



## Measuring glycated haemoglobin in diabetes management

### Why is this important?

Diabetes is the seventh leading cause of death in Australia and affects one million Australians, half of whom may be unaware they have it.[1] The aim of diabetes management is about achieving near normal blood glucose levels, because better diabetes control is associated with improved outcomes and a reduction in the development and progression of complications, such as eye, kidney and nerve disease.

### Best available evidence

In two major trials, the UK Prospective Diabetes Study and the Diabetes Control and Complications Trial, improved diabetes control was assessed by glycated haemoglobin (HbA1c) measurement. HbA1c concentration, which gives an indication of the average blood glucose level over the past two to three months, is accepted as the gold standard for measuring 'long-term' diabetes control.

The American Diabetes Association recommends that HbA1c testing be performed at least once every six months for people with diabetes who have stable blood glucose levels and every three months in those whose therapy has changed or who are not meeting blood glucose goals.[2–4] National Health and Medical Research Council guidelines are currently being developed.

### Current practice

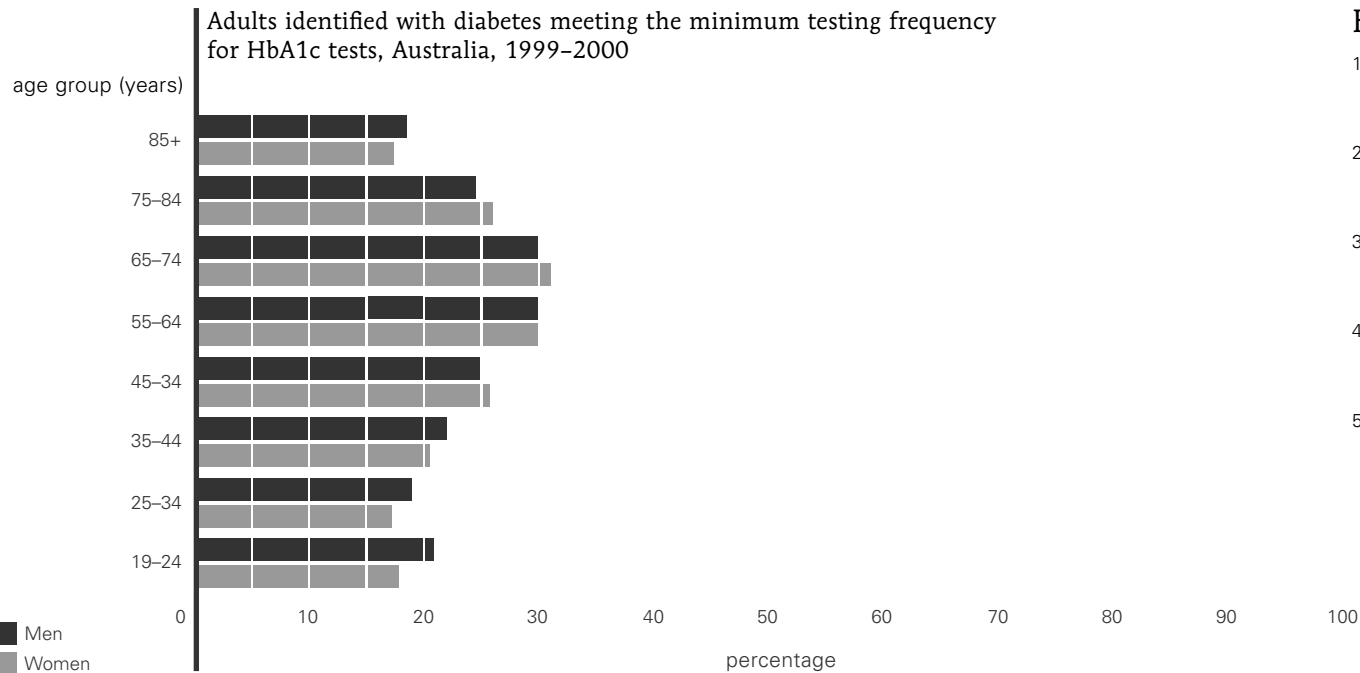
Using Medicare data, it is estimated that only 27 per cent of people with diabetes met the minimum testing frequency for HbA1c tests in 1999–2000.[1] The graph opposite shows the percentages for men and women in each age group.

Data from other sources also suggest that many Australians with diabetes are not having HbA1c tests as often as recommended, and there may be considerable interstate variation.[5]

### Implications

- HbA1c testing is not being performed as frequently as the guidelines recommend, and this is likely to have an impact on achieving target blood glucose control.
- Increased consumer and health professional awareness of the guideline recommendations regarding HbA1c measurement is required to help improve management of diabetes.

It is estimated that almost three-quarters of people with diabetes are not having glycated haemoglobin tests performed as frequently as recommended.



Source: Australian Institute of Health and Welfare (2002)

### References

- 1 Australian Institute of Health and Welfare (2002) Diabetes: Australian facts 2002. AIHW cat. no. CVD 20 (Diabetes Series no. 3). AIHW, Canberra
- 2 American Diabetes Association (2003) Standards of medical care for patients with diabetes mellitus. *Diabetes Care* 26: S33–50
- 3 National Institute for Clinical Excellence (2003) Compilation. Summary of guidance issued to the NHS in England and Wales. Issue 6, April 2003. NICE, London
- 4 Harris P, Joyner B, Phillips P, Webster C (2003) Diabetes management in general practice, 9th edition. Diabetes Australia Publication NP 1055. Diabetes Australia, Sydney
- 5 SCRCSSP (Steering Committee for the Review of Commonwealth/State Service Provision) (2002) Report on government services 2002. AusInfo, Canberra