National Asthma Strategy

2006-2008



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NATIONAL ASTHMA STRATEGY I

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Foreword

Asthma has long been recognised as a major health problem in Australia, with the proportion of the population with the disease being high by international standards. People with asthma report a reduced quality of life and more days off work or study, and are more likely to suffer from depression. Asthma-related costs to the health system and to general productivity are also considerable.

In Australia there is a growing body of research and action that focuses on the problem of asthma. Current activity is building on the foundation laid by almost two decades of concerted effort led by the National Asthma Council and supported by the Asthma Foundations. Activity is now supported by government-funded structures under the National Health Priority Area initiative (the National Asthma Reference Group and the Australian Centre for Asthma Monitoring). Future action must also be seen within the wider context of structures to address other health priority areas and chronic disease overall, such as the National Chronic Disease Strategy and the National Service Improvement Frameworks.

This Strategy seeks to encourage people to join a long-term partnership to improve asthma care. It aims to go beyond outlining public policy and be a useful resource for all those involved in asthma care, including people with asthma and their carers, health professionals and managers, asthma organisations and governments. It is intended for use over the three-year period 2006–2008, after which a new strategy that reflects current practice and understanding will be required.

A vision for asthma care in Australia

It is hoped that through the multilevel approach supported by this document, we will achieve a situation where:

- there is greater awareness of asthma symptoms and management in the general community
- quality of life and health outcomes for people with asthma are improved and the burden on individuals, families and communities is reduced
- people are no longer at greater risk of poorly managed asthma because of cultural, environmental, economic, geographic or lifestyle factors
- asthma care is evidence-based where this is possible or based on the best available information where it is not
- barriers to self-management practices are reduced and self-management is well supported through a focus on consumer empowerment and improved access to information and services
- service provision is designed to respond to the needs of people with asthma and their carers and recognises the need for linkages between primary and hospital care
- research into prevention, early intervention and management of asthma is enhanced, increasing our capacity to answer the many questions still posed by this disease.

Over the last two decades considerable gains have been made in asthma care in Australia.

The strategic directions outlined in this document aim to foster a coordinated and collaborative approach to build on and continue these improvements over the next three years.

The directions are designed to fit within existing structures. They are based around a social rather than a medical model, focussing on people with asthma and their carers.



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There are many aspects of aetiology, diagnosis and management of asthma that are shared by other airways diseases, especially COPD. This section has been prepared by the National Asthma Council to describe the context in which asthma sits in relation to these diseases. Consideration should be given to incorporating these diseases in the next phase of asthma as a national health priority.

Executive summary

- The National Asthma Strategy 2006–2008 (Section 1) sets the context for improving asthma care. It outlines important issues for consideration by those involved in planning and implementing future actions by:
 - focussing on people with asthma
 - building on existing knowledge
 - working within existing structures
 - maintaining a collaborative approach and
 - setting future priorities.

The Strategy outlines priority themes and strategic directions (see below).

- Special consideration is given to the overlap of aspects of the aetiology, diagnosis and management of asthma with other respiratory diseases like COPD and allergy (Section 2). The future need for stakeholder collaboration on these is emphasised.
- Useful information sources are provided for the reader (Section 3).

Desired outcomes and strategic directions

OUTCOME 1 — Raised **community understanding** of asthma as a **chronic** disease

- Collaborate on health promotion activities to raise community understanding of asthma, its risk factors, identifiable trigger factors and management
- Promote community understanding of asthma as a chronic disease that requires management through a strategic long-term approach
- Work with anti-smoking organisations to publicise the relationship between asthma and smoking

OUTCOME 2 — Increased **recognition** and **diagnosis** of previously undiagnosed asthma

- Collaborate on community-based campaigns to raise awareness of asthma symptoms and encourage those with respiratory symptoms to consult their GP
- Develop evidence-based, practical tools for GPs to assist diagnosis of asthma and other respiratory conditions

OUTCOME 3 — Increased levels of **consumer participation** in developing, implementing and evaluating health strategies, programs and service delivery

- Involve people with asthma, carers and consumer organisations across the spectrum of care from needs assessment to developing, implementing and evaluating health strategies, programs and services
- Increase consumer-based research into models of asthma self-management and care

Raising understanding of asthma

Supporting consumer action and self-management

Supporting consumer action and self-management (cont)

OUTCOME 4 — Increased **capacity** of people with asthma and their carers to take charge of their own asthma **management**

- Develop and implement consistent, practical self-management education
- Investigate innovative approaches to adherence/concordance
- Identify ways to increase uptake of written asthma action plans and other aspects of patient self-management education by people with moderate to severe asthma
- Develop strategies to facilitate GPs writing asthma action plans and working with others in the primary care team to deliver self-management education
- Ensure self-management education includes identification and management of asthma triggers, particularly smoking, which is not only a trigger for worsening asthma but decreases the beneficial effects of medication
- Promote optimal recognition and early treatment of asthma exacerbations among patients, carers and health professionals
- Monitor rate and identify factors contributing to inappropriate hospital presentations and admissions for asthma
- Enhance awareness of risk of continuing smoking and poorer asthma outcomes
- Develop programs in collaboration with current providers to discourage uptake
 of smoking by people with asthma and increase quit rates of smokers with
 asthma

OUTCOME 5 — Enhanced **understanding** among people with asthma and their carers, and health professionals, of the improvement in **quality of life** resulting from **better asthma control**

- Develop, evaluate and promote interventions that improve quality of asthma control, learning from past and current examples
- Investigate if and how much consumers understand and value improved quality of life as a motivation for improved adherence practices

Developing care models for priority population groups

OUTCOME 6 — Development and implementation of approaches to **communication** that meet the needs and enhance the outcomes of **priority population groups**

- Identify priority population groups through research and evaluation and establish consultation mechanisms
- Tailor approaches specifically with culturally appropriate information in userfriendly format and appropriate language
- Develop and trial approaches to priority population groups, with emphasis on engagement, communication and community support
- Develop culturally specific materials for priority population groups (eg Indigenous and non-English speaking communities)
- Develop culturally appropriate programs, in collaboration with current providers, to discourage uptake of smoking by people with asthma and increase quit rates of smokers with asthma (by enhancing awareness of risk of continuing smoking and poorer asthma outcomes)

OUTCOME 7 — Refined **care delivery models** and incentives suited to **priority population groups**

- Undertake research to investigate the causes of and contributors to poorer asthma outcomes in priority population groups
- Adapt existing approaches (eg the Asthma 3+ support program and help lines) for priority population groups
- Investigate models that enhance the capacity of primary care to provide appropriate asthma care to specific priority population groups
- Address the specific needs of children in relation to the diagnosis and management of asthma

Developing care models for priority population groups (cont)

OUTCOME 8 — Improved access to care by priority population groups

- Facilitate access by priority population groups to information, treatment and devices
- Support community-based emergency asthma management programs
- Increase school, childcare, workplace and aged care facility-based asthma management programs
- Promote pharmacy-based asthma management systems (eg Pharmacy Asthma Care program)

OUTCOME 9 — Effective **communication** between members of the care team and people with asthma and their carers

- Identify barriers to effective communication between members of the care team and between health professionals and people with asthma
- Continue to provide professional development on asthma management including training in communication
- Identify links and maximise opportunities to coordinate local, regional and national initiatives for better asthma outcomes

OUTCOME 10 — Increased investment in **quality improvement structures** in health care delivery

- Build systems that support health professionals to assess the outcomes of the health care they provide and adopt evidence-based care models
- Establish continuous quality improvement systems and benchmark services against agreed performance indicators
- Engage educational institutions and professional organisations at every level to adopt best practice for educating and training health professionals in optimal asthma care
- Promote a unified approach to teaching the principles of asthma management across disciplines and throughout professional life (from undergraduate through postgraduate to continuing professional education)
- Develop and implement an asthma core data set
- Explore innovative funding approaches to support improved care models for people with chronic diseases, including asthma

Improving integration of care

Improving integration of care (cont)

OUTCOME 11 — Improved **continuity** of asthma care

- Develop sustainable referral procedures between GPs, pharmacists, asthma educators and other relevant health professionals
- Develop sustainable hospital admission and discharge planning models suitable for different settings
- Develop strategies to increase uptake of best-practice hospital discharge practice

Recognising networks

OUTCOME 12 — Strong **local and regional networks** active in the coordinated delivery of care

- Support the development of local, tailored approaches and care models in response to consumer needs, using national or State-developed resources, guidelines and programs
- Focus on what needs to be achieved and empower people to develop a model of service that suits their needs
- Identify, repackage and promote available resources (such as the Pharmacy Asthma Care Program) and evidence-based approaches to asthma care

OUTCOME 13 — Existing systems for communicating and **sharing information** between Australian government jurisdictions and asthma stakeholders strengthened and built on

- Build on National Asthma Council and Asthma Foundation networks such as websites
- Continue to monitor consistency of information
- Build common resources for use across sectors and geographical boundaries
- Encourage jurisdictions to link to asthma websites

Improving understanding of the disease

OUTCOME 14 — Increased **understanding** of the factors involved in **optimal outcomes** for the person with asthma

- Fund and conduct coordinated, innovative research that aims to inform patientcentred care
- Continue to conduct research that will enable GPs to identify the most appropriate management and devices for patients and help patients to use devices to their best advantage
- Conduct research to clarify the role of environmental triggers in exacerbations of asthma and to develop interventions to minimize these
- Fund research to elucidate the risk factors for the development of asthma and the potential to modify this risk.
- Support the appropriate assessment, review and dissemination of evidence for effective asthma care
- Raise awareness of the need for appropriate funding for asthma research

OUTCOME 15 — Better understanding of the **cost** of asthma to the community

- Conduct economic analysis of the direct and indirect costs of asthma (ie update the Report on the Cost of Asthma)
- Explore accessibility issues related to the costs of asthma for individual consumers (eg medications, devices, GP visits, travel, home and work disruption)

SECTION 1 — THE NATIONAL ASTHMA STRATEGY

Introduction

The National Asthma Strategy was developed through broad stakeholder consultation by an expert working group that included representation from the National Asthma Council, Asthma Foundations of Australia, the National Asthma Reference Group, the Australian Centre for Asthma Monitoring and the Department of Health and Ageing.

The Strategy is the outcome of a joint review of the National Asthma Strategy (NAS) developed in 1999 by the National Asthma Council, and the National Asthma Action Plan (NAAP) of the Department of Health and Ageing. The aims of the review were to:

- assess the impact of the NAS and NAAP in informing the development of policies and activities undertaken by stakeholders to improve the quality of life for people with asthma
- ascertain from the field and from available evidence, any achievements, gaps and areas of potential investment relating to asthma in Australia
- involve stakeholders in a process to inform the development of future strategic documents in the asthma area.

The review comprised an audit of asthma activity, interviews with key informants, a workshop of asthma stakeholders and a subsequent meeting of key stakeholders to progress the outcomes of the workshop. The findings and recommendations of the review formed the basis of this Strategy, which was then refined following consultation with stakeholders in mid-2004.

