Australian Government
Department of Veterans' Affairs

Veterans' MATES

November 2019

Therapeutic Brief

veteransmates.net.au

Optimising use of the Annual Diabetes Cycle of Care

In Australia, 280 people develop diabetes every day.[1] If the number of people diagnosed with diabetes continues to grow at the current rate, an estimated three million Australians over the age of 25 years will be living with type 1 or type 2 diabetes by 2025.[2]

Planned care and regular reviews with follow-up via a multidisciplinary team is the best approach for effective diabetes care.[3-5]

An Australian study showed there was a 22% reduction in the risk of hospitalisation for a diabetes related complication, and a significant increase in the use of diabetes related services recommended in the guidelines with the provision of a General Practice Management Plan (GPMP).[5]

1 in 6 DVA Gold Card holders aged over 65 years has diabetes[6]

The Annual Diabetes Cycle of Care provides a systematic approach for early assessment of diabetes related complications.[4, 7] Chronic disease management plans also improve processes and health outcomes for people with diabetes.[3, 5]

Despite the benefits, the use of chronic disease management items is low among people in Australia with chronic diseases.[8] Analysis of the Australian Government Department of Veterans' Affairs (DVA) health claims data indicates many DVA patients with diabetes have not had claims for management plans or routine diabetes checks (Figure 1).[6] Only one-fifth of patients with diabetes had a claim for an Annual Diabetes Cycle of Care and a little over one-third had a claim for a GPMP or review of a GPMP in a 12-month period.[6] Although GPs can refer DVA Gold Card holders and eligible White Card holders for a range of health services without the need to create a Team Care Arrangement (TCA), the provision and review of GPMPs and TCAs has ongoing benefits for patients.[3, 5]

If you would like to know more about your patient's DVA accepted conditions or their eligibility, please call DVA on 1800 550 457.

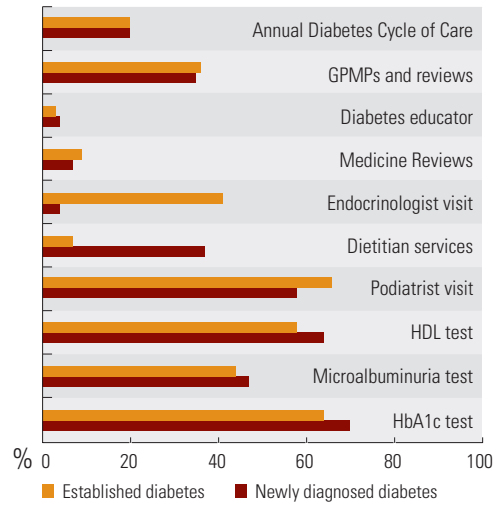

Figure 1 DVA patients with diabetes who have had a claim for routine diabetes checks in a 12-month period[6]

INSIDE

Key points

- Use the Annual Diabetes Cycle of Care for early assessment of diabetes related complications
- Use a General Practice Management Plan and a Team Care Arrangement to coordinate multidisciplinary team-based care for your patient with diabetes and review through the year
- With your patient, individualise and review their goals of management
- Offer referral of all your newly diagnosed patients, and those whose diabetes is not well controlled, to a diabetes educator
- Review your patient's medicines

Assess for and implement measures to reduce the risk of diabetes related complications

Implement the Annual Diabetes Cycle of Care

The Annual Diabetes Cycle of Care helps to ensure that patients receive recommended care by identifying diabetes related health issues early. Medicare provides Service Incentive Payments (SIPs) for completing the Annual Diabetes Cycle of Care as defined in the MBS item numbers 2517 (standard), 2521 (long) or 2525 (prolonged).[4, 9]

The minimum requirements to complete an Annual Diabetes Cycle of Care for Medicare benefits and SIP purposes must be accomplished over a period of at least 11 months and up to 13 months, and must include items listed in Table 1.

Consider using the Chronic Disease Management Medicare items

A structured care program that includes the Chronic Disease Management Medicare items (GPMPs, TCAs and Multidisciplinary Care Plans) 721, 723, 729, 731 and 732 enables implementation of best practice guidelines, and improves health outcomes for people with diabetes.[3-5] Patients with a GPMP or a TCA can receive monitoring and support services from a practice nurse, under MBS item number 10997.[9] Review the need for specialist referral at least once every 12 months.

