

# SECTION 14

## Residential Care

The aim and purpose of this section is to provide information that specifically relates to the care and education of residents with diabetes or at risk of developing diabetes. There is a growing need to consider people who live with diabetes in residential care. The increasing population of aged people and the range of other residential care facilities has highlighted specific issues for management and care.

Australia's aged care system is structured around two main forms of formal care delivery, residential and community care. Residential care facilities function to either provide services, or provide access to services. These services range from nursing homes and hostels to retirement villages for older people.

Other alternatives can include temporary homeless shelters, homes for the mentally ill, homes for the mentally challenged, homes for the disabled, respite services, 'in-home' care or home care community services. For more information about aged care services, go to [www.agedcareaustralia.gov.au](http://www.agedcareaustralia.gov.au).

### Why diabetes is an important issue

1 in 4 people over the age of 25 years have type 2 diabetes or pre diabetes.<sup>1</sup> If you are older, have a family history of type 2 diabetes, there is an increased risk of developing type 2 diabetes. If the person is overweight or has other health problems eg hypertension, the risk increases even further. For those people with a mental illness, the use of an atypical antipsychotic medication can also increase the risk.<sup>2</sup>

For people who have any type of diabetes, the consequences of not receiving adequate treatment and care can be devastating. Long standing uncontrolled diabetes places the person at risk of short and long term complications.

In the short term, uncontrolled blood glucose can cause confusion, sleep disturbances, incontinence and thrush. Low blood glucose can worsen the risk of falls.

In the long term, uncontrolled diabetes affects the heart and other major blood vessels, eyes, kidneys, feet and nerves, causing disability and loss of quality of life. It also contributes to the worsening of existing complications.<sup>3</sup>

## Applying the guidelines in residential care

### Primary prevention, risk identification and screening

There is some evidence that type 2 diabetes can be delayed or prevented with improvement of modifiable risk factors such as weight management and increased activity.<sup>4</sup> Utilising a risk identification activity such as the one below can assist in identifying those residents that are at risk and what modifiable risk factors are able to be addressed.

<b>Type 2 Diabetes Risk Check<sup>5</sup></b>
1. Over 55 years of age
2. Over 45 years of age AND are overweight
3. Over 45 years of age AND have an immediate family member with type two diabetes
4. Over 45 years of age AND have high blood pressure
5. Over 35 years AND from an Aboriginal, Torres Strait Island, Pacific Island, Indian sub-continent, or Chinese cultural background
6. Have heart disease or have had a heart attack
7. Had diabetes when pregnant (gestational diabetes)
8. Have impaired glucose tolerance (IGT) or impaired fasting glucose (IFG)
9. Have polycystic ovary syndrome AND are overweight
<i>Yes to any of the above questions should facilitate a blood glucose check with a general practitioner.</i>

Given the persons age, mobility, mental capacity, the potential to reduce some risks may be limited. Nevertheless, risk factor identification is an important aspect of primary prevention for both type 2 diabetes, cardiovascular disease and kidney disease.

## Diagnosis

A diagnosis criterion is based on the Royal Australian College of General Practitioners Guidelines<sup>6</sup>, and can be found in *Understanding diabetes* – Section 2 of this manual.

## Cycle of care

Residents with diabetes have a right to an individualised diabetes management plan. This plan should take into account the person's age, functional mobility and cognitive capacity.

A diabetes educator may assist in care planning by undertaking a comprehensive diabetes assessment on which care can be based. This would include appropriate and realistic goal setting.

If residents are cared for by a general practitioner, they will be eligible for either a GP Management Plan and / or a Team Care Arrangement. These items will facilitate access to specialist health professionals such as diabetes educator, podiatrist and dietitian.

A cycle of care for a person with diabetes includes routine monitoring of:<sup>6</sup>

- blood pressure
- height/ weight/waist BMI
- feet examination
- glycaemic control (HbA1c)
- blood lipids
- microalbuminuria
- eye examination
- smoking
- healthy eating plan
- physical activity
- self-care education.