The report Asthma in Australia 2003 (ACAM 2003) was used to inform the Strategy and is the source for all data cited. Developed by the Australian Centre for Asthma Monitoring, the report contains a comprehensive record of asthma statistics in Australia and identifies areas where monitoring is still required.

The Strategy is intended to be a guide for those with an interest in asthma care, providing a framework within which to plan and implement activities at local, State and Territory and national levels.

First and foremost this Strategy is based around the needs of people with asthma, in particular groups whose asthma is not as well managed as it could be.

The Strategy addresses aspects of management that have been identified as problem areas.

It summarises existing activities and structures so that efforts already underway can be fostered and built on by future action

"Asthma is a chronic disease causing episodes of wheezing, chest tightness and shortness of breath due to widespread, reversible narrowing of the airways within the lungs and obstruction to airflow. The underlying problem is chronic inflammation of the air passages, which also tend to over-react by narrowing too often and too much in response to triggers such as exercise and exposure to pollens and other factors."

(Asthma in Australia 2003)

Recent surveys show that around 1 in 6 children and 1 in 10 adults have a diagnosis of asthma that remains a current problem. Around 25 per cent of Australians say that they have had wheezing in the last year.

Prevalence of asthma in adults did not change during the 1990s, but prevalence in children rose in the 1980s and early 1990s. Two recent studies suggest that prevalence may no longer be increasing.

1 Context for future action

This chapter describes the **context for action** to improve asthma care in Australia. It outlines **important issues** to be considered by all those involved in **planning and implementing** future action.

In Australia, the last two decades have seen sustained growth in activity aimed at improving care and health outcomes for people with asthma. As momentum has gathered, the approach to the area has become better coordinated and more collaborative. Aspects of asthma care where further progress could be made have been identified and initiatives are underway towards improvements in these areas. However, there is still a long way to go. Research studies continue to find intriguing clues to the problem of asthma prevention, but we still do not know whether it is possible to prevent the onset of asthma. We know that most asthma can be effectively managed, but integrating interventions into an already pressured health system to ensure high quality care for people with asthma remains a challenge.

This National Asthma Strategy is intended as a framework for continued collaborative efforts to improve asthma care in Australia, with the aim of consolidating current activity and supporting and advancing action to achieve both short-term and long-term gains. It also aims to facilitate effective interaction between governments, service providers and the general community, so that the health system is supported to more effectively care for people with asthma and other chronic diseases.

The Strategy is intended for use by all those with an interest in asthma care, from people with asthma and their carers through to policy makers. It is intended for use over the three-year period 2006–2008.

Section 1 outlines issues that require consideration in future planning for asthma care (Chapter 1); presents a set of desired outcomes, listing strategic directions for action (Chapter 2); and provides a framework for evaluation of the strategy (Chapter 3). It has been jointly developed by all major stakeholders in asthma care.

Section 2, prepared by the National Asthma Council, describes the broader context of asthma in relation to other airways diseases, such as chronic obstructive pulmonary disease, which share many aspects of aetiology, diagnosis and management with asthma.

Future action in asthma must be considered within the context of what has already been achieved. Over the past four years, there has been increased funding and activity in many areas and a more coordinated approach across sectors. Collaboration between clinical bodies through the National Asthma Council, working with other relevant groups (including asthma educator and consumer organisations), has greatly facilitated progress in the practical management of asthma in Australia.

Major research findings have informed evidence-based resources to support consumers and health professionals. Australia published and disseminated the first national asthma management guideline in the world, the Asthma Management Handbook, and the consistency of asthma care in Australia has improved with the strong focus on guideline dissemination and implementation in primary care. A wide range of educational and other programs have also been developed at national, State and Territory and local levels. There has been a greater focus on self-management by people with asthma, and self-management resources and practice tools have been developed and implemented.

The challenge for future action is to ensure that these resources and programs reach and benefit more people with asthma and their carers, and that research efforts can continue to fill the gaps in our knowledge about this complex disease.

Stakeholders have identified the need for a system-wide coordinated and collaborative approach that focuses on consumers and delivers consistent messages. Work should progress on different levels, raising understanding across the population, but also meeting the individual needs of people with asthma and targeting priority population groups.

1.1 FOCUSSING ON PEOPLE WITH ASTHMA

The key directions outlined in this strategy are based on a multilevel approach, with the overall aim of improving the health of children and adults with asthma. A patient-centred focus ensures that those with asthma are treated as individuals and that other aspects of their lives (eg coexisting conditions) are taken into account.

Action should occur at the following levels.

- Taking a population health approach, to raise understanding of asthma across the
 community, increase the skill base in managing asthma and help to encourage
 people with unidentified asthma to seek diagnosis and treatment. For maximum
 effect, a population health approach should reach children and adults wherever
 they are such as schools, workplaces, sports clubs and child-care centres.
- Addressing the needs of individuals with asthma so they receive quality care, taking
 into account the differing experiences of consumers and carers from childhood
 to old age, and investigating innovative models of care delivery that promote
 self-management and continuity of care.
- Targeting population groups that may have specific needs across the spectrum
 of care from prevention to management, and for which population approaches
 must be varied. These priority population groups include (but are not limited to)
 those who:
 - are families with children who have undiagnosed or poorly managed asthma
 - have poorly managed or unmanaged asthma, perhaps because it is undiagnosed or because of adherence issues
 - are continuing smokers or live with carers who smoke
 - are older people who may be dealing with other conditions as well as asthma
 - are Aboriginal people and/or Torres Strait Islanders
 - were born overseas and do not speak or read English as a first language
 - live in rural or remote areas
 - are socio-economically disadvantaged
 - have physical or mental disabilities
 - have a history of severe attacks or life-threatening asthma.

Death due to asthma is uncommon (eg 0.3 per cent of all deaths in 2001) and rates have decreased by more than half since the late 1980s, falling below 400 a year for the first time in 20 years in 2002. The majority of deaths from asthma now occur in people aged 50 years and over.

Hospitalisation for asthma among children also reduced during the 1990s.

Despite these gains, asthma is still a major reason for health care visits and lost productivity.

People who were born overseas and do not speak English as a first language have low diagnosis of asthma, more ill health and a higher risk of death from asthma.

People who live in rural and remote areas or in more disadvantaged areas have a higher risk of dying from asthma than people in cities and large towns or in less disadvantaged areas. These differences are similar to those seen for deaths due to other causes. However there are not many asthma deaths overall.

The number of people who report having asthma as a long-term condition is higher among Indigenous adults than among non-Indigenous adults.

The symptoms of asthma are usually reversible, either spontaneously or with treatment. Since the degree of airway narrowing and obstruction varies with the disease and treatment, symptoms can also vary from being absent, to low grade or occasional problems through to severe or persistent. Some asthmalike symptoms occur in people with other diseases, particularly among older people and the very young.

While there was an increase in the use of written asthma action plans in the early 1990s, at the time of high profile national community education campaigns on written asthma action plans, uptake appears to have decreased since the mid 1990s. However, the last surveys on ownership were completed shortly before the introduction of the Asthma 3+ Visit Plan, which may have had a positive effect on uptake.

1.2 BUILDING ON EXISTING KNOWLEDGE

The collaborative work of asthma stakeholders including the National Asthma Council and the Asthma Foundations has led to continuing growth in knowledge and resources about asthma care. We know that most asthma can be well-managed through medication, avoidance of triggers and effective self-management. The evidence-based Six-Step Asthma Management Plan presented in the National Asthma Council's Asthma Management Handbook has been shown to reduce ill health and increase quality of life among people with asthma. However, asthma is a chronic, complex condition that many people find difficult both to accept as potentially life-threatening and to manage effectively. Adherence to long-term medication is a significant problem, and the costs of medications, devices and indirect costs (eg travel, work disruption) are also potential barriers.

Providing information alone does not improve asthma outcomes. Education, resources and adherence interventions need to support children and adults to manage asthma as part of their lives, both day to day and over the long-term.

Research into prevention of asthma is underway and must continue. Studies of the natural history of asthma indicate that the disease process begins very early in life, possibly even before birth. However, we cannot yet clearly distinguish young children at risk of developing asthma, or identify avoidable risk factors for the disease. Consequently, we cannot develop interventions to address risk factors for asthma and this is not likely to be possible within the life of this strategy.

While research continues, there are several areas in which action should be focussed.

• Self-management of asthma — the use of an individualised, written asthma action plan, together with self-management education, self-monitoring and regular medical review, improves health outcomes for people with asthma and is fundamental to the success of asthma self-management. However, despite the fact that written asthma action plans have formed part of national management guidelines for asthma since 1989, most people with asthma still do not have such plans. In fact, ownership of written action plans has fallen significantly since reaching a peak of 40 per cent in 1995. It is a priority to reverse this trend and combine improved levels of ownership of action plans among people with asthma with more effective approaches to self-management education among health professionals.

While self-management remains a focus, support strategies must also be available for those who, for reasons of cultural background, age or disability, prefer guided management.

Integration of care — flexible integrated care models should include effective and readily implemented follow-up procedures after discharge (such as standard information kits, referral protocols and Home Medicines Reviews). These should improve the continuity of care between all health practitioners and between hospital and the community. Adequate record systems are also required in order to track the experience of a patient with asthma. Integrated care models have to be adapted to suit different geographical and cultural needs. To widen their reach, they should also extend beyond primary health facilities to other community settings such as schools and workplaces.

- Delivery of asthma care in the community GPs are the main providers of asthma care in the community. It is critical that the results of the Asthma 3+ Visit Plan evaluation are converted into recommendations for practice that make it easier for GPs and the primary care team (for example in the context of Aboriginal Community Controlled Health Services) to deliver effective care to their patients with asthma. There is also a need for a flexible approach that reinforces the most appropriate care delivery in the most appropriate setting, depending on the individual. This will ensure that wherever people with asthma access health care they receive consistent messages about the importance of following a written asthma action plan and of working with their doctor and other health professionals to get the best outcomes for their asthma. The primary care team is also an important source of lifestyle advice (eg encouraging smoking cessation).
- Minimising the impact of asthma triggers —This is an important part of asthma management, particularly in young children. Early intervention to identify asthma triggers can increase awareness of asthma and its management and minimise the likelihood of problems as children get older. Common triggers include allergens (such as house dust mite, pets, mould spores or pollens), tobacco smoke and respiratory infections. Occupational asthma triggers should also be considered. Smoking is an important preventable cause of asthma symptoms and worsening symptoms. Encouraging smoking cessation by people with asthma and the carers of children with asthma should be a major part of trigger avoidance strategies.
- Quality use of medicines Medications are central to asthma management and different medications are used in different ways, depending on the individual and the severity of their asthma. Over the last decade, the National Asthma Council has been at the forefront of strategies for quality use of medicines in relation to asthma care. However, there are still issues to resolve: convincing people to stay on their long-term preventer medication; ensuring that people have their asthma reviewed regularly and are on the appropriate dose; and ensuring access and affordability of medications for those with asthma. Aboriginal and Torres Strait Islander peoples have poorer access to medications. The Australian Pharmaceutical Advisory Council have recommended a number of strategies to correct this.
- Relationship between asthma and other airways diseases Action in asthma should recognise that asthma is part of a spectrum of airways diseases and that misdiagnosis within this spectrum is common, particularly in older people in whom chronic obstructive pulmonary disease (COPD) is common. The need to consider asthma as part of the broader respiratory disease area is discussed in Section 2.