Individualise goals for optimum management

In Australia, about two-thirds of patients with one chronic condition have two or more comorbidities.[10] About one-quarter of people with type 2 diabetes have four or more comorbidities.[11] When discussing management goals with your patient (see Table 1), involve them in the decision-making process and individualise management goals according to their circumstances.[4] Focus on what is achievable and important to them, taking into consideration your patient's age, capabilities, comorbidities and life expectancy.[4]

Table 1 Minimum requirements for the Annual Diabetes Cycle of Care and suggested management goals[4, 9, 12]

At least once every 6 months

Weight, height and body mass index: measure weight and height to calculate body mass index (BMI). The general target for weight loss is at least 5% to 10% for people who are overweight or obese (BMI greater than 25 kg/m^2).

Blood pressure: individualise treatment targets depending on your patient's circumstances. Monitor for adverse effects if starting antihypertensive medicines. The general target to aim for is equal to or less than 140/90 mmHg. Consider a lower target for young people and for secondary prevention in those at high risk of stroke, if treatment burden doesn't increase risk.

For people with diabetes and albuminuria/proteinuria, aim for a target of less than 130/80 mmHg.

Feet: assess for any foot problems, including ulceration, infection or peripheral arterial disease. Consider referral to a podiatrist if needed.

At least once every 12 months

Glycated haemoglobin (HbA1c): most patients will require more than one HbA1c test a year. Individualise the target according to your patient's circumstances, but the general target is equal to or less than 53 mmol/mol (equal to or less than 7%).

Cardiovascular disease risk: assessing cardiovascular disease (CVD) risk is a vital part of diabetes care. Assess absolute CVD risk at: www.cvdcheck.org.au Use the following targets as a general guide only and not as mandatory requirements:

Total cholesterol: less than 4.0 mmol/L

Triglycerides: less than 2.0 mmol/L

High-density lipoprotein cholesterol (HDL-C): greater than or equal to 1.0 mmol/L

Microalbuminuria: urine albumin-to-creatinine ratio:

Women: less than 3.5 mg/mmol
Men: less than 2.5 mg/mmol

Spot collection: less than 20 mg/L

Estimated glomerular filtration rate (eGFR): monitor eGFR. To know which medicines need dose adjustment in reduced kidney function, go to the previous MATES topic: *Think 'kidney function' when prescribing* at: www.veteransmates.net.au/topic-56-therapeutic-brief

At least once every 24 months

Eye examination: refer your patient to an optometrist or an ophthalmologist. If complications are detected, refer annually.

Review at least once every Annual Diabetes Cycle of Care[4, 9]

Smoking: strongly encourage smokers to stop smoking and consider whether they may benefit from medicines for nicotine dependence. DVA funds medicines for nicotine dependence for eligible DVA patients. Offer Quitline contact details; phone 13 7848 or go to: www.quitnow.gov.au

Nutrition: review diet and consider referring to a dietitian if needed.

Physical activity: encourage increased physical activity and consider referring your patient to an exercise physiologist for an individualised and graded exercise plan.

Self care education: review your patient's understanding of diabetes and their ability to self care. Where appropriate, involve your patient's partner and family in education and treatment.

Medicines: ask your patient about their understanding of the role of their medicines. Consider a Home Medicines Review under MBS item number 900. To access the Australian blood glucose treatment algorithm for type 2 diabetes 2018, go to: http://t2d.diabetessociety.com.au/plan

Refer to the Royal Australian College of General Practitioners 'General practice management of type 2 diabetes, 2016-18' guidelines for further information at: **www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/management-of-type-2-diabetes**

Provide tailored self care education

Tailored education to support self care is an integral part of diabetes care, whether the patient is newly diagnosed or has been living with diabetes for some time.[4, 12] Some patients may not appreciate the seriousness of the disease, may struggle to understand health information about their care, or lack the skills to self care.[13-15] These patients in particular are at an increased risk of poor health outcomes and require additional reviews, support and education.[16] Older patients may prefer face-to-face education and printed resources.[14]

Offer referral to a diabetes educator

DVA-funded diabetes educators are underused.[6] A diabetes educator can address educational, psychosocial, medical and behavioural issues associated with diabetes, and recommend referrals and additional therapies, as needed.[17] For patients newly diagnosed with diabetes, offer referral to a diabetes educator and a dietitian.[4, 17] For patients whose diabetes is established but not well controlled, offer referral to a diabetes educator for review. One way to find a diabetes educator in your area is to go to the Australian Diabetes Educators Association at: **www.adea.com.au** To find a diabetes educator or a dietitian at Healthdirect, go to: **www.healthdirect.gov.au/australian-health-services**

