had nothing listed in the SIP column of the register. A total of 145 patients were due for their SIPs. The practice manager held a meeting with staff to develop a strategy and a priority list for targeting patients overdue for their Diabetes Annual Cycle of Care.

Source: Brooke St Medical Centre, Central Highlands General Practice Network case study

Small group discussion

- What is your estimation of the number of patients for whom your practice has claimed a Diabetes Annual Cycle of Care?
- Discuss if your existing call/recall system is proactive enough.
- What are the potential benefits for your practice of greater use of diabetes SIPs?
- What factors should be considered by a practice before going ahead with establishing systems to support improved uptake of the Diabetes SIP?
- What supports the uptake and maintenance of the Diabetes SIP in general practice?

Case study 3
Information systems and the Diabetes Annual Cycle of Care

Case study 3 illustrates the role of the practice nurse and the use of information systems to support the Diabetes Annual Cycle of Care.

The practice team decides there is a need to improve the completion rates of the Diabetes Annual Cycle of Care for patients. The practice nurse is asked to audit the diabetes register to determine how many patients have not completed their Annual Cycle of Care.

The practice nurse organises for a recall letter to be sent to these patients. Pathology forms are also sent and patients are advised to have their blood tested before visiting their GP. The audit was completed in 1 week and recall letters were sent out. There were 280 patients that needed to be recalled. As there were many patients that needed to be recalled, the clinic sent out four recall letters each week. This ensured that the clinic was not overloaded and same day access not taken up. Patients saw the practice nurses first, and completed the major part of the assessment before review with their GP.

Adapted from: Flinders University. National Primary Care Collaboratives: collaborative handbook. Version 2. October 2005. Available at www.npcc.com.au

Small group discussion

- Can you identify the number of patients with diabetes who have not completed their Annual Cycle of Care? If not, decide how you will call/recall these patients.
- Are your patients invited for review according to the Diabetes Australia, RACGP, *Diabetes management in general practice guidelines*?
- How might the workload in the call/recall system best be managed?
- Discuss integrating the patient's perspective in the design of your system? What type of information could patients provide?

Suggested answers

Please note that these sample answers are designed to be helpful and to aid discussion. There are several ways to approach the discussion points, and these are not the only correct answers.

Case study 1

What are the minimum requirements of the Diabetes Annual Cycle of Care as described in the current Diabetes Australia, RACGP, *Diabetes management in general practice guidelines*?

The minimum requirements are outlined in *Table 1*.

The yearly review is an opportunity for a more detailed assessment, updating the problem priority list and the re-establishment of goals and contractual arrangements for management. A full system review (checking for vascular, renal, eye, nerve and podiatric problems) needs to be performed.[1]

What parts of the diabetes annual/quarterly review can be conducted by the practice nurse?

For example:

- Identifying eligible patients through examination of patient records and patient information systems used in the practice
- Information collection (eg. measuring height, weight, blood pressure and lifestyle risk factors outlined in the *Diabetes management in general practice guidelines*).

What has been shown to enhance nurse management of diabetes patients?

For example:

- Knowledge, skills and training (eg. diabetes education, motivational interviewing, lifestyle counselling, teamwork)

Table 1. Diabetes Annual Cycle of Care minimum requirements

Blood pressure	Every 6 months
Height/weight/waist (BMI)	Every 6 months
Feet examination	Every 6 months
Glycaemic control (HbA1c)	Once per year
Blood lipids	Once per year
Microalbuminuria	Once per year
Eye examination	At least every 2 years
Smoking review	Review once per year
Healthy eating plan	Review once per year
Physical activity	Review once per year
Self care education	Review once per year
Medications	Review once per year

- Computerised management information systems
- Diabetes management tools.

Case study 2

What is your estimation of the number of patients with diabetes that your practice claimed SIP for the completion of a Diabetes Annual Cycle of Care?

For discussion.

Discuss if your existing call/recall system is proactive enough.

For discussion.