There is continuing underuse of preventer medication among people with asthma, particularly among younger people. Underuse does not appear to be related to socio-economic disadvantage or living in a remote location, although under-use of preventers is likely to be multifactorial. Little is known about the factors contributing to this serious problem which results in high levels of morbidity related to poorly treated asthma. Long-term adherence to medication is an ongoing challenge to be addressed.

The 2001 National Health
Survey found that the
proportion of smokers
among people with
asthma was higher than
the proportion of smokers
among people without
asthma, particularly in the
18 to 34 years age group.
Smoking contributes to
suboptimal responses to
treatment with inhaled
corticosteroids.

The Survey also found that around 40 per cent of children with asthma lived with one or more regular smokers.

Tobacco smoke is a recognised risk factor for the development of asthma symptoms and for the worsening of pre-existing asthma.

1.3 WORKING WITHIN EXISTING STRUCTURES

Future action must be seen within the wider context of structures to address other health priority areas and chronic disease overall. It is essential to build on existing work and to foster linkages between existing programs. These include:

- National Health Priority Areas, which focus on chronic diseases of significant health burden. The initiative relies on collaboration between the Commonwealth, State and Territory governments and draws upon expertise from a range of non-government, clinical and consumer groups
- the *National Chronic Disease Strategy* (currently being developed), which will aim to build a seamless and consistent management structure across the continuum of prevention and care with the aim of improving the quality of life and reducing inequity for people with or at risk of chronic disease
- National and State and Territory strategies relevant to the lifestyle aspects of asthma management, including the National Tobacco Strategy and Be Active Australia: A Health Sector Framework for Action 2005–2010
- National Service Improvement Frameworks for each national health priority area, which are patient-centred and reflect national consensus regarding appropriate standards of prevention and treatment from diagnosis to recovery or palliation
- Strategies and policies on medicines, such as the National Strategy for Quality Use of Medicines, and the National Medicines Policy
- *non-disease specific programs*, such as the National Resource Centre for Consumer Participation, and chronic disease programs operating in States and Territories.

1.4 MAINTAINING A COLLABORATIVE APPROACH

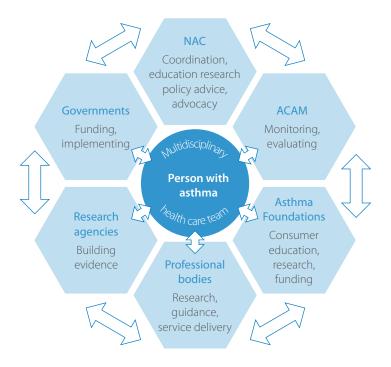
People with asthma and their carers have a vital role in a collaborative approach to asthma care, including:

- working with the health care team to effectively self-manage their asthma including developing and following a written asthma action plan
- · communicating with their health professionals
- taking part in community education and advocacy
- participating in asthma-related consumer research or program development so that services appropriately address consumer needs, are accessible and deliver optimal care.

Asthma organisations, governments and other groups have demonstrated their willingness and ability to work together to achieve improvements across many areas of asthma. Collaboration and coordination should continue and strengthen, to make the most efficient use of resources and reduce duplication of effort.

Collaboration is not just important at the organisational level — at the individual level it is essential that health professionals work with patients to facilitate effective self-management.

Communication and coordination in asthma care



1.5 FUTURE PRIORITIES

Continuing research is essential in the areas of both prevention and management. Research is needed to identify avoidable risk factors, assess interventions to address risk factors for asthma, and develop a better understanding of the factors that worsen asthma symptoms. Although a range of effective interventions for asthma management have been developed, research is needed into the effective implementation of these interventions in different settings and with different target groups.

Other priorities in asthma include:

- facilitation of changes to practice that will assist GPs to deliver more effective care, through GP bodies and professional organisations
- more rigorous mechanisms ensuring continuity of care between hospital and community-based care and within the community
- more effective use of information systems
- education for health professionals becoming more evidence-based to support improved care delivery
- exploration of different models of care for example involving asthma-trained practice nurses in asthma self-management education
- development of processes to strengthen the role of asthma educators (eg education programs and resources, peer mentoring)
- addressing education and workforce issues to build the capacity of asthmatrained clinicians and educators
- integration of asthma best practice models for individuals and communities into public policy documents such as the National Chronic Disease Strategy and the National Service Improvement Frameworks.

2 Priority themes and strategic directions

This chapter takes a **practical approach** to improving asthma care in Australia. It presents a set of **desirable outcomes** and suggests ways — **strategic directions** — of focussing activity to achieve the outcomes. **Examples** are given of the ways in which different individuals and organisations can translate the strategic directions into action. **Key agencies** likely to be involved in implementation are given for each outcome.

A great deal of effort is already underway to improve asthma care in Australia. Acknowledging the broad range of individuals and organisations involved, the strategic directions outlined in this chapter aim to:

- support an integrated and coordinated approach that addresses the needs of people with asthma
- build on existing developments, consolidating work carried out under the National Asthma Strategy (NAS) and the National Asthma Action Plan (NAAP) by stakeholders
- provide a single, flexible framework that can be adapted by stakeholders in a range of settings
- challenge stakeholders to develop innovative programs that will identify and overcome current barriers to effective asthma care.

Using this strategy to improve asthma care

Planning

Take into consideration the need to:

- focus on people with asthma and their carers
- build on existing knowledge and activity
- · work within existing structures
- maintain a collaborative approach
- be innovative and flexible
- identify and overcome barriers to effective care and better outcomes

Measuring progress

Assess whether progress has been made against original aims

Focussing activity

Priority themes include:

- raising understanding across the population
- supporting consumer action and self-management
- developing care models for priority populations
- improving integration of care
- using local, regional, and national networks
- improving understanding of the disease

Taking action

- Identify goals and assess the outcomes and strategic directions that relate to you or your organisation
- Develop local actions towards relevant outcomes using given examples for guidance

2.1 RAISING UNDERSTANDING OF ASTHMA ACROSS THE POPULATION

The population health approach that is being taken towards asthma and other chronic diseases in Australia has already raised awareness and understanding and this should be continued and strengthened. Further work should aim to:

- raise levels of appropriate diagnosis and referral through greater awareness of asthma symptoms and how they indicate the severity of asthma
- ensure continuing consistency of educational resources and minimal duplication of effort
- build the capacity of asthma-trained clinicians and educators
- inform and educate the community and health professionals to minimise environmental risk factors for wheezing illness in young children (eg from unflued gas heaters, environmental tobacco smoke and synthetic bedding)
- maintain community education to reduce smoking and tobacco smoke exposure of children.

OUTCOME 1

Raised **community understanding** of asthma as a **chronic** disease

Chronic diseases affect people through long periods of their lives and not simply as single episodes requiring short-term treatment. Understanding the implications of asthma as a chronic disease is a first step towards long-term approaches to care that maximise the possibilities for best quality of life and optimal outcomes.

Strategic directions

- Collaborate on health promotion activities to raise community understanding of asthma, its risk factors, identifiable trigger factors and management
- Promote community understanding of asthma as a chronic disease that requires management through a strategic long-term approach
- Work with anti-smoking organisations to publicise the relationship between asthma and smoking

Suggested activities

- Undertake research to determine the most effective strategies for community education and awareness about asthma and its optimal management as a chronic disease
- Undertake comprehensive national market research (rural and urban) to determine asthma knowledge of people with asthma and their carers — look at understanding of medications, triggers, symptoms, management. Repeat survey every 4–5 years to monitor progress
- Conduct annual national community education campaigns (using television)
 each year to maintain community awareness and to deliver targeted messages
 on aspects such as asthma management, smoking, 'could it be asthma?', and
 written Asthma Action Plans

Examples of action towards OUTCOME 1

Consumer with asthma participates in asthma education classes at work or school

Pharmacist promotes asthma awareness through pharmacy displays and discusses best approaches to quality use of medicines and device use

GP discusses asthma symptoms and management with patients and gives appropriate advice on quitting smoking

Community health centre holds information evenings on asthma

Asthma organisations

develop resources to support community-based asthma education

Pharmaceutical company

works with Asthma Australia to develop educational resources

Governments fund evaluation of existing community–based asthma education programs

Examples of action towards OUTCOME 2

Consumer with asthma is

aware of common asthma symptoms and consults GP about respiratory symptoms

GP follows evidence-based guidelines for diagnosis, institutes Asthma 3+ Visit Plan if necessary and refers patient to asthma educator

Asthma educator answers queries about medication and helps patient to identify triggers, develop strategies to minimise exposure and adhere to care plan

Pharmacist promotes understanding of asthma symptoms through pharmacy displays and conducts informed discussion with consumers at point of care

Asthma organisations

develop resources to support asthma education that can be given in community venues such as schools and clubs

Governments fund evaluation of communitybased asthma education programs

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Action on Smoking and Health, Royal Australian College of General Practitioners, Thoracic Society of Australia and New Zealand, Australasian Society of Clinical Immunology and Allergy, pharmaceutical industry

OUTCOME 2

Increased **recognition** and **diagnosis** of previously undiagnosed asthma

Strategic directions

- Collaborate on community-based campaigns to raise awareness of asthma symptoms and encourage those with respiratory symptoms to consult their GP
- Develop evidence-based, practical tools for GPs to assist diagnosis of asthma and other respiratory conditions

Suggested activities

- Determine the extent of undiagnosed asthma and use this information as the basis for health promotion activities (eg media releases directed at health professionals and the general population)
- Trial the practicality of an evidence-based diagnostic tool for asthma and other respiratory conditions (eg within a Division of General Practice) and disseminate findings

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Australian Lung Foundation, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Royal Australian College of General Practitioners, Thoracic Society of Australia and New Zealand, Australasian Society of Clinical Immunology and Allergy

2.2 SUPPORTING CONSUMER ACTION AND SELF-MANAGEMENT

The NAS and the NAAP supported increased consumer involvement in developing asthma programs and planning service delivery. Continued empowerment of consumers, particularly among harder to reach groups, will assist in the development and evaluation of models of care and educational resources that are appropriate to consumer needs.

Another important element of consumer involvement and of successful self-management is education. Many organisations have produced materials about asthma treatment and management. However, little information is available about the uptake of these materials or their effect on outcomes. The fact that many organisations have produced materials with similar information highlights the need for continued coordination to avoid too much duplication of effort.

Self-management is also supported by the Asthma 3+ Visit Plan, which has been successfully implemented among some groups. However, some reports suggest that

there are barriers to uptake of the plan by GPs, many people participating in the plan have not attended all three visits and there are concerns that the plan does not meet the requirements of all groups.

New Chronic Disease Management Medicare items have been developed and offer an alternative to the Asthma 3+ Visit Plan for providing care to those with chronic conditions, including asthma.

There is a need to explore the roles of asthma educators, community pharmacists and practice nurses in supporting and encouraging the implementation of asthma self-management education.