Encourage your patients to register with Diabetes Australia and the National Diabetes Services Scheme

Diabetes Australia is the national body for people with diabetes and provides access to a wide range of educational resources and support for people with diabetes, their families and carers.[4] DVA patients with diabetes and a Gold or White Card are eligible for a DVA-funded membership. To find out more, go to: **www.dva.gov.au/health-and-treatment/work-and-social-life-programs/diabetes-support-services/diabetes-organisations**

The National Diabetes Services Scheme (NDSS), an Australian government initiative administered with the assistance of Diabetes Australia, gives all Australians with diabetes access to subsidised diabetes items, self care education, mental health programs, peer support groups and a range of resources to help patients better understand and manage their condition.[4] DVA will fund NDSS items supplied to eligible DVA patients. For a list of diabetes items funded by DVA in the Rehabilitation Appliances Program National Schedule of Equipment, go to: **www.veteransmates.net.au/dva.rap-providers**

Patients can access support or talk with a diabetes educator or dietitian by phoning the NDSS national helpline on 1300 136 588 or by visiting: **www.ndss.com.au/support-services**

Set up a structured program to support diabetes care

Due to the complexity in treating people with diabetes, a structured program that engages a multidisciplinary team is the best approach for effective diabetes care.[3, 4, 18]

General practices can access incentives and payments to support diabetes care through DVA's Local Medical Officer (LMO) Scheme. To find out more and to see DVA fee schedules for medical services, effective from 1 July 2019, go to: www.dva.gov.au/providers/fees-schedules

Use quality data to facilitate systematic care

Record diagnoses of diabetes by choosing the appropriate diagnosis from the standard terminology supplied in your clinical software. Codes allow your clinical software to recognise the diagnosis. This in turn enables reminders to be automatically generated about care that is due. Send recall messages by SMS or post for patients who attend infrequently.

Record smoking status, alcohol intake, blood pressure, weight, height and other examination findings in the special purpose fields in your clinical software. Recording these elements of care in the appropriate fields enables your clinical software to prompt you about missing elements of care. This also enables your clinical audit software to report your practice's performance of care for its patients with diabetes.

Enlist the support of the practice nurse to coordinate the management system

Practice nurses are well placed to provide both a clinical and administrative role. They can manage the reminder and recall system or diabetes register, schedule appointments, conduct clinical assessments, and facilitate team-based care processes, such as educational activities and support for lifestyle modifications.[4, 18]

Consider the Co-ordinated Veterans' Care (CVC) program

The CVC program provides planned and coordinated care for Gold Card holders living in the community who are most at risk of unplanned hospitalisation due to chronic illness and complex care needs.[19] By participating in the CVC Program, GPs can claim an Initial Incentive Payment and Quarterly Care Payments using existing Medicare arrangements. For further details, go to: **www.dva.gov.au/factsheet-hsv101-coordinated-veterans-care-program**

Access DVA-funded health services

Your DVA patients can access DVA-funded health services, including a diabetes educator, a dietitian, an exercise physiologist and a podiatrist without the provision of a TCA. Gold Card holders are entitled to treatment for all conditions and White Card holders are entitled to treatment for conditions accepted by DVA. To find out which services are funded by DVA go to: **www.dva.gov.au/health-and-treatment/work-and-social-life-programs/diabetes-support-services**

Consider other health issues for people with diabetes

Diabetes related health issues can have a substantial effect on a patient's quality of life and on their ability to self care. Common issues, particularly in older people with diabetes, include CVD, diabetic neuropathies, periodontal disease, mental health issues and cognitive impairment, and risk of influenza, pneumococcal disease, shingles, and diphtheria, tetanus and pertussis.[4, 12]

Cardiovascular disease risk

All patients with diabetes are at risk of developing CVD.[4, 20] CVD is the leading cause of death in people with diabetes.[20] When assessing CVD risk, assess the combined effect of multiple risk factors (absolute CVD risk).[21] You can access an online absolute risk calculator and other related resources at: **www.diabetesaustralia.com.au/absolute-cardiovascular-risk**

Encourage your veteran patients to enrol in the DVA-funded Heart Health Programme. The program runs for 52 weeks and covers a range of topics, including nutrition and healthy eating, physical activity, quitting smoking, responsible alcohol consumption, back care and stress management. To find out if your veteran patient is eligible, go to: **www.veteranshearthealth.com.au**

