

5 DISCUSSION

This report outlines the framework developed to guide the monitoring of prevention. The analytical parts of the report then use the framework to monitor prevention in relation to the key risk factors for CVD, diabetes and CKD. Consequently, this report aims to answer three questions:

1. What is the national prevalence of the main risk factors for CVD, diabetes and CKD?
2. What population-level initiatives are in place that aim to prevent or improve each of these risk factors?
3. What individual-level services are being used to prevent or improve each of these risk factors?

Answering the questions

In answer to the first question on risk factors, it was found that almost 70% of the population aged 15 years and over do not do enough physical exercise, and more than half (60%) are overweight or obese. The prevalence of overweight and obesity is of particular concern as it is continuing to increase. The latest available information shows that, among people aged 25 years and over, a little under a third had high blood pressure and around a half had high cholesterol in 1999–2000. While the proportion of people smoking continues to fall, there was still 20% of the population aged 14 years and over who smoked tobacco in 2007. Preventive treatment decisions are moving towards the assessment of multiple risk factors as well as each risk factor individually—particularly for CVD—as the concept of ‘absolute risk’ is a more accurate method of assessing the risk of developing various diseases. Based on the AusDiab survey, an estimated 5% of men aged 25 years and over were at high risk of a CVD event in the next 5 years, as were around 1% of women.

For the second question, it was not possible to present detailed data on population-level initiatives as there is currently very little routine collection of data on population-level prevention activities in Australia. However, descriptions of the types of current activities have been included, along with specific examples where information was available. From this, public awareness campaigns and community interventions appear to be commonly used across the risk factors examined. Although it is difficult to compare the amount of services delivered under the different categories of population interventions, some broad observations can be made. Legislation, and tax and price incentives, are less commonly used, although for some risk factors such as smoking they are integral to the initiatives. And when they are used, they can have a substantial impact, such as legislation for tobacco advertising, sales and permitted areas for smoking. There is a general awareness that the built environment can affect the prevalence of risk factors and some measures are being taken in this area. Most population-level initiatives focus on particular health behaviours as part of broader strategies.

Considerable new information on prevention activities provided to individuals has been presented (question 3), particularly on the health assessments that form part of the MBS. In 2007–08, there were almost half a million MBS health assessments provided to individuals in Australia. Health check data with trend information available for a number of years show that there have been increases in the rates of use, although in many cases only a relatively small proportion of the relevant population had used

these services. The other main area with available information is medication use in the community. The information presented shows that blood-pressure-lowering medications—among the most commonly supplied medications in Australia—accounted for 20% of all medicines supplied in the community in 2006. Lipid-lowering medications and antidepressants were also very commonly used, making up 8% and 6% respectively of all medicines supplied in the community. Counselling is another important component of general practice for prevention. In 2007–08, counselling about nutrition and weight was the most common preventive activity provided at GP encounters, accounting for 12.2% of all clinical treatments. The most intensive treatment examined here is hospital procedures for morbid obesity. In 2006–07, more than 13,000 of these procedures were performed in Australia, and the number is increasing sharply.

These results demonstrate that there is considerable activity in preventing or treating the risk factors for CVD, diabetes and CKD. This is the first time prevention across a number of risk factors has been systematically monitored in Australia. As the first such report, it is intended to provide a baseline so that the effects of the increased focus on prevention can be assessed in the future.

As a baseline report, there is not a great deal of trend information included. However, information on trends in the risk factors has been included, which is important to understand the context in which the prevention activities are taking place. In addition, trends in individual-level services have been included where possible. Future reporting should aim to include trends in the prevention services. However, it is important to note that any effect of the increased focus on prevention may take many years before it would have a discernable effect on the prevalence of the risk factors.

Information gaps

It is clear that there are a number of data gaps that restricted the amount of information that could be included in this report. Some of these gaps were due to the scope and timing of this report, while in other cases the data are not collected at present.

The largest gap was in the area of population-level prevention activities, for which there is currently no agreed and implemented standard data collection. Further challenges arise because of the large number of government and non-government organisations involved in these activities. This report provided information that could be readily compiled in this area; however, a detailed collection could not be undertaken. A potential structure for such a data collection has been provided, a process that would be very valuable if potentially challenging.

Gaps also exist in the area of individual-level prevention activities, notably medications used in the hospital setting and services provided in community settings (such as Quit programs, and advice provided by private health insurance funds to members).

As has been the case for many years, the report has not been able to include recent information on a number of risk factors due to the lack of a national blood measurement population survey in Australia in the last 10 years. It is, however, notable that measurements related to overweight and obesity were available from the latest NHS, and a new risk factor measurement survey is currently in the planning stages. Also in relation to risk factors, this report only presents prevalence estimates. Incidence estimates would also be valuable information, but currently there is only limited incidence data available in this area, mostly from studies such as the cohort component of the AusDiab study.