To help address

Further work in this area should aim to strengthen:

- consumer participation of people with asthma, particularly among hard to reach groups
- service delivery models (such as the Asthma 3+ Visit Plan) that support selfmanagement and also recognise that guided management will be the preference of some consumer groups (eg some older persons and perhaps some cultural groups)
- exploration of models of care that enhance the roles of different members of the primary care team in implementing asthma self-management education
- adherence to asthma action plans and medication regimens.

OUTCOME 3

Increased levels of consumer participation in developing, implementing and evaluating health strategies, programs and service delivery

Strategic directions

- Involve people with asthma, carers and consumer organisations across the spectrum of care from needs assessment to developing, implementing and evaluating health strategies, programs and services
- Increase consumer-based research into models of asthma self-management and care

Suggested activities

- Undertake focus group research rural and urban across socioeconomic groups to determine how asthma information is best conveyed (eg internet, brochures, meetings, media). Use this information to support the multi-faceted annual national community education campaign
- Undertake consumer-based research to identify barriers to consumers achieving optimal outcomes from care provided
- Provide organisations likely to undertake asthma interventions with evidence on the value of consumer consultation

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Consumers' Health Forum, Pharmacy Guild of Australia, Pharmaceutical Society of Australia

Examples of action towards OUTCOME 3

Consumer with asthma participates in research and contributes to the

development of resources to enhance asthma service delivery

Consumer organisation

supports members to become involved in asthma research and planning

Hospital gathers information from people with asthma about their experiences to inform future planning

Asthma organisations involve consumers in planning programs

Examples of action towards OUTCOME 4

Consumer with asthma seeks information from asthma websites or helplines, or asks GP for brochures on asthma self-management

GP provides information on self-management and assists in development of self-management skills. GP works with patient to develop a care plan for asthma and any other chronic conditions

Asthma educator provides asthma education while patient is in hospital after treatment for worsening symptoms

Hospital links to GP and community pharmacist to inform them of patient's treatment and of follow-up needs

Asthma organisations work together to provide consistent messages

Governments fund research, evaluation and further development of existing consumer resources

Research funding bodies and organisations design, fund and undertake research into adherence and selfmanagement

OUTCOME 4

Increased **capacity** of people with asthma and their carers to take charge of their own asthma **management**

Strategic directions

- Develop and implement consistent, practical self-management education
- Investigate innovative approaches to adherence/concordance
- Identify ways to increase uptake of written asthma action plans and other aspects of patient self-management education by people with moderate to severe asthma
- Develop strategies to facilitate GPs writing asthma action plans and working with others in the primary care team to deliver self-management education
- Ensure self-management education includes identification and management of asthma triggers, particularly smoking, which is not only a trigger for worsening asthma but decreases the beneficial effects of medication
- Promote optimal recognition and early treatment of asthma exacerbations among patients, carers and health professionals
- Monitor rate and identify factors contributing to inappropriate hospital presentations and admissions for asthma
- Enhance awareness of risk of continuing smoking and poorer asthma outcomes
- Develop programs in collaboration with current providers to discourage uptake
 of smoking by people with asthma and increase quit rates of smokers with
 asthma

Suggested activities

- Develop (with consumer consultation) and trial local level health promotion activities (evidence-based, if possible) to support effective and sustainable selfmanagement
- Continue to provide educational programs and resources to consumers on the role of asthma medications
- Develop a pilot in one area where the Asthma Friendly Schools program is very successful and develop this into a community project linked to local health professionals and local media. Use this as a model for adaptation and adoption in other local areas
- Investigate successful models (eg in Divisions of General Practice) for overcoming barriers to uptake of Asthma 3+ Visit Plan by GPs and adapt for implementation in local area

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Consumers' Health Forum, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Royal Australian College of General Practitioners, Thoracic Society of Australia and New Zealand, Australasian Society of Clinical Immunology and Allergy

OUTCOME 5

Enhanced **understanding** among people with asthma and their carers, and health professionals, of the improvement in **quality of life** resulting from **better asthma control**

Strategic directions

- Develop, evaluate and promote interventions that improve quality of asthma control, learning from past and current examples
- Investigate if and how much consumers understand and value improved quality of life as a motivation for improved adherence practices

Suggested activities

- Continue to build on national community education activities on this issue using targeted media for specific population groups (eg parent groups, teenagers, older people)
- Develop educational resources for health professionals on adherence strategies and provide them with useful messages to communicate to patients about the possibility of achieving control
- Develop a comprehensive health promotion and community education program that specifically focuses on the Aboriginal and Torres Strait Islander population in order to generate awareness of asthma as a key health issue, the availability of systematic asthma care and the role of preventer medications, while recognising local difference and capacity.

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Consumers' Health Forum, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Royal Australian College of General Practitioners, pharmaceutical industry.

2.3 DEVELOPING CARE MODELS FOR PRIORITY POPULATION GROUPS

Mainstream approaches to asthma care are not appropriate for all population groups. Further investigation and comprehensive consultation with groups that have poorly managed asthma will aim to identify:

- strategies to enhance asthma care that support delivery of comprehensive primary health care of most relevance to each group
- suitable processes of engagement, communication and community support
- ways in which existing programs and initiatives can be adapted to the needs of different groups.

Examples of action towards OUTCOME 5

Consumer with asthma

sees television commercial on asthma control and seeks written asthma action plan from pharmacist

Pharmacist supplies proforma written asthma action plan, reinforces television commercial message to see GP for check up, and also checks inhaler use

GP reviews consumer's asthma, instigates Asthma 3+ Visit Plan, schedules next appointment, completes written asthma action plan with consumer, recommends visit to asthma educator and contact with local Asthma Foundation.

Asthma educator develops adherence strategy with consumer and monitors progress

Asthma Foundation available with asthma inquiry line and brochures.

Local community health
centre works with Asthma
Foundation and coordinates
health promotion activities
which encourage effective selfmanagement to improve
quality of life

Examples of action towards OUTCOME 6

Consumer with asthma

(in a priority population group — eg non-English speaking background) requests appropriate materials from local pharmacist

Pharmacist ensures adequate supply of suitable materials and contacts as part of local asthma programs for priority population groups

Asthma organisations work with priority population groups to develop and focus test asthma materials

Local government considers health communication needs of priority population groups in municipal health planning

Governments fund development of appropriate educational materials for priority population groups

OUTCOME 6

Development and implementation of approaches to **communication** that meet the needs and enhance the outcomes of **priority population groups**

Strategic directions

- Identify priority population groups through research and evaluation and establish consultation mechanisms
- Tailor approaches specifically with culturally appropriate information in userfriendly format and appropriate language
- Develop and trial approaches to priority population groups, with emphasis on engagement, communication and community support
- Developculturally specific materials for priority population groups (eg Indigenous and non-English speaking communities)
- Develop culturally appropriate programs, in collaboration with current providers, to discourage uptake of smoking by people with asthma and increase quit rates of smokers with asthma (by enhancing awareness of risk of continuing smoking and poorer asthma outcomes)

Suggested activities

- Work with the Federation of Ethnic Communities Councils of Australia to develop comprehensive asthma resources and systems to ensure that they are easily available to and used by the target communities
- Develop specialised training programs for Indigenous and ethnic health workers to facilitate communication on asthma
- Develop and trial age-appropriate education packages to help preschool and early school age children understand asthma, its management and treatment

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Royal Australian College of General Practitioners, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Federation of Ethnic Communities Councils of Australia, National Aboriginal Community Controlled Health Organisation, aged care organisations, Action on Smoking and Health

OUTCOME 7

Refined care delivery models and incentives suited to priority population groups

Strategic directions

- Undertake research to investigate the causes of and contributors to poorer asthma outcomes in priority population groups
- Adapt existing approaches (eg the Asthma 3+ support program and help lines) for priority population groups
- Investigate models that enhance the capacity of primary care to provide appropriate asthma care to priority population groups
- Address the specific needs of children in relation to the diagnosis and management of asthma

Suggested activities

- Work with one cultural group through its organisational, community and media structures to develop an effective and evaluated asthma intervention. Use this as a development model, adapting as necessary, to work with other cultural groups
- Consider modifying Asthma 3+ Visit Plan requirements under the Medicare Benefits Schedule and the Practice Incentive Program (PIP) for Aboriginal Community Controlled Health Services to allow for one GP visit with subsequent follow-up visits to be provided by an allied health professional such as an Aboriginal Health Worker (under supervision of a GP)
- Work with the National Aboriginal Community Controlled Health Organisation and local Aboriginal groups and Aboriginal Health Workers to develop alternative incentive payment systems for ACCHSs not eligible under PIP
- Develop supports for Aboriginal Community Controlled Health Services to enhance and consolidate asthma management capacity including the training of Aboriginal health Workers as asthma eductors and the use of recall systems
- Develop, implement and trial resources for GPs to improve diagnostic certainty of asthma, particularly in children, with treatment directed at symptoms and signs of airway obstruction rather than cough alone

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Royal Australian College of General Practitioners, Federation of Ethnic Communities Councils of Australia, National Aboriginal Community Controlled Health Organisation, aged care organisations, pharmaceutical industry

Examples of action towards OUTCOME 7

Consumer with asthma

participates in consultation to develop service delivery targeting their community

Aboriginal Health Worker

works with community representatives to learn about appropriate ways of improving asthma outcomes

Pharmacy supports supply of medications in a timely manner to remote communities with no resident pharmacist

Asthma organisations and pharmaceutical industry work with target groups to develop and focus test asthma materials

Governments fund consultations and research with target groups to learn about preferred ways of accessing health care

Examples of action towards OUTCOME 8

ACAM identifies priority population groups through Asthma in Australia report

Asthma organisations note people in culturally and linguistically diverse (CALD) communities at risk of low ownership of written action plans through continuing quality improvement and audit process established for reviewing outcomes of initiatives in CALD communities

Foundations and asthma educators work toward asthma education programs for people of non-English speaking background

OUTCOME 8

Improved access to care by priority population groups

Strategic directions

- Facilitate access by priority population groups to information, treatment and devices
- Support community-based emergency asthma management programs
- Increase school, childcare, workplace and aged care facility-based asthma management programs
- Promote pharmacy-based asthma management systems (eg Pharmacy Asthma Care program)

Suggested activities

- Identify health professionals who have skills to practise in a language other than English and provide them with appropriate resources
- Provide interpreters and translators of major language services with good summaries of asthma information and offer these summaries to interpreter and translator courses
- Introduce subsidies for spacer delivery devices for asthma inhalers for Aboriginal and Torres Strait Islander peoples. Supply schemes should preferably include those operating under the Pharmaceutical Benefits Scheme (PBS)
- Implement the recommendations of the Australian Pharmaceutical Advisory Council regarding the extension of the S100 PBS Access Scheme to all eligible Aboriginal Community Controlled health Services

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Royal Australian College of General Practitioners, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Federation of Ethnic Communities Councils of Australia, National Aboriginal Community Controlled Health Organisation, aged care organisations

2.4 IMPROVING INTEGRATION OF CARE

One of the most important outcomes of broad stakeholder representation in the development of the NAS and the NAAP is the move towards greater integration of asthma care. It is acknowledged that this is a complex task involving many public health, institutional, community and individual participants. Activities to date have largely focussed on the specific delivery of services within the primary care (eg through GPs, community asthma educators and pharmacists) and acute care settings. There has been some preliminary work undertaken at the national and jurisdictional levels in the areas of discharge planning and continuity of care. The development of strategies to overcome barriers and to evaluate and establish alternative effective models of care delivery and continuity will help to achieve integration of services.

