

The role of the pharmacist in providing care for people with type 2 diabetes

This document represents the current, official position of the Pharmaceutical Society of Australia (PSA) in relation to the role of the pharmacist in caring for people with type 2 diabetes.

Background

It has been estimated that 7.4% of Australians aged 25 years and over have type 2 diabetes and that half of those are currently undiagnosed. The number of Australians with diabetes is increasing, with one new case per 450 people each year.^{1,2}

Diabetes and its associated complications, which include cardiovascular, kidney and eye diseases, compromise the quality of life of a large number of Australians.^{3,4} The scope of the problem is much greater in Indigenous Australian populations as diabetes is two to four times more prevalent than in the non-Indigenous population and is the greatest contributor to morbidity and mortality. Diabetes and its complications also constitute a sharply increasing component of health costs, and this increase is likely to continue as the population ages.⁵

In recognition of the burgeoning health threat posed by diabetes, Australian Health Ministers declared it the fifth National Health Priority Area in 1996.⁶ Published evidence suggests that even with the availability of well defined evidence-based therapeutic targets to guide treatment⁷ many patients with type 2 diabetes are not achieving these targets.⁸

The effective management of a chronic disease such as diabetes in an ageing population is a major challenge to our government and to society. Resources are scarce and ensuring access to effective and continuing health care for chronic diseases is a high priority.

Pharmacists are recognised as providers of continuing care for people with diabetes and are well placed to assist the Australian health care system cope with the burden of type 2 diabetes and its intensive management. Pharmacists can contribute by using their expertise to deliver professional services and information to support and assist people with diabetes over the entire course of the disease. To optimise patient outcomes, pharmacists should also be active members of the diabetes care team and collaborate effectively with other health care professionals.

The positive contribution of diabetes disease state management (DSM) services delivered by pharmacists has been clearly established by research in both the clinic⁹⁻¹¹ and community

pharmacy settings¹²⁻¹⁴ in the USA and Australia. Specific services offered by pharmacists have included the following:

1. Providing diabetes education and coaching to assist in empowerment of the patient.⁹⁻¹⁴
2. Monitoring and promoting patient adherence with medication and other components of self-management.^{13,14}
3. Ensuring evidence-based use of medications in the complete management of the patient's diabetes, including the prevention of diabetic complications.⁹⁻¹⁴
4. Monitoring and documenting easily measurable key clinical indicators such as blood glucose levels, glycated haemoglobin (HbA1c), blood pressure, urinary albumin excretion and lipid levels.⁹⁻¹⁴
5. Reminding patients of the importance of regular examinations for the presence of diabetic complications (eg. eye and feet examinations).¹²⁻¹⁴

The Pharmaceutical Society of Australia (PSA) is training and supporting pharmacists to implement the Diabetes Medication Assistance Service (DMAS) funded by the Fourth Community Pharmacy Agreement. The DMAS is a national roll out of a pharmacy based diabetes disease state management service and encompasses many of the services listed above.

Position

The PSA advocates that pharmacists take a proactive role in diabetes by engaging in both public health activities and individual care through the delivery of high quality services to the community. The public health role may encompass involvement in public health campaigns such as Diabetes Week, other health promotion events, community education and/or patient advocacy.

1. All pharmacists should be involved in:

a) Primary prevention activities including:

1. Early identification and referral of people at risk of diabetes to their general practitioner (GP) or a dietician by using readily available checklists of risk factors for type 2 diabetes, identifying minor symptoms suggestive of diabetes or following case detection procedures based on the National Health

and Medical Research Council (NHMRC) guidelines.^{15,Δ}

2. Education of people at risk of type 2 diabetes or with diagnosed pre-diabetes (people with IGT or IFG) about lifestyle modifications. They should recommend appropriate actions such as:[†]
 - a. Thirty minutes of moderate intensity physical activity on most days of the week.
 - b. A weight reduction plan if obese (Body Mass Index (BMI) > 30 kg/m²) and/or waist circumference ≥ 94 cm in European men and ≥ 80 cm in European women).^{‡,16}
 - c. Diets of low energy density and containing a wide range of carbohydrate foods rich in dietary fibre and of low glycaemic index (GI) (eg. cereals, vegetables, legumes, fruits).¹
 - d. Reduced salt intake.
 - e. Smoking cessation if applicable.
 - f. Reminders to be retested in 12 months.