Diabetic neuropathy

The incidence of diabetic neuropathies increases with age, duration of diabetes and level of control of blood glucose levels, affecting an estimated 40% to 50% of people after 10 years of having the disease.[22] Pain, numbness or 'pins and needles' are common peripheral neuropathic symptoms. Check your patient for peripheral neuropathy at least annually and refer to a podiatrist if needed.[4]

For patients with peripheral neuropathy, and balance and gait problems, minimise their falls risk by referring to information provided in the previous MATES topic *Medicines: the hidden contributor to falls and hip fractures* at: **www.veteransmates.net.au/topic-50-therapeutic-brief**

For patients with skin tears or venous leg ulcers, refer to the previous MATES topic: *Wound management: putting the pressure on venous leg ulcers and reducing the risk of skin tears* to access recommended management strategies at: **www.veteransmates.net.au/topic-47-therapeutic-brief**

Periodontal disease

Poor oral health, in particular periodontal disease, contributes to worsening glycaemic control and increases the risk of diabetes related complications.[23-25] Periodontitis can lead to dental caries, tooth loss, an inability to chew food, poor nutrition and quality of life.[23] Encourage your patients to have a dental check-up at least once a year. DVA funds all dental services for Gold Card holders.

Mental health issues

Mental health issues, including depression and anxiety, are common among people with diabetes.[4, 15] Consider offering early referral for psychological support. DVA will pay for treatment for any mental health issue, without the need for a mental health care plan, even if the condition is not related to service. However, veterans need to be registered with DVA. To find out about recommended management strategies or other health professionals who can provide support for your patient with depression, refer to the previous Veterans' MATES topic *Achieving best outcomes for depression* at: **www.veteransmates.net.au/topic-49-therapeutic-brief**

There is an increased risk of cognitive dysfunction and dementia among people with diabetes.[26] Consider assessing your DVA patients with diabetes aged over 60 years who express concerns about memory or cognitive impairment affecting their daily functioning.[26, 27]

Vaccination against influenza, pneumococcal disease, shingles and diphtheria, tetanus and pertussis

Consider vaccination against influenza, pneumococcal disease, shingles and diphtheria, tetanus and pertussis (dTpa).[4, 28] For detailed information, refer to the *Australian Immunisation Handbook*, 10th edition at: **https://immunisationhandbook.health.gov.au**

A note about sodium glucose co-transporter 2 inhibitors and diabetic ketoacidosis

There is a potential risk for patients with diabetes using a sodium glucose co-transporter 2 (SGLT2) inhibitor to develop diabetic ketoacidosis. The risk is increased in patients:

- with an acute illness
- fasting for a prolonged time
- who have a low carbohydrate diet
- with severe dehydration
- who have excessive alcohol intake
- undergoing a surgical operation or a medical procedure requiring anaesthesia or light sedation.[29]

The Therapeutic Goods Administration (TGA) advises stopping the SGLT2 inhibitor prior to major surgery and restarting after only when the patient's condition has stabilised and oral intake has returned to normal.[29]

Inform your patient of the signs and symptoms of diabetic ketoacidosis and instruct them to immediately seek medical advice if they experience symptoms. Early symptoms may include abdominal pain, nausea, vomiting, anorexia, excessive thirst, difficulty breathing or unusual tiredness.[29]

For further information, go to the TGA website at: **www.tga.gov.au/alert/sodium-glucose-co-transporter-2-inhibitors**