Further work in this area should aim to strengthen:

- communication along the continuum of care
- quality improvement systems
- follow-up and continuing care after hospital admission or emergency presentation.

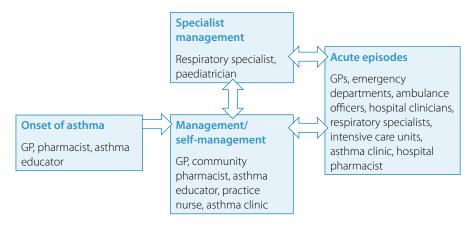
At an individual level, integrated care depends on good communication and effective partnerships between the person with asthma and members of their multidisciplinary health care team.

It is clear that these are all areas where considerable effort and innovation will be needed to bring further gains.

OUTCOME 9

Effective **communication** between members of the care team and people with asthma and their carers

Communication across the continuum of care



Strategic directions

- Identify barriers to effective communication between members of the primary care team and between health professionals and people with asthma
- Continue to provide professional development on asthma management including training in communication
- Identify links and maximise opportunities to coordinate local, regional and national initiatives for better asthma outcomes

Suggested activities

- Conduct a workshop to examine the communication strategies between specialist, GP, asthma educator, patient and hospital, aimed at ensuring consistency of information and methods of promoting adherence. Examine the knowledge of this group about existing asthma resources and services and their availability
- Trial the effectiveness of behavioural change strategies (eg motivational interviewing) in improving communication and achieving optimal outcomes in asthma

Examples of action towards OUTCOME 9

Consumer with asthma

presenting repeatedly to emergency department with worsening asthma symptoms asks for help with managing her asthma

Emergency department

residents inform GP of their diagnosis and put an asthma discharge program in place to ensure continuity of care from the hospital to the patient's GP and community pharmacist

Community pharmacist reinforces correct inhaler use

GP schedules patient visits for regular asthma reviews and establishes contract of care/partnership management with patient. Also refers the patient to asthma educator.

Asthma educator works with GP and patient to develop an adherence strategy and monitor progress

Examples of action towards OUTCOME 10

Health administrators

facilitate audit and review in hospital and community practice

Professional Colleges

mandate quality improvement approaches in continuing professional development and assist health professionals to develop appropriate skills

Institutions establish and implement quality management systems

Clinicians implement quality improvement programs (eg for performing spirometry) and integrate into local setting for routine practice and self evaluation

Students learn value of Plan-Do-Study-Act cycles for review and adaptation of clinical activities to achieve better outcomes

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Australian Lung Foundation, Australian Medical Association, Australasian Society of Clinical Immunology and Allergy, Royal Australian College of General Practitioners, The Thoracic Society of Australia and New Zealand, Australasian College for Emergency Medicine

OUTCOMF 10

Increased investment in **quality improvement structures** in health care delivery

Strategic directions

- Build systems that support health professionals in assessing the outcomes of the health care they provide and adopt evidence-based models of care
- Establish continuous quality improvement systems and benchmark services against agreed performance indicators
- Engage educational institutions and professional organisations at every level to adopt best practice for educating and training health professionals in optimal asthma care
- Promote a unified approach to teaching the principles of asthma management across disciplines and throughout professional life (from undergraduate through postgraduate to continuing professional education)
- Develop and implement a core data set for asthma
- Explore innovative funding approaches to support improved care models for people with chronic diseases, including asthma

Suggested activities

- Trial a computerised prescribing system that supports current best-practice guidelines and the management of chronic and complex illness
- Implement a successful model of (community or general) practice organisation and procedures that improve services and address the needs of people with asthma

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Australian Lung Foundation, Australian Medical Association, Australasian Society of Clinical Immunology and Allergy, Royal Australian College of General Practitioners, The Thoracic Society of Australia and New Zealand, Australasian College for Emergency Medicine

OUTCOME 11

Improved continuity of asthma care

Strategic directions

- Develop sustainable referral procedures between GPs, pharmacists, asthma educators and other relevant health professionals
- Develop sustainable hospital admission and discharge planning models suitable for different settings
- Develop strategies to increase uptake of best-practice hospital discharge practice

Suggested activities

- Within a community, trial the practicality and sustainability of various referral procedures between local primary care team members
- Adapt a discharge planning model that is based on best practice for care of chronic disease so that it suits local conditions and trial its effectiveness in improving continuity of care

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Australian Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Australian Lung Foundation, Australian Medical Association, Australasian Society of Clinical Immunology and Allergy, Royal Australian College of General Practitioners, The Thoracic Society of Australia and New Zealand, Australasian College for Emergency Medicine

2.5 RECOGNISING LOCAL, REGIONAL AND NATIONAL NETWORKS

Many organisations and individuals are involved in the asthma field at national, State/ Territory and local levels. Further strengthening of networks is required to increase efficiency and avoid unnecessary duplication of effort.

While strategic direction can be given nationally, local and regional networks must be recognised as being the key implementers of strategies. Therefore, mechanisms for consultation and collaboration that operate nationally must also exist at the local level to drive initiatives.

Examples of action towards OUTCOME 11

Consumer with asthma

leaves hospital, having been counselled by asthma educator and with asthma information pack. Sees GP for review within one week and commences Asthma 3+ Visit Plan

GP and pharmacist refer consumer to the local Asthma Foundation

Hospital communicates with consumer's GP and community pharmacist

NARG hospital discharge project identifies best practice for emergency department asthma review and discharge

ACEM pilots research and assesses feasibility of new initiatives in emergency departments to enhance continuity and prevent reattendance

Research funding bodies

facilitate testing and evaluation of new strategies

National Asthma Council and ACEM promote research findings and lobby for implementation of best practice

Examples of action towards OUTCOME 12

Aboriginal Health Worker makes locally produced materials available for adaptation by other Aboriginal Medical Services in the region

Hospital works with local Division of GPs and pharmacists to develop a safety net for people with asthma in the local community

Asthma organisations collaborate and communicate at the local and regional levels

Governments support

dissemination of successful initiatives and programs, and facilitate integration of national and State public health initiatives for asthma.

Stakeholders in asthma management collaborate to develop a work plan for their region

Examples of action towards OUTCOME 13

Consumer with asthma accesses State health department website and follows links to the National Asthma Council, State Asthma Foundation, asthma educator websites, Commonwealth DOHA Asthma Section and ACAM

GP accurately diagnoses asthma in child.

Pharmacist advises on use of devices and refers to HealthInsite

Parent, through HealthInsite, locates Asthma Foundation and National Asthma Council websites

Asthma Foundation contacted for advice

Peak bodies adopt principle of information sharing for consumers and health professionals, and National Asthma Council convenes working group to ensure links and ease of access to information is maintained

OUTCOME 12

Strong **local and regional networks** active in the coordinated delivery of care

Strategic directions

- Support the development of local, tailored approaches and care models in response to consumer needs, using national or State-developed resources, guidelines and programs
- Focus on what needs to be achieved and empower people to develop a model of service that suits their needs
- Identify, repackage and promote available resources (such as the Pharmacy Asthma Care Program) and evidence-based approaches to asthma care

Suggested activities

- Investigate needs of consumers with asthma and other chronic diseases in local community and gaps in current service provision
- Explore available resources and programs that address issues in asthma care relevant to the local community and tailor them for local use

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, Divisions of General Practice, Australian Asthma and Respiratory Educators Association, Pharmacy Guild of Australia, Pharmaceutical Society of Australia, Australian Lung Foundation, Australian Medical Association, Australasian Society of Clinical Immunology and Allergy, Royal Australian College of General Practitioners, The Thoracic Society of Australia and New Zealand, Australasian College for Emergency Medicine

OUTCOMF 13

Existing systems for communicating and sharing information between Australian government jurisdictions and asthmastakeholders strengthened and built on

Strategic directions

- Build on National Asthma Council and Asthma Foundation networks such as websites
- Continue to monitor consistency of information
- Build common resources for use across sectors and geographical boundaries
- Encourage jurisdictions to link to asthma websites

Suggested activities

- Develop effective strategies for using networks to keep health professionals updated on latest evidence on asthma care
- Ensure relevant websites have their own, locally appropriate information on asthma, as well as links to the websites of the National Asthma Council and the Asthma Foundations

Key agencies

National Asthma Council, Asthma Foundations of Australia, Australian Government, State and Territory governments, ACAM, Australian Asthma and Respiratory Educators Association

2.6 IMPROVING UNDERSTANDING OF THE DISEASE

While much research activity has focussed on the clinical treatment and management of asthma and on identifying effective means of service delivery, there are still many gaps in our understanding of asthma prevention and of optimal asthma management. Priorities for further research include:

- understanding and addressing individual and system barriers to optimal asthma outcomes
- improving understanding of issues specific to population groups that have less good asthma control
- continuing research to identify major risk factors for the development of asthma and how to modify them to decrease the prevalence of asthma in the community, especially in children
- improving identification of factors for worsening asthma and ways to minimise risk, including lowering occupational exposure to asthma triggers
- better understanding the link between asthma and allergy and determining how this knowledge can be harnessed to improve the quality of life for people with asthma
- improving appropriate diagnosis within the spectrum of respiratory diseases (eq asthma, COPD)
- maintaining consumer awareness of barriers and facilitators to optimal asthma outcomes.

OUTCOMF 14

Increased **clinical understanding** of the factors involved in **optimal outcomes** for the person with asthma

Strategic directions

- Fund and conduct coordinated, innovative research that aims to inform patientcentred care
- Continue to conduct research that will enable GPs to identify the most appropriate management and devices for patients and help patients to use devices to their best advantage
- Conduct research to clarify the role of environmental triggers in exacerbations of asthma and to develop interventions to minimise these
- Fund research to elucidate the risk factors for the development of asthma and the potential to modify this risk
- Support the appropriate assessment, review and dissemination of evidence for effective asthma care
- Raise awareness of the need for appropriate funding for asthma research

Examples of action towards OUTCOME 14

Consumer with asthma

participates in research into the impact of asthma and the needs of people with asthma

ACAM gathers and analyses data on the impact of the disease on the person with asthma and identifies high priority areas for research

Research organisations identify asthma research as a high priority and design and obtain funding to conduct rigorous studies to achieve better outcomes.

