1 Introduction

1.1 Purpose of this report

The Australian Government Department of Health and Ageing commissioned the Australian Institute of Health and Welfare (AIHW) to compile details of key Australian data sources that are relevant to assessing prevalence and outcomes of eye diseases and injuries and eye health-care utilisation.

1.2 Structure of this document

This report is divided into four sections. Following this introduction, Section 2 presents a brief analysis of the current key eye health data sources in Australia, in addition to presenting detailed listings of each key eye health data source.

Section 3 presents a discussion on the key definitional issues surrounding eye health terminology and includes a summary of eye health definitions in use in Australia.

Section 4 presents useful background information for the development of future performance indicators in eye health.

1.3 Eye health in Australia

It is estimated that in excess of 161 million people are visually impaired worldwide. This includes people with significant loss of function and disability due to the impact of vision loss. The leading cause of this visual impairment worldwide is cataract. Other major causes of visual impairment worldwide are glaucoma, age-related macular degeneration, diabetic retinopathy and trachoma (Resnikoff et al. 2004).

As in other developed countries, the most prevalent causes of blindness and vision loss in Australia are those related to ageing. Eye health in Australia, the background paper to the National framework for action to promote eye health and prevent avoidable blindness and vision loss (the National eye health framework), reported that age-related macular degeneration, cataract, glaucoma, diabetic retinopathy, uncorrected or under-corrected refractive error, eye trauma and trachoma are the most prevalent causes of blindness and vision loss in Australia (Commonwealth of Australia 2005a).

In a recent analysis of pooled eye health data from population-based clinical studies, conducted both in Australia and internationally, it was estimated that 9.4% of Australians aged 55 or older are visually impaired and about 1.2% are blind (AIHW 2005a). The combined impact of an ageing Australian population and the high age correlation of causes of vision loss indicates that the prevalence of visual impairment is set to increase over time in a policy-neutral environment (Access Economics 2004).

Self-reported data on the prevalence of loss of sight is available through the Australian Bureau of Statistics (ABS) National Health Survey 2004–05. The survey indicates that 52% of the Australian population report eyesight problems, including long and short sightedness, as a long-term medical condition (ABS 2006).

Certain groups within the Australian population are at greater risk of developing eye disease. These groups include Aboriginal and Torres Strait Islander peoples, older people, people with a family history of eye disease, people with diabetes and marginalised to disadvantaged people (Commonwealth of Australia 2005a).

People with diabetes have an increased risk of developing eye disease. The Australian Diabetes, Obesity and Lifestyle Study found that 15.3% of people with known diabetes and newly diagnosed diabetes had developed retinopathy (Tapp et al. 2003).

Eye disease and vision loss have considerable financial and social costs to the Australian community. Visual impairment can shorten life, increase the risk of other conditions, restrict social participation and independence, and impair physical and mental health. In addition, people with visual impairment have a higher use of social services and higher admission rate to nursing homes. It has been calculated that the total financial costs of visual impairment, both direct and indirect, were over \$5.0 billion in 2004 (Access Economics 2004).

1.4 Context of the project

In response to the World Health Assembly resolution WHA56.26 on the elimination of avoidable blindness in member states, the Australian Health Ministers' Advisory Council endorsed the *National eye health framework*. The framework focuses on the elimination of avoidable blindness and vision loss in Australia, providing an outline for nationally coordinated action by governments, health professionals, nongovernment organisations, industry and individuals to work in partnership (Commonwealth of Australia 2005b).

In the 2006 Federal Budget, the Australian Government allocated \$13.8 million over 4 years to a new National Eye Health Initiative. This initiative will support a range of activities to raise public awareness of eye health issues and to strengthen the delivery of eye health care. The National Eye Health Initiative represents the Australian Government's contribution to the implementation of the *National eye health framework*.

The Australian Government Department of Health and Ageing (DoHA) commissioned the AIHW through the National Eye Health Initiative to undertake the Eye Health Data Project. This follows on from work performed for an earlier publication, *Vision problems among older Australians*, released in July 2005.

The key areas for action within the *National eye health framework* provide a brief outline of the challenges to be addressed and a series of actions that might be utilised to meet these challenges.

The Key area for action 5—*Improving the evidence base* outlines, among other actions, a need to examine existing health data sets for relevance to eye health. The project informs this action area by compiling details of key Australian data sources that are relevant to assessing prevalence and outcomes of eye diseases and injuries and eye health-care utilisation. Refer to the Methodology section of this report (Section 2.1) for more information on the process of collating these data sources. The project assesses the set of key data sources in terms of their capacity to address questions which emerge from the key areas for action, as outlined in the *National eye health framework*.

The Key area for action 5—*Improving the evidence base* also outlines a need to develop performance indicators. The project informs this action area firstly at a preliminary level by presenting useful information for the development of future eye health performance indicators. Secondly, the project informs this action area through the preliminary examination of key definitional issues surrounding eye health terminology.