# Specific issues for older people with diabetes

## Cognitive impairment

Cognitive performance can be impaired in the older person with diabetes. The risk of cognitive impairment increases with the duration of diabetes. Cognitive impairment can be associated with compromised adherence to treatment and poor diabetes control. This can be due to erratic nutrition and increased risk of medication mistakes thus increasing the risk of hypoglycaemia and hyperglycaemia.<sup>7</sup>

## Mental health issues

Depression is at least two times higher in people with diabetes when compared with the general population and is associated with poor adherence to treatment and medication.<sup>8</sup>

Loss of appetite, adherence to medication regimes, performance of physical activity, socialisation and well being can be affected by depression.<sup>9</sup> A regular weekly weigh-in can be an alert for weight loss or weight gain. Appropriate action needs to be taken if the person is not achieving a healthy weight range. Weight loss in elderly people is not recommended unless they are at least 20% overweight.<sup>10</sup>

Depression can result in a loss of meaning in life and a decrease in 'positive' behaviour.

Features of depression include:<sup>11</sup>

- feel sad, down or miserable most of the time
- lose interest or pleasure in most usual activities
- loss or gain a lot of weight OR had an decrease or increase in appetite
- sleep disturbance
- feel slowed down, restless or excessively busy
- feel tired or has no energy
- feel worthless OR feel excessively guilty OR feel guilt about things the person should not be feeling guilty about
- poor concentration OR difficulties thinking OR very indecisive
- recurrent thoughts of death.

If any of the above are noted or of concern it is important to seek advice from senior staff or the person's general practitioner.

## Hypoglycaemia

As part of the ageing process there is reduced glucose counterregulation and this can decrease the awareness for hypoglycaemia. Increased blood glucose monitoring may be required to detect unrecognised hypoglycaemia.<sup>10</sup> Refer to *Understanding diabetes* – Section 11 for more information

## Hyperglycaemia

It is important to consider the possibility of hyperosmolar hyperglycaemic nonketotic state for those with type 2 diabetes and ketoacidosis for those with type 1 diabetes, if the older person has extremely high glucose levels.<sup>10</sup> Refer to *Understanding diabetes* – Section 11 for more information.

# Providing diabetes care

Staffing mix in residential care facilities can vary dramatically. Access to qualified registered nurses can be limited and / or absent depending on the level of care offered. Whatever the staff mix, it is essential to have someone in the organisation that is aware of the diabetes cycle of care<sup>6</sup> and the resources available for support and training of both residents and staff.

## Staff training

All staff (RN's, EN's and carers) should have access to training about the needs of a person with diabetes (all types of diabetes) and be aware of the risks of developing type 2 diabetes.

Training should include awareness of the criteria for diagnosis, primary prevention strategies, risk screening and cycle of care for management of diabetes. Possessing the necessary knowledge and skills to respond to acute presentations of hypoglycaemia and hyperglycaemia in a competent and timely manner is paramount in order to prevent further deterioration and possible hospitalisation.

Other aspects such as medication management, foot and dental care, healthy eating and suitable activity are also important to maintain a level of desirable wellness.

It is also important to include information about the psychosocial aspects of diabetes and the impact this can have on the individual and their family.<sup>9</sup> Developing links with the local / regional diabetes education team can provide support and advice re training opportunities.

## Virtual teams

Teams don't have to be located together in the same building or health service. The use of virtual teams will enable organisations to develop appropriate networks utilising telephone, fax and email. A diabetes educator is one member of this team that can help staff learn how to better care for people with all types of diabetes.

Teaming up with a diabetes educator can help with information about:

- Facilitating partnerships with other allied health professionals such as dietitian, pharmacists, podiatrist, counsellor, etc.
- Improving staff confidence by contributing to their continuing education and thereby their ability to assist residents' in diabetes management.
- Balancing eating, physical activity, medication, and blood glucose monitoring routines.
- Incorporating appropriate food choices within aged care.<sup>12</sup>
- Incorporating lifestyle needs, such as cultural eating habits and exercise preferences, into a management plan.
- Making everyday food choices healthy choices.
- Managing high and low blood glucose, and devising a plan for sick days (see *Unstable diabetes* – Section 11).
- Developing appropriate foot care strategies to prevent problems (see *Footcare* – Section 6).
- Establishing and maintaining a sustainable diabetes care plan.
- Helping to prevent or delay the onset of complications such as heart disease, blindness, kidney failure, nerve damage, and sexual problems (see *Long term complications* – Section 12).