Governments fund research into optimal asthma service delivery

Asthma organisations implement research findings

Suggested activities

- Conduct a literature search on consumer understanding of possibility of optimal outcomes and of behavioural change strategies
- With this information, conduct a trial targeting adherence interventions for consumers and health professionals (eg in rural communities)
- Undertake research to examine the critical aspects of adherence that can be
 addressed in the clinical practice setting, fund pilot studies to assess interventions
 and subsequently fund and support the uptake of these by practitioners across
 the spectrum of care
- Conduct local media-based health promotion activities on major asthma and allergy triggers
- Provide an information paper on asthma and allergy to health professionals involved in primary care of asthma

Key agencies

National Asthma Council, Australian Government, State and Territory governments, ACAM, National Health and Medical Research Council, The Thoracic Society of Australia and New Zealand, Divisions of General Practice, Australasian Society of Clinical Immunology and Allergy, Royal Australian College of General Practitioners, Australian Lung Foundation, pharmaceutical industry.

OUTCOME 15

Better understanding of the cost of asthma to the community

Strategic directions

- Conduct economic analysis of the direct and indirect costs of asthma (ie update the Report on the Cost of Asthma)
- Explore accessibility issues related to the costs of asthma for individual consumers (eg medications, devices, GP visits, travel, home and work disruption)

Suggested activity

 Conduct a workshop/survey of consumers with asthma to investigate barriers to optimum management that are related to direct and indirect costs

Key agencies

National Asthma Council, Australian Government, State and Territory governments, ACAM, National Health and Medical Research Council, The Thoracic Society of Australia and New Zealand, Divisions of General Practice, Australasian Society of Clinical Immunology and Allergy, Royal Australian College of General Practitioners, Consumers' Health Forum

Examples of action towards OUTCOME 15

ACAM gathers data on costs to the health system, identifies gaps and recommends the optimal approach to studying the impact and burden of asthma

Governments recognise the value of accurately assessing burden of disease and fund it appropriately

Researchers take up these ideas and develop relevant studies to inform the community to help achieve better outcomes to reduce the burden of disease

Peak bodies disseminate recommendations, educate health professionals and consumers and lobby government to implement system change to improve prevention and management of asthma

3 Evaluation and monitoring

This chapter outlines the need for **ongoing evaluation** of the strategic directions presented in this document and makes suggestions as to how this could be carried out.

Asthma is a complex disease that presents a substantial health burden in Australia. A range of environmental factors have been identified as possible or actual contributors to both the aetiology and the impact of the disease. Furthermore, the burden of illness in individuals, and hence for society as a whole, is substantially influenced by the implementation of management and self-management strategies of established efficacy. Action to reduce the burden of asthma focuses on these opportunities for health gain. The provision of population health information plays a key role in optimising this action from two perspectives:

- It is important to select the most appropriate interventions and direct them at the population sub-groups that have most to gain from them. Surveillance activities to identify population sub-groups with a high burden of asthma, high exposure to risk factors or trigger factors relevant to asthma, and/or poor asthma management and self-management form the basis for these decisions. For example, Asthma in Australia 2003 identified Indigenous adults as a population with a high burden of asthma
- Continuous improvement of asthma outcomes and efficient use of resources both depend on evaluation of the impact of policy initiatives. Several models of evaluation are available, including formal randomised controlled trials, analysis of time series data, and qualitative analyses of processes. However, ultimately all evaluations of health care interventions are dependent on high quality information about the interventions and the outcomes of intervention.

3.1 AUSTRALIAN SYSTEM FOR MONITORING ASTHMA

The important role of data monitoring was recognised at the time of the development of the first national asthma strategy. As part of the National Health Priority Area initiative for asthma, the Australian Department of Health and Ageing allocated funding for the establishment of the Australian System for Monitoring Asthma (ASMA). ASMA aims to assist in reducing the burden of asthma in Australia by developing, collating and interpreting data relevant to asthma prevention, management and health policy. The specific objectives of ASMA are:

- to develop a systematic approach to surveillance of asthma across Australia
- to monitor and report on disease levels, burden, and trends associated with asthma in the general population and in priority population groups
- to examine social, geographical and environmental differentials that may influence the development and burden associated with asthma
- to identify potential for improved prevention and management strategies
- to track the impact of health policy, and prevention and management strategies
- to develop and manage special projects and collaborations for the integration and enhancement of asthma-related information

The development and implementation of public policy in relation to asthma is enhanced by the timely provision of appropriate, reliable, and accurate information to policy makers and implementation agencies. The system for providing this information must be flexible and responsive to change in scientific understanding about the disease and in the public policy environment.

In summary, the role of ACAM is to act as an expert link between data users and data collection agencies, working to optimise the quality and appropriateness, and improve the interpretation of, the data that are collected.

The operations of ASMA are overseen by a management committee, which also provides technical advice to the system. This committee comprises representatives from key government and non-government organisations, clinical specialists with expertise in asthma, experts in monitoring and surveillance, and other experts as required.

The major implementation agency for ASMA is the Australian Centre for Asthma Monitoring (ACAM), which was established in February 2002 as a collaborating unit of the Australian Institute of Health and Welfare (AIHW). ACAM is based at the Woolcock Institute of Medical Research, Sydney. The ASMA management committee supports the activities of ACAM and provides technical and specialist advice for monitoring activities undertaken by the Centre.

ACAM is developing a systematic approach to the surveillance of asthma using a national indicator set. To facilitate the process, ACAM is:

- identifying and evaluating data sources
- making recommendations for asthma indicators
- developing operational definitions for proposed indicators
- analysing and developing a reporting system for these indicators
- identifying areas for data development, including overseeing the systematic development of national data sets that collect asthma data.

3.2 FUTURE NEEDS FOR ASTHMA DATA MONITORING AND EVALUATION

General approach

The development of policy on controlling and reducing the burden of asthma is based upon information gathered from a range of sources. The recognition of groups at increased risk of asthma, the selection of appropriate preventive interventions and the identification of optimal asthma management strategies are all based on published Australian and international research and the synthesis of that research in systematic reviews and guidelines. Understanding the burden of the disease, the appropriateness of current disease management and their distribution within the Australian community requires Australian data. These are gleaned from routine, vital, and administrative data sources, such as mortality statistics, Health Insurance Commission data, and hospital utilisation data, as well as special data collections including surveys of general practice, the National Health Survey and other large scale surveys conducted by State and Territory departments of health. All of these data sources accrue information on asthma as part of general health data collection. In addition Australian researchers have conducted a number of local surveys, specifically focussing on asthma. Data from these surveys are usually more detailed and substantial than those gathered in general health surveys. However, geographical coverage is usually limited to a small area and these surveys are not routinely repeated.

ACAM has made substantial progress in identifying appropriate indicators for asthma data monitoring and evaluation. However, a number of potential indicators cannot be measured because suitable data sources have not yet been established and/or the method of measuring the indicator has not yet been agreed. In some cases additional methods of analysis, such as data linkage, will be required. A plan of action to address these deficiencies is contained within ACAM's Asthma Data Development Plan. A key ongoing task will be the implementation of this data development plan.

There is value in linking data monitoring with evaluation. At present ACAM has no specific role in evaluation of policy initiatives in relation to asthma. However, with expertise in the assessment of asthma data and in the identification of appropriate data sources, ACAM is well placed to design evaluation studies in conjunction with policy agencies (such as NARG and the Department of Health and Ageing). The task would be to provide an evaluation framework, at the direction of the policy agencies, which would form a component of the "Request for Tender" for implementation of the evaluation.

Specific needs

Responses to data presented in Asthma in Australia 2003 and the evaluation of elements of the existing National Asthma Strategy have highlighted some key areas in which enhanced asthma data collection, collation, and/or analysis will be important.

Identifying target groups

It is clear that use of preventer medications and of asthma management plans is sub-optimal. However, there are few existing data to form a basis for policy recommendations to address this problem. The first step in obtaining these data will be to identify persons for whom preventer medications and asthma action plans would normally be recommended but who are not currently using them. The next stage will be to plan an investigation to identify the barriers to uptake of these components of asthma management. This information would then be used to formulate a response that could then be evaluated and, if successful, widely implemented.

Identifying and monitoring priority population groups

Asthma in Australia 2003 identified some population groups that may benefit from special attention in relation to asthma. For example, rates of hospitalisation and emergency department attendance are very high in pre-school age children. Death rates are highest in older people. Prevalence and hospitalisation rates for asthma seem disproportionately high among Indigenous adults. People from a non-English speaking background have a lower prevalence of asthma but, proportionately, have more hospitalisation and worse asthma management than English-speaking persons. Each of these differences raises opportunities for health improvement. Defining the appropriate response requires investigation of the basis of these inequalities.

3.3 STRATEGY FOR ASTHMA DATA MONITORING AND EVALUATION

Meeting the data monitoring and evaluation needs outlined above requires a unit with clinical, public health, epidemiological and biostatistical expertise specifically relevant to respiratory health and with strong links to both data collection agencies and data users. The existing structure of ACAM, as a collaborating unit of the AIHW overseen by a management committee with a diverse range of expertise and representation, largely meets those needs. The linkages with asthma stakeholders in Australia have been enhanced by nationwide consultative workshops held in 2002 and 2004.

Knowledge about asthma is constantly evolving leading to the identification of new environmental risk factors and the recommendation of new management strategies. For this reason asthma data monitoring activities must have the flexibility to accommodate changes in information needs. A further key task for effective asthma data monitoring is the ongoing recognition of, and response to, changes in asthma data needs by proposing and implementing additional asthma data development. It is proposed that ACAM will continue as a collaborating unit of the AIHW with tasks defined as:

- overseeing the maintenance and implementation of the asthma data development plan in close consultation with asthma data users and providers
- periodic reporting on Asthma in Australia
- undertaking research tasks relevant to asthma policy research needs
- contributing to the evaluation of policy initiatives by defining indicators, identifying relevant data sources and providing an evaluation framework.

The expertise of this centre would be available to the Australian Government Department of Health and Ageing and the Australian Institute of Health and Welfare for the provision of advice on data monitoring and evaluation in related fields, such as other chronic respiratory illness and other health priority areas.

SECTION 2 — ASTHMA, ALLERGY AND COPD: LOOKING AHEAD

There are many aspects of aetiology, diagnosis and management of asthma that are shared by other airways diseases, especially COPD. This section has been prepared by the National Asthma Council to describe the context in which asthma sits in relation to these diseases. Consideration should be given to incorporating these diseases in the next phase of asthma as a national health priority.

The National Asthma Council, the peak body for asthma, is a coalition of the major bodies in asthma:

- The Thoracic Society of Australia and New Zealand
- The Royal Australian College of General Practitioners
- The Pharmaceutical Society of Australia
- Asthma Foundations of Australia
- The Australasian Society of Clinical Immunology and Allergy.

The National Asthma Council has four major roles:

- policy advice and development
- health professional education and information
- broad brush national community education campaigns for people with asthma
- · evaluation.

To fulfil these roles, the National Asthma Council works strategically, with and through its member bodies, other relevant organisations and individual experts.

