



Australian Government

Australian Institute of
Health and Welfare

Authoritative information and statistics
to promote better health and wellbeing

PBAC Post market review of products used in the management of diabetes

Stage 1: Review of blood glucose test strips

Submission by the Australian Institute of Health and Welfare

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The Australian Institute of Health and Welfare (AIHW) welcomes the opportunity to contribute to the Pharmaceutical Benefits Advisory Committee (PBAC) review of products used in the management of diabetes. As an independent major national agency set up by the Australian Government to provide reliable, regular and relevant information and statistics on Australia's health and welfare, with access to a variety of national data sources and with expertise in data linkage, the AIHW can contribute substantially to the epidemiological knowledge in this area, which can be used to inform policy and practice.

The AIHW's work in this arena

The National Centre for Monitoring Diabetes at the AIHW has a long history of reporting the epidemiology of diabetes and patterns of diabetes management in Australia. To date, the AIHW has published a number of reports that have explored the pharmacological management of people with diabetes in Australia and the utilisation and patterns of use of consumables associated with diabetes self-management among certain groups. These include the *Insulin pump use in Australia* report (AIHW 2012), that presents data from the National Diabetes Service Scheme (NDSS) on purchases of insulin pumps and related consumables among people with Type 1 diabetes managed with continuous subcutaneous insulin infusion therapy, and the *Use of medicines by Australians with diabetes* series, that synthesises data from a range of sources to periodically profile the pharmacological management of diabetes, related conditions and associated economic costs.

Utilisation of glucose testing strips and patterns of self-monitoring of blood glucose among people with diabetes are an emergent focus. In particular, such data for young people with various forms of diabetes are presented in the AIHW's forthcoming report, *Diabetes among young Australians*, due for public release in early December 2012.

Additionally, work in progress funded by the Department of Health and Ageing's Chronic Disease Policy Unit that proposes to link data from the Pharmaceutical Benefits Scheme (PBS)/Repatriation Pharmaceutical Benefits Scheme (RPBS) and the NDSS will include

examination of glucometer test strip purchasing patterns. These schemes comprise the principal sources of obtaining such products at a subsidised cost in Australia and will provide a comprehensive picture of purchasing patterns and trends nationally.

Data sources and scope

The AIHW holds and accesses data from a range of sources and is therefore in a unique position to be able to integrate, analyse and interpret relevant data sets to provide an overview of diabetes management and blood glucose test strip utilisation nationally. The AIHW is the custodian of the National Insulin-Treated Diabetes Register (NITDR), which is based on data from the NDSS and the Australasian Paediatric Endocrine Group and records details of people with diagnosed, insulin-treated diabetes. The AIHW also holds a range of other administrative and survey databases, some of which may contain potentially relevant information.

The ability to access and integrate data from a range of sources, rather than a single database, is a particular strength of the AIHW. For the examination of diabetes management and blood glucose test strip utilisation, this data access will enable a more complete picture of product purchases than that which might be obtained from analysis of a single database in isolation. For example, the cost of purchasing 100 blood glucose testing strips through the NDSS (\$14.70) is cheaper than accessing the same products via the PBS (\$34.20) (NDSS 2011). It is therefore plausible that some groups may be more or less likely to obtain their products from one or other source (for example, those on low incomes may be more likely to access the more heavily subsidised products offered by the NDSS). Purchasing patterns could be investigated more extensively with access to both data sets.

Overall, the NDSS database has good coverage of those with diabetes—it is estimated that 80-90% of people with diagnosed diabetes are registered with the NDSS (AIHW 2009). When considered in the context of existing work and other data sources, the NDSS may be used to provide useful information regarding product purchases among various socio-demographic and clinical subgroups, including by diabetes type and insulin use status. For instance, a recent survey of a sample of 3,338 adults registered with the NDSS reported that overall, 90% of respondents had purchased glucometer test strips through the NDSS in the past year (86% of those with Type 2 diabetes), and 59% (n=1,144) of respondents with Type 2 diabetes reported testing their blood glucose levels only once or twice daily (Speight et al 2011). This survey information on testing frequency provides context to the information that can be obtained from the NDSS database regarding blood glucose testing strip purchases. Moreover, the basic demographic information accessible through the NDSS and NITDR mean that there is scope to identify any population subgroups characterised by high or low frequency of purchases. This information is important when considering issues of equity and access, and may help inform this review and subsequent policy and practice.

The AIHW is also in a position to conduct primary data collection and research. For example, the AIHW recently developed and conducted a survey of NDSS registrants who are eligible to purchase insulin pumps (AIHW 2012). The Insulin Pump User Survey was the first national survey of insulin pump users in Australia and explored the experiences, motivations and barriers to pump use among those using this mode of insulin delivery. The successful conduct of this survey and the high response rate achieved (59%) highlight the AIHW's capacity for high quality primary research, in addition to the analysis and reporting of existing data sources.

There is thus considerable scope for the AIHW to utilise its existing expertise and data resources to help provide the background epidemiology required to inform this review and we would be interested in working with the PBAC on this.

Summary

The Australian Institute of Health and Welfare is interested in working closely with the Pharmaceutical Benefits Advisory Committee on the epidemiological components of this review. The Australian Institute of Health and Welfare's existing work, data sources and expertise in this arena lend it to being able to contribute substantially to the examination of the self-management of Type 2 diabetes in Australia. The Australian Institute of Health and Welfare strongly supports the Pharmaceutical Benefits Advisory Committee in undertaking this review and looks forward to engaging further with this process.

References

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