It is not currently possible to link service delivery with outcomes at the individual level, that is, to examine risk factors and health problems in individuals who have received particular services. This would be very valuable, and could be achieved with relevant data being linked across data sources.

Issues raised by the framework and analysis

It would be very useful to determine whether Australia's current efforts in prevention are adequate. While this is not an aim of this report, nor is it possible to assess this with the data presented here, there are various developments that provide some insight into this question. There have been a number of calls for more to be done in the area of prevention (Oldenburg & Harper 2008; Russell et al. 2008). And, very importantly, prevention is now a major policy focus at both the Australian Government and the state and territory levels (COAG 2008; NPHT 2008). Further, the recent report of the National Health and Hospitals Reform Commission listed 'embedding prevention and early intervention' as the first priority in the area of redesigning the health system (NHHRC 2009). Finally, the large number of people with the relevant risk factors also points to the need for more prevention. Taken together, these all suggest that the consensus is that there is considerable scope for increasing the health system efforts in the area of prevention. International comparisons could shed light on this, if comparable data were available.

One area that could be investigated further is to compare the services currently provided with those specified in relevant guidelines. In Australia, there are some relevant clinical guidelines, such as the prevention of diabetes and the assessment of absolute risk of cardiovascular events (NHMRC 2005; NVDPA 2009). These could be used to assess whether preventive care does follow these guidelines, although extra data collection would be needed. Australia does not currently have any guidelines for population-level prevention activities. Some of these do exist in other countries (see, for example, those produced by the National Institute for Health and Clinical Excellence in the United Kingdom).

This report does not attempt to assess the effectiveness of the various interventions, both population- and individual-level. In general, if these interventions are evidence-based services—they have been shown to be effective in research studies—then it is assumed that they are effective in practice. However, this may of course not always be the case, such as when interventions are used in populations or settings that were not covered by the relevant research study. There is scope for further research to be done in assessing the effectiveness of these interventions in practice. But the attribution of cause and effect in relation to prevention services is very challenging, largely due to the long duration between the intervention and the outcome.

There is an important role for self-management in the prevention of risk factors. While this report has focused on the health system's role in prevention activities, the successful prevention of (or improvement in) risk factors is also very dependent on the choices made by individuals in relation to their health behaviours—prevention of chronic disease is the shared responsibility of individuals and the overall environment (Roger 2009). The health system does have an important role in influencing these choices, but there are also many other influences outside the health system. These other influences can be positive or negative in terms of health, and can come from sources including the media, advertising and word-of-mouth.

In the analysis of risk factor levels, the report does provide information on differences across population groups where data were available. The general pattern is that there are higher levels of risk in the lower socioeconomic groups than the higher ones, and substantially higher risk for Indigenous Australians than other Australians. There are also higher levels of risk in the more regional and remote areas than in cities, but the difference is much smaller than for the other two categories mentioned above. There is evidence that these population groups are less likely to access preventive services than other groups, which has the potential to widen the gap in risk factors across population groups (Lorant et al. 2002). However, it was not possible to do detailed analyses of the individual-level services for different population groups. While some of this information is collected on the various databases used, detailed data take a significant amount of time to provide, limiting what could be included in this report. Nevertheless, this level of analysis could be included in future reporting. And if further data collation was done for population-level initiatives, it would also be important to include information on specific population groups targeted.

As outlined in the introduction to this report, the risk factors covered here are the behavioural and biomedical ones that are most relevant to CVD, diabetes and CKD. However, it is very important that more upstream determinants such as social and environmental factors are included in prevention activities, along with a focus on the risk factors covered here. These upstream factors of course have important effects on the risk factors within the scope of this report as well as for many other diseases and aspects of health and wellbeing.

Conclusions

It is clear that there is a strong need for increased monitoring of prevention activities in Australia, particularly with the increased policy focus in this area. Much of this monitoring can be done with existing data such as those included in this report. But there is considerable scope to extend this further, such as through more in-depth analysis of the currently available data (for example population groups), and also through data development to extend the information currently available in the existing collections (for example medication use in hospital). As well, there are many other areas where new data collections may be needed, such as in population-level prevention services. It is clear that there needs to be extension of the analysis that was possible for this report, and that monitoring continues systematically and independently of, but in partnership with, the organisations implementing the services.

There remains considerable scope for more prevention to occur in relation to the risk factors for CVD, diabetes and CKD. The shared risk factors for these diseases makes them a key area to focus on, particularly as these diseases account for a substantial proportion of the burden of disease in Australia (around a quarter), as well as a high proportion of deaths (a little less than two-thirds). The relevant risk factors continue to be very common, and in fact this is worsening in some cases, notably obesity. The increased policy focus on prevention is expected to result in an increased number of interventions in this area, thus making continued monitoring an important and relevant national activity.