The original National Asthma Strategy was coordinated by the National Asthma Council, involving all asthma stakeholders. When asthma became a National Health Priority Area, the Department of Health and Ageing wrote the National Asthma Action Plan to guide the roll out of the National Health Priority Area. This current and second National Asthma Strategy was coordinated by the Australian Department of Health and Ageing and the National Asthma Council, to update their respective publications, the National Asthma Action Plan and the National Asthma Strategy Implementation Plan and to provide Australia with a future direction for asthma. It was agreed that the National Asthma Council would have a separate section in the document in which it briefly encompassed broader elements of respiratory illness that overlap with asthma – allergic disease and COPD. Future consideration of asthma programs needs to consider these overlapping conditions as research continues to link them more strongly with asthma. Of particular concern is the differential diagnosis of respiratory disease in older people where smoking may be a factor and the treatment options for these conditions.

The asthma healthcare team of patient, carer, GP, pharmacist, asthma educator/practice nurse and specialist, needs to be aware of the implications of the overlap between asthma and allergy (especially rhinitis) and asthma and COPD. There are implications for diagnosis, treatment, prevention and education.

Allergy and asthma

The majority of patients with asthma are atopic*.

- Being allergic is associated with worse asthma and more frequent hospitalisation.
- Most patients have 1–2 triggers rather than dozens.
- Allergic factors are important in the development of asthma, asthma exacerbations and severity.

Allergic rhinitis in asthma

- 58% of people with asthma also have allergic rhinitis.¹
- 38% of patients with allergic rhinitis also have asthma.²
- Rhinitis preceded asthma in 59-85% of patients with both conditions.
- Patients with rhinitis and asthma have more difficulty controlling asthma, are more expensive to treat and attend the emergency department more often.
- Treatment of allergic rhinitis with a topical steroid can reduce:
 - seasonal asthma symptoms by 3–10 fold
 - frequency of seasonal asthma symptoms.¹

Allergic triggers of asthma

Recent studies indicate that there are many causes for wheezing in childhood including virus associated wheezing and asthma. Differentiation of these different causes will be important to assist early identification of children with asthma. The risk factors for asthma at age six are:

- atopy
- maternal asthma
- maternal smoking
- rhinitis, apart from colds
- eczema during the first year of life
- being male.3

People with asthma, and especially parents of children with asthma, demonstrate great interest in preventive strategies that do not involve medication, i.e. house dust mite control measures in the home. In terms of adherence, avoidance of trigger factors has been reported to be the easiest component,⁴ whereas patients have complex attitudes to medication.⁵

Therefore, people with, or carers of people with asthma, need access to the best possible information on allergen avoidance.

^{*} Atopy is a personal and/or familial tendency, usually in childhood or adolescence, to become sensitised and produce IgE antibodies in response to ordinary exposure to allergens. This can lead to the development of rhinitis or asthma symptoms.

Prevention of asthma and allergic disease

There is an increasing body of knowledge about the prevention of allergic disease including asthma:

- Evidence suggests that the increased prevalence of asthma and allergy may relate to improved living conditions in early life with reduced exposure to 'good' bacteria. A recent seminal study carried out in Europe has shown that feeding newborn babies 'good' bacteria in the first six months of life reduced the incidence of allergic disease in the first year of life.⁶⁷
- There is also now some evidence that immunotherapy can lead to the prevention of asthma in children with rhinitis.⁸

The Australasian Society of Clinical Immunology and Allergy is now writing guidelines based on the current evidence for prevention of allergic disease. As evidence on the strategies for primary and secondary prevention of allergic disease — asthma and rhinitis in particular — grows, these strategies will need to be incorporated into asthma programs.

Asthma and allergic disease cannot be separated and the future planning for asthma must incorporate specific directions and activities for this:

- information and educational activities for GPs, pharmacists, asthma educators/ practice nurses on asthma and allergy based on the current evidence
- continuing the provision of evidence-based information to people with asthma and allergy on realistic allergen avoidance and reduction measures
- greater collaboration between the Australasian Society of Clinical Immunology and Allergy, the National Asthma Council and the Asthma Foundations
- greater involvement of the Australasian Society of Clinical Immunology and Allergy in asthma
- support for increased research into asthma and allergy prevention primary and secondary.

COPD and asthma

The burden of COPD in Australia is considerable and increasing with the ageing population:

- more than half a million Australians are estimated to have moderate to severe disease⁹
- COPD is the fourth most common cause of death in Australian men and the sixth most common cause in women¹⁰
- COPD death rates in indigenous Australians are five times that of non-indigenous Australians¹¹
- smoking is the most important risk factor for COPD¹²
- current prevalence is under-estimated as COPD is often diagnosed late
- with an ageing population the burden of COPD is likely to increase for some years
- worldwide, COPD will be the third leading cause of death by 2002.

While asthma and COPD are usually easy to differentiate, in some patients, particularly older patients with a smoking history, the converse is true. Long-standing or poorly controlled asthma can lead to chronic, irreversible airway narrowing, even in non-smokers¹³. A recent study indicates that people with asthma are about 12 times more likely to develop COPD¹⁴. In Australia, through the National Asthma Council's GP Asthma Group, GPs are requesting information on asthma and COPD, reflecting the trend experienced by the 23 national GP groups which make up the International Primary Care Respiratory Group. In general, these groups have developed from GP Asthma Groups into GP Airways Groups. The Australian Lung Foundation published the COPDX Guidelines in 2002 and is actively disseminating this information.

Asthma and COPD as important health issues cannot be separated either and future planning for asthma must incorporate specific directions and activities for this:

 Information and educational activities for GPs, pharmacists, asthma educators/ practice nurses on the COPD/asthma overlap syndrome, differential diagnosis and treatment.

Smoking and asthma

Smoking is another area of common concern for asthma and COPD. Asthma in Australia 2003¹⁵ reports:

- The proportion of smokers among people with asthma is higher than the proportion of smokers among people without asthma
- Children exposed to environmental tobacco smoke are more likely to attend Emergency Departments for their asthma
- Prevention of indoor smoking leads to a reduction in hospital admissions in children with asthma. There needs to be a concerted effort by the respiratory bodies to deal with this issue:
 - Greater collaboration of the Australian Lung Foundation, National Asthma Council, National Tobacco Strategy, Asthma Foundations, Action on Smoking and Health and the State/Territory anti-tobacco bodies, leading to consumer campaigns on COPD/asthma and smoking cessation.

Conclusion

The effective collaboration of the asthma organisations has achieved a great deal in asthma. This collaborative effort will now need to include allergic disease and COPD and the organisations responsible for these.

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SECTION 3 — USEFUL INFORMATION

This section provides information that will support readers in their understanding of the issues discussed in this document. It gives **definitions** for asthma terms, outlines the main **stakeholders** in the asthma area and suggests further **resources** for practice and planning.

STAKEHOLDERS IN ASTHMA

Governments

The Australian Government and the State and Territory jurisdictions recognise the size of the burden of asthma across many community sectors. In response, all Health Ministers agreed to asthma becoming a National Health Priority Area in 1999. Following this decision, a range of initiatives were put place, such as an asthma action plan, the establishment of a national Asthma Reference Group and specific funding towards a range of activity. This activity included an incentive program for general practitioners — the Asthma 3+ Visit Plan, which promotes a structured approach to asthma care. From 1 July 2005, the Australian Government also introduced new Chronic Disease Management Medicare items which will make it easier for GPs to manage the health care of patients with chronic medical conditions, including asthma. A number of other initiatives affecting asthma care in the community, in schools and among specific high-risk sectors of the population have been implemented. In addition, some State and Territory authorities have implemented a range of projects to improve the management of asthma in their jurisdictions to assist with the effective management of the disease.

Asthma organisations

The National Asthma Council (formerly called the National Asthma Campaign) is the peak body for asthma. It brings together lead agencies in asthma management and research, and is advised by a wide range of experts in the field. Its member bodies are the Thoracic Society of Australia and New Zealand, The Royal Australian College of General Practitioners, the Pharmaceutical Society of Australia, Asthma Foundations of Australia and the Australasian Society of Clinical Immunology and Allergy.

National Asthma Council

www.nationalasthma.org.au

Asthma Foundations of Australia

www.asthmaaustralia.org.au

The Asthma Foundations in each State/Territory provide information and services to people with asthma, their families and carers. These services include education and asthma awareness programs, advice and counselling for individuals and small groups, swimming classes and camps for children with asthma, and advocacy on behalf of people with asthma and their carers. Contact details for the **Asthma Foundation in each State/Territory** are given below.

- The Asthma Foundation of the ACT
- Asthma New South Wales
- The Asthma Foundation of Victoria
- Asthma Queensland
- Asthma South Australia
- Asthma Foundation of WA
- The Asthma Foundation of Tasmania
- Asthma Foundation of the NT Inc

www.asthmaact.org.au www.asthmansw.org.au www.asthma.org.au www.asthmaqld.org.au

www.asthmasa.org.au

www.asthmawa.org.au

www.asthmatas.org.au

www.asthmant.org.au

Respiratory Research Institutes

Several research institutes have established strong reputations for high quality asthma research, in diverse areas encompassing basic clinical, pathological, public health and epidemiological research. These include the Asthma and Allergy Research Institute (Perth), the Hunter Medical Research Institute (Newcastle), the Telethon Institute of Child Health (Perth) and the Woolcock Institute of Medical Research (Sydney). These institutes, along with university and hospital-based respiratory research groups, have helped to establish the international reputation of asthma research in Australia.

Cooperative Research Centre for Asthma

crc.org.au

The Cooperative Research Centre for Asthma is funded through a joint industry-government initiative and is a multi-campus network of five major research groups in Australia (University of Sydney, University of Western Australia, Monash University, the Woolcock Institute of Medical Research and the Garvan Institute). Its activities span research into identification of people at high risk of asthma, preventive measures, management (including further development of evidence-based guidelines), research into new treatments and diagnostic and monitoring tools, improved continuity of care after hospital admission for asthma, adherence and consumer needs. The Centre collaborates with asthma organisations, NSW Health, National Asthma Council, Asthma Australia, other research institutions and industry.

Australian Cochrane Airways Network

The Australian Cochrane Airways Group is one of 50 Cochrane review groups in the world that is involved in the synthesis and publication of up-to-date best available evidence on the management of respiratory disease. The groups cover asthma, COPD, bronchiectasis, sleep apnoea, interstitial lung disease and pulmonary hypertension. The Group has published 148 systematic reviews, with a further 63 in preparation as protocols. Airways Group reviews and protocols, together with a specialised register of controlled trials, are published electronically on the Cochrane Library.

The Thoracic Society of Australia and New Zealand

www.thoracic.org.au

Professional organisations

The Thoracic Society of Australia and New Zealand is the professional society of thoracic physicians, scientists and other health professionals involved in lung disease. It collaborates with the National Asthma Council and the Australian Lung Foundation.