What are the potential benefits for the practice of greater use of SIP payments?

- Better health management and outcomes for patients
- More efficient use of appointments as visits are scheduled rather than emergency
- More appropriate financial compensation for work done.

What factors should be considered by a practice before going ahead with establishing systems to support improved uptake of the Diabetes SIP?

For example:

- capacity – do you have the appointment spaces required?
- accreditation – are you working in an accredited practice?
- resources – do GPs, nurses and other staff who have time to complete or assist with Enahnced Primary Care items?
- patients – who will comply and get benefit from these items? Can you develop a system with your patients?
- do you think they make a good business model?
- how will you manage patients who do not attend?

What supports the uptake and maintenance of the Diabetes SIP incentive within general practice?

Research shows that there are a number of factors that support the uptake and maintenance of the Diabetes SIP incentive within general practice including:

- human resources: involvement of practice support staff, eg. a practice nurse can play a significant role
- effective communication and teamwork within the practice
- effective IT systems: hardware and software
- effective divisional support[2]
- Having a systematic approach. This can be facilitated by having a 'driver' within the practice, having a practice nurse, and being computerised.

Case study 3

Can you identify the number of diabetes patients who have not completed their Annual Cycle of Care? If not, decide how you will call/ recall patients?

- For example, some practices use clinical computer system (linking via your computerised diabetic template)
- Are your patients invited for review at intervals consistent with the Diabetes Australia, RACGP, *Management of diabetes in general practice guidelines*?
- Participants to answer according to their own practice policies – perhaps have a link to the guidelines

How might the workload in the call/ recall system be managed?

- Some practices find it useful to work out how many patients they need to see each year and have a system to call the right proportion each month or week, remembering to adjust this as the register grows. This allows a smoothing out of the demand for care from this group of patients throughout the full year and enables greater planning and control of the workload for the care team
- Some practices find it useful to provide a general clinic to cover a number of chronic conditions, eg. asthma, diabetes, ischaemic heart disease.

Adapted from: UNSW Research Centre for Primary Health Care and Equity: Teamwork Research Study. Enhancing the role of non-GP staff in chronic disease management in general practice (Section 5: Planned care)

How would you manage patients who did not attend?

Participants to share their own experiences and ideas.

Discuss integrating the patient's perspective in the design of your system. What information could patients provide?

Patients should be able to provide valuable information on, for example:

- the style and content of letters and patient literature
- the organisation and timing of clinics/appointments to maximise attendance
- how to best deliver care to patients with more than one chronic condition
- understanding issues around compliance with medication and developing patient self care (Taken from: UNSW Research Centre for Primary Health Care and Equity: Teamwork Research Study. Enhancing the role of non-GP staff in chronic disease management in general practice [Section 5: Planned care])

Adapted from: Flinders University National Primary Care Collaboratives. Collaborative handbook. Version 2, October 2005

Definitions

'A team is a group with a specific task, or tasks, the accomplishment of which require the interdependent and collaborative efforts of its members.'[3]

Multidisciplinary teams are those in which 'multiple disciplines work in the same site and serve the same patients, but each discipline operates with considerable independence – ie. each generates its own assessment and treatment plan [and] implements the plan... Team members share information with each other, but there is no attempt to generate or implement a common plan. Multidisciplinary teams are also hierarchically organized, with a designated program leader... who is responsible for overseeing the program, leading meetings, resolving conflicts, allocating caseload... team members feel responsible only for the clinical work of their discipline and need not share a sense of responsibility for program function and team effectiveness.'[4]

Service Incentive Payment (SIP) is an incentive paid to the GP once a year, per diabetes patient, when they have completed of an annual cycle of evidence based care and a means of measuring GP management.

Practice Incentives Program (PIP) replaced the Better Practice Program in 1998 and provides incentives for accredited general practices to improve the quality of care provided to patients.

Guidelines are a method of optimising and standardising care and their use facilitates evaluation of specialist and GP practice as well as patient health outcomes.

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