## **The organisations' responsibility**

Depending on the level of care provided, the organisations responsibility will vary. It is important to ensure residents with diabetes have access to:

- A general practitioner confident in the management of diabetes.
- A diabetes educator and allied health team as needed.
- Residential nursing staff confident and competent in the management of diabetes.

Organisational responsibility also extends to the provision of appropriate policy and procedure being in place. These policies and procedures more commonly cover care issues such as cycle of care, blood glucose monitoring, medications including administration of insulin, hypoglycaemia and hyperglycaemia and sick day management

Refer to other sections of this manual to assist with policy and procedure development.

## **Considerations when caring for people in residential care**

- All staff caring for residents with diabetes should be aware of the care plan including the cycle of care.
- Ensure communication with the residents' diabetes education team.
- All staff involved in blood glucose monitoring are aware of the targets and response protocol relating to hypoglycaemia, hyperglycaemia and sick day management.
- Medications (oral) should be reviewed annually and a webster pack considered for clients self-medicating.
- Residents who are prescribed insulin have access to diabetes education and have a documented care plan and appropriate response protocols in place.
- All nursing staff involved in the administration of insulin are competent and demonstrate current and relevancy of practice relating to insulin therapy and medication administration reflected in an up to date medication authority care plan and with associated response protocols in place.
- Residents meals are reviewed to ensure appropriateness.

# Conclusion

When assessing the needs of a resident with diabetes it is important to consult with the persons' general practitioner and diabetes education team. Care plans and action plans will vary depending on the type of diabetes, the persons age, and capacity to self-care.

It is extremely important to consider the staffing and training needs of the organisation to ensure all levels of staff possess an acceptable level of competency. Also consider what policies and procedures will need to be in place to ensure a safe environment for the resident.

## Accessing Diabetes Services

- Local diabetes education service at a hospital or community health service
- Diabetes Australia on 1300 136 588.
- The Royal District Nursing Service SA Inc – Diabetes Team on 1300 364 264
  - RDNS can assist with staff training.
  - Assessment, care planning and clinical support relating to individual residents'.
- Assist with the development of diabetes related policies, guidelines and procedures.

# References

1. Dunstan D, Zimmet P, Welborm T, Sicree R, Armstrong T, Atkins R, and et al (2001) *Australian diabetes obesity and lifestyle study (AusDiab)*, International Diabetes Institute, Melbourne.
2. American Diabetes Association (2004) Consensus development conference on antipsychotic drugs and obesity and diabetes. *Diabetes Care*, 27(2): p596-602.
3. Australian Diabetes Educators Association (2003) *Guidelines for the management and care of diabetes in the elderly: Report*. Australian Diabetes Educators Association, Canberra.
4. Diabetes Prevention Program Research Group (2002) The diabetes prevention program (DPP). *Diabetes Care*, 25(12): p2165-2171.
5. Diabetes Australia (2005) *Tick Test*. [Cited 15 June 2009]; Available from: <http://www.diabetesaction.com.au/diabetesaustralia/display.asp?entityid=4081>
6. Harris P, Mann L, Marshall P, Phillips P, and Webster C (2008/09) *Diabetes management in general practice: Guidelines for type 2 diabetes*. Royal Australian College of General Practitioners and Diabetes Australia, Canberra.
7. Sinclair AJ (2006) Special considerations in older adults with diabetes: Meeting the challenge. *Diabetes Spectrum*, 19(4): p229-233.
8. Suhl E and Bonsignore P (2006) Diabetes self-management education for older adults: General principles and practical application. *Diabetes Spectrum*, 19(4): p234-240.
9. DAWN (Diabetes Attitudes Wishes Needs) Study (2001) *Living with diabetes*. [Cited 14 June 2009]; Available from: [http://www.dawnstudy.com/documents/home\\_page/document/index.asp](http://www.dawnstudy.com/documents/home_page/document/index.asp)
10. Australian Diabetes Educators Association (2003) *Guidelines: Management and care of diabetes in the elderly: Summary*. ADEA, Canberra.
11. BeyondBlue (2009) *Depression checklist: Kessler psychological distress scale (K10)*. [Cited 15 June 2009]; Available from: [http://www.beyondblue.org.au/index.aspx?link\\_id=103.882](http://www.beyondblue.org.au/index.aspx?link_id=103.882)
12. Diabetes Centre (2007) *Healthy eating and diabetes: A guide for aged care facilities*. Diabetes Centre, Adelaide.