Full reference list available at: www.veteransmates.net.au

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References

1. Diabetes Australia. Diabetes in Australia. Available at: www.diabetesaustralia.com.au/diabetes-in-australia [Accessed August 2019].
2. Shaw J, Tanamas S (eds). Diabetes: the silent pandemic and its impact on Australia. Baker IDI Heart and Diabetes Institute. 2012. Available at: www.baker.edu.au/-/media/Documents/impact/diabetes-the-silent-pandemic.ashx?la=en [Accessed August 2019].
3. Wickramasinghe L, Schattner P, Hibbert M, Enticott J, Georgeff M, Russell G. Impact on diabetes management of General Practice Management Plans, Team Care Arrangements and reviews. Med J Aust. 2013; 199: 261-5.
4. Royal Australian College of General Practitioners. General practice management of type 2 diabetes 2016-18. Available at: www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/management-of-type-2-diabetes [Accessed May 2019].
5. Caughey G, Vitry A, Ramsay E, Gilbert A, Shakib S, Ryan P et al. Effect of a general practitioner management plan on health outcomes and hospitalisations in older patients with diabetes. Intern Med J. 2016; 46: 1430-1436.
6. Australian Government Department of Veterans' Affairs Health Claims Database. University of South Australia. QUMPRC. [Accessed March 2019].
7. Dunning T. Assessing older people with diabetes in Australia. Diabetes & Primary Care Australia. 2016; 1(4): 115-120.
8. Vitry A, Roughead E, Ramsay E, Ryan P, Caughey G, Esterman A et al. Chronic disease management: does the disease affect likelihood of care planning? Aust Health Rev. 2012; 36: 419-23.
9. Australian Government Department of Health. MBS Online. Medicare Benefits Schedule - Item 2517. Available from: www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=2517&qt=item#assocNotes [Accessed July 2019].
10. Harrison C, Henderson J, Miller G, Britt H. The prevalence of complex multimorbidity in Australia. Aust N Z J Public Health. 2016; 40: 239-44.
11. Teljeur C, Smith S, Paul G, Kelly A, O'Dowd T. Multimorbidity in a cohort of patients with type 2 diabetes. Eur J Gen Pract. 2013; 19: 17-22.
12. LeRoith D, Biessels G, Braithwaite S, Casanueva F, Draznin B, Halter J et al. Treatment of diabetes in older adults: an Endocrine Society* clinical practice guideline. J Clin Endocrinol Metab. 2019; 104: 1520-1574.
13. Cavanaugh K, Wallston K, Gebretsadik T, Shintani A, Huizinga M, Davis D et al. Addressing literacy and numeracy to improve diabetes care: two randomized controlled trials. Diabetes Care. 2009; 32: 2149-55.
14. Dao J, Spooner C, Lo W, Harris M. Factors influencing self-management in patients with type 2 diabetes in general practice: a qualitative study. Aust J Prim Health. 2019; 25: 176-184.
15. Ventura A, Browne J, Holmes-Truscott E, Hendrieckx C, Pouwer F, Speight J. Diabetes MILES-2 2016 Survey Report. Melbourne. Diabetes Victoria. 2016.
16. Australian Commission on Safety and Quality in Health Care. Health literacy: taking action to improve safety and quality. Sydney. ACSQHC. 2014.
17. Powers M, Bardsley J, Cypress M, Duker P, Funnell M, Fischl A et al. Diabetes self-management education and support in type 2 diabetes. Diabetes Educ. 2017; 43: 40-53.
18. Acharya S, Philcox A, Parsons M, Suthers B, Luu J, Lynch M et al. Hunter and New England Diabetes Alliance: innovative and integrated diabetes care delivery in general practice. Aust J Prim Health. 2019; 25: 219-243.
19. Australian Government Department of Veterans' Affairs. Coordinated Veterans' Care Program. A Guide for General Practice. Canberra. 2017.
20. Australian Institute of Health and Welfare. Deaths among people with diabetes in Australia 2009-2014. Cat. no. CVD 79. Canberra. AIHW. 2017.
21. National Vascular Disease Prevention Alliance. Absolute cardiovascular disease risk management. Quick reference guide for health professionals. 2012. Available at: www.diabetesaustralia.com.au/absolute-cardiovascular-risk [Accessed August 2019].
22. Callaghan B, Little A, Feldman E, Hughes R. Enhanced glucose control for preventing and treating diabetic neuropathy (review). Cochrane Database Syst Rev. 2012: Issue 6. Art. NoCD007543.
23. Dental Health Services Victoria. Links between oral health and general health the case for action. Carlton, Vic. 2011.
24. Borgnakke W, Ylostalo P, Taylor G, Genco R. Effect of periodontal disease on diabetes: systematic review of epidemiologic observational evidence. J Periodontol. 2013; 84: S135-52.
25. Nascimento G, Leite F, Vestergaard P, Scheutz F, Lopez R. Does diabetes increase the risk of periodontitis? A systematic review and meta-regression analysis of longitudinal prospective studies. Acta Diabetol. 2018; 55: 653-667.
26. Biessels G, Despa F. Cognitive decline and dementia in diabetes mellitus: mechanisms and clinical implications. Nat Rev Endocrinol. 2018; 14: 591-604.
27. Guideline Adaptation Committee. Clinical Practice Guidelines and Principles of Care for People with Dementia. Sydney. Guideline Adaptation Committee. 2016.
28. Gardner I. Protecting yourselves and your grandchildren through vaccination. Vetaffairs. 2017; 34(3): 5.
29. Australian Government Department of Health. Therapeutic Goods Administration. Sodium glucose co-transporter 2 inhibitors. Available at: www.tga.gov.au/alert/sodium-glucose-co-transporter-2-inhibitors [Accessed October 2019].