b) Ongoing diabetes management:

Pharmacists should assist patients with diabetes to achieve optimal therapeutic targets and metabolic control through the delivery of pharmaceutical care by:

1. Educating patients about all medications, including complementary and alternative medicines (CAM), supported where possible by the provision of Consumer Medicine Information (CMI) leaflets.
2. Conducting medication adherence assessments and providing adherence support including compliance aids where appropriate.
3. Identifying, preventing, or solving drug-related problems including those related to use of CAM.
4. Educating patients on the use and maintenance of blood glucose meters.
5. Referral to a credentialed diabetes educator/GP.

2. Pharmacists with appropriate training[§] should provide:

a) Medication Management Review

This involves a comprehensive medication review by an accredited pharmacist on referral

^Δ It should be noted current NHMRC guidelines do **not** recommend the use of blood glucose meters in screening for undiagnosed disease.

[†] Pharmacists must ensure currency of information as screening guidelines are continually reviewed and updated.

[‡] Waist measurement as an indicator of central adiposity is a stronger predictor of diabetes and cardiovascular risk than BMI.

[§] It is envisaged that competency based training requirements will differ according to the type of professional services to be provided by the pharmacist.

from the patient's GP. The pharmacist submits a written report to the GP and this is followed up, if required, by a discussion with the GP.

b) Diabetes disease state management (DSM) services

A comprehensive service which involves an on-going cycle of assessment, management and review provided at regular intervals in the pharmacy in collaboration with GPs and members of the diabetes care team. The service should provide a patient-centred approach focusing on patient needs and collaborative goal setting.

Elements of a diabetes DSM service include:

1. Education on the use and maintenance of blood glucose meters.
2. Regular feedback on Self Blood Glucose Monitoring (SBGM) to support the achievement of treatment targets.
3. Identification of patterns of blood glucose readings and how that relates to lifestyle and medication.
4. Assistance in blood pressure and lipid level monitoring to support the achievement of treatment targets.^{17,18}
5. Empowerment of patients to self-manage their condition appropriately (eg. education about the condition, medication and insulin devices if appropriate, as well as other aspects of diabetes self-care such as foot care, managing hypo- and hyperglycaemia and sick days).
6. Adherence assessment and detection of drug-related problems.
7. Reinforcement and goal setting for lifestyle issues including diet and physical activity.
8. Provision of relevant, objective and accurate additional written information to support patient education. Such materials may be obtained from organisations such as Diabetes Australia, or from the PSA Pharmacy Self Care program.
9. Reminders of regular follow-up checks for possible complications related to diabetes.
10. Communication with and referrals (as appropriate) to other members of the diabetes care team.
11. Documentation and evaluation of patient outcomes.

Pharmacists offering diabetes DSM services should ensure that:

- a. The pharmacy maintains a health care area that is fully equipped for dealing with the information and service needs of people with diabetes.
- b. The health care area is located either near an existing counselling area, or a desk or bench with seating to provide an

- appropriate level of privacy for discussion with patients.
- c. The health care area is equipped with approved hardware to allow the accurate recording of patients' blood glucose levels (if appropriate), blood pressure, BMI or waist circumference and recording of results.
 - d. The provision of professional services complies with the relevant practice standards,¹⁹ including those dealing with the use of Cautionary and Advisory Labels on dispensed medicines, provision of CMI leaflets and monitoring and case detection.
 - e. All professional service delivery conforms to the Code of Professional Conduct²⁰ and applicable privacy legislation.

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