The Australian and New Zealand Society of Respiratory Science aims to: provide a Australia and New Zealand forum for scientific and technical communications between members; advance Society of Respiratory Scientists the knowledge and practice of respiratory function measurement and respiratory physiology; promote excellence in respiratory function measurement; support and www.anzsrs.org.au encourage training and education in respiratory function measurement; and facilitate dialogue with other professional societies with common interests. The Australasian Paediatric Respiratory Group has reported on the prevalence of Australasian Paediatric asthma in South Australia, implemented a critical care pathway for inpatients with **Respiratory Group** asthma, established an education program (including consumer literature published through the Women's and Children's Hospital in Adelaide), established a long-term follow-up group and undertaken studies to examine quality of life in children with asthma and the effect of information programs on parental smoking. The Australasian Society of Clinical Immunology and Allergy is a professional Australasian Society of organisation that aims to: promote and advance the study and knowledge of immune Clinical Immunology and Allergy and allergic diseases, including asthma; advance and maintain the highest standards of scientific and medical practice among those professionally engaged in the areas www.allergy.org.au of clinical immunology and allergy; and be recognised as the foremost authority in clinical immunology and allergy in Australia and New Zealand. The Australian Lung Foundation (ALF) raises funds in support of medical research into *Australian Lung Foundation* lung disease, distributes research findings and knowledge, educates patients and the www.lungnet.org.au broader public on the treatment and prevention of lung disease and fosters patient support activities. The Royal Australian College of General Practitioners (RACGP) is a national member-Royal Australian College of **General Practitioners** based organisation which sets and maintains standards for high quality general practice; leads the education, training and assessment processes for GPs; advocates www.racgp.org.au on behalf of the profession; and supports Australia's GPs in meeting the health needs of the Australian population. The Australian Divisions of General Practice (ADGP) represents 120 Divisions of **Divisions of General Practice** General Practice across Australia, with about 94 per cent of GPs being members of www.adgp.com.au a local Division. The ADGP aims to promote the health and well-being of Australians through the Divisions by strengthening the effectiveness and vitality of the general practice sector; contributing to the development of national health policy; promoting cooperation and communication with other national organisations in Australia; and providing national leadership in health system development. ADGP also works closely with the State Based Organisations and Divisions in implementing national programs to ensure they meet the local needs of their communities. Contact details for the **State-based organisations** are given below. Alliance of NSW Divisions www.answd.com.au General Practice Divisions Victoria www.gpdv.com.au Oueensland Divisions of General Practice www.qdgp.org.au SA Divisions of General Practice www.sadi.org.au General Practice Divisions of Western Australia Tasmanian General Practice Divisions www.tgpd.com.au General Practice and Primary Health Care Northern Territory www.apphcnt.org.au ACT Division of General Practice www.actdgp.asn.au

National Aboriginal Community Controlled Health Organisation www.naccho.org.au	The National Aboriginal Community Controlled Health Organisation represents over 130 Aboriginal Community Controlled Health Services across Australia. These are culturally appropriate, autonomous primary health services initiated, planned, and governed by local Aboriginal communities through their elected Aboriginal board of directors.	
Pharmaceutical Society of Australia www.psa.org.au	The Pharmaceutical Society of Australia represents pharmacists from a wide range of practice. The Society publishes a regular journal of pharmacy education and practice and offers educational programs and conferences. The Pharmacy SelfCare Program includes health information for the public and education for pharmacists and staff on a range of topics including asthma.	
Pharmacy Guild of Australia www.guild.org.au	The Pharmacy Guild of Australia is a national employers' organisation servicing the needs of its members who are proprietors of independent community pharmacies throughout Australia. In regard to asthma, the Guild aims to optimise management of people with asthma through education, participation in research, implementation of programs to manage and review medication and its use, and through campaigns to raise asthma awareness in the community.	
Society of Hospital Pharmacists of Australia www.shpa.org.au	The Society of Hospital Pharmacists of Australia is the professional organisation representing pharmacists working in hospitals and related areas. The Society provides education for members on topics including asthma and related subjects.	
Australasian College for Emergency Medicine www.acem.org.au	The Australasian College for Emergency Medicine (ACEM) is an incorporated educational institution, the prime objective of which is the training and examination of specialist emergency physicians for Australia and New Zealand. ACEM has a wide range of subsidiary objectives relating to emergency department accreditation, policies and standards for the emergency medical system, teaching and research, publication, and those aspects of the medico political framework that have a direct impact on health outcomes for emergency patients	
Royal College of Nursing Australia www.rcna.org.au	The Royal College of Nursing Australia is the professional body for nurses, providing advocacy on health issues that affect nurses and the community. The organisation promotes excellence within the profession through support and education.	
Australian Asthma and Respiratory Educators' Association	Australian Asthma and Respiratory Health Educators' Association is the national body representing asthma educators. This group aims to ensure that the needs of asthma educators throughout Australia are met. The group aims to develop accredited asthma educator courses, develop criteria for credentialling asthma and respiratory health educators, and provide ongoing education, support and information to its members.	
State and Territory asthma educators' associations www.aeansw.org.au www.asthmaeducatorsvic.org.au	The Asthma Educators' Associations in New South Wales, Victoria and South Australia have membership encompassing a wide range of professions and a variety of allied health backgrounds, including community health, general practice, pharmacy, research, acute/hospital sector and culturally specific programs. The associations offer training programs for health professionals, community asthma awareness programs and hospital-based asthma education and discharge planning for consumers. They provide support, professional development, leadership and networks for health professionals involved in asthma education to foster improved asthma management. The associations collaborate with their local Asthma Foundation and universities.	

The Lung Health Promotion Centre at the Alfred Hospital is an education centre that provides programs and resources for health professionals in lung disease management. It conducts the largest asthma educator training program in Australia.	Lung Health Promotion Centre www.lunghealth.org.au
Industry	
A number of pharmaceutical companies with asthma products provide information on asthma for consumers and health professionals and are involved in sponsorship of asthma initiatives. The Cooperative Research Centre for Asthma is partially funded by industry and there is also collaboration between industry, the National Asthma Council and Asthma Foundations.	
Medicines Australia represents research based pharmaceutical companies, which discover, develop and manufacture prescription medicines. Over the past seven years, pharmaceutical research has brought over 250 new medicines to patients to treat or prevent diseases in every national health priority area, including asthma.	Medicines Australia www.medicinesaustralia.com.au
The Pharmaceutical Alliance (TPA) is a collaboration of three research-based companies (Eli Lilly, GlaxoSmithKline and Merck Sharp & Dohme). Its aim is to gain evidence to demonstrate the role of medicines in improving patient outcomes and to be a partner in health care reform activities. In partnership with DoHA, TPA developed the Integrated Care Program for Asthma.	The Pharmaceutical Alliance www.pharmalliance.com.au

GLOSSARY OF TERMS

To promote consistency of usage, this glossary is largely derived from that given in the ACAM report Asthma in Australia 2005.

Asthma management plan	An individualised plan of management for people with asthma formulated in accordance with the Six Step Asthma Management Plan. (The written asthma action plan forms one part of this.)
Asthma 3+ Visit Plan	A general practice incentive scheme funded by the Australian Government aimed at people with moderate to severe asthma. The Plan entails three visits to the GP in which asthma control and treatment is reviewed, an individualised asthma management plan is developed, a written action plan is provided and the patient receives selfmanagement education about asthma.
Asthma care team	The multidisciplinary health care team involved in the care of a person with asthma. This may include GPs, pharmacists, Aboriginal health workers, respiratory physicians, asthma and respiratory health educators, emergency department staff, practice nurses, and paramedics.
Chronic Disease Management Item	Medicare Benefits Schedule items introduced from 1 July 2005 that assist GPs to manage the health care of patients with chronic medical conditions, including asthma. The new items were developed and agreed with the Royal Australian College of General Practitioners, Australian Medical Association, Australian Divisions of General Practice and Rural Doctors Association of Australia.
Chronic obstructive pulmonary disease	This term describes several lung disorders including chronic bronchitis and emphysema. Most affected persons have symptoms of lung damage characteristic of both diseases. Respiratory function is impaired by obstruction to normal airflow. Cigarette smoking is the usual cause but other factors that contribute to COPD include industrial pollution, occupational exposure to irritating inhalants and dusts and infections.
Culturally and linguistically diverse	This term is used to describe the multicultural nature of the Australian population, including those from English-speaking countries and those from countries where English is not spoken as the first language.
Indigenous Australians	Refers to people of Indigenous origin who identify themselves as being of Aboriginal or Torres Strait Islander origin.
Integrated care	Integration of care recognises the need for linkages between primary and acute care and along clinical pathways.
Non-English-speaking background	This term is used to describe people who have re-settled in Australia but who come from countries where English is not the primary language spoken.
Prevalence	The number or proportion of people with certain conditions in a population at a given time.
Priority population group	A population group that may have specific needs across the spectrum of asthma care, and for which population approaches must be varied.
Quality use of medicines	Selecting management options wisely, choosing suitable medicines if a medicine is considered necessary, and using medicines safely and effectively

Self-management concerns people with a chronic disease taking responsibility for managing some aspects of the condition themselves in partnership with relevant health professionals.	Self-management
A plan for the management of asthma developed by the National Asthma Council. The six steps are: 1) Assess asthma severity; 2) Achieve best lung function; 3) Maintain best lung function: identify and avoid trigger factors; 4) Maintain best lung function: optimise medication program; 5) Develop an action plan; and 6) Educate and review regularly.	Six-Step Asthma Management Plan
A breathing test used to help diagnose and monitor asthma and other respiratory diseases.	Spirometry
Breathing difficulty accompanied by an audible whistling sound.	Wheeze
A plan that provides instructions on how to recognise when asthma is getting worse and what action to take when it does. It is recommended that these instructions be given in writing. The action plan is based on symptoms and/or peak expiratory flow measurements and is individualised according to the pattern of the person's asthma. These plans have sometimes been referred to as 'asthma management plans', 'action plans', 'self-management plans', 'asthma care plans' or 'personal asthma plans'. Short-term asthma action plans are interim plans used following discharge from the emergency department or hospital. These are suitable for use until a patient can see a health provider in the community (eg GP) when a long-term asthma action plan can be developed.	Written asthma action plan

ABBREVIATIONS

ACAM	Australian Centre for Asthma Monitoring
AIHW	Australian Institute of Health and Welfare
ASMA	Australian System for Monitoring Asthma
COPD	Chronic obstructive pulmonary disease

GP General practitioner

NAAP National Asthma Action Plan NAC National Asthma Council

NARG National Asthma Reference Group

NAS National Asthma Strategy

FURTHER RESOURCES

Publications

The following publications have informed the development of this strategy. They may also be of use for people seeking more detailed information on certain aspects of asthma in Australia.

National Asthma Campaign (1994) National Asthma Strategy: Goals and Targets

This document describes a mechanism for strategic planning and for defining a framework in which clinicians, researchers, pharmacists, educators, community bodies, government and funding bodies can work and in which progress toward better health can be monitored.

National Asthma Campaign (1996) National Asthma Strategy: Strategies and Implementation

The strategies for action outlined in this report aimed to put into effect the National Asthma Strategy, Goals and Targets. The strategies were developed by a broad-based steering group, and through stakeholder meetings and communication.

National Asthma Campaign (1999) National Asthma Strategy: Implementation Plan

This was developed to focus effort, resources on priority areas, to provide a means to coordinate and provide direction for asthma activity (research, education and management) and to identify gaps in asthma activity on which action had to occur.

Department of Health and Ageing (2001) National Asthma Action Plan 1999–2002

This document was developed to provide a focus for targeted national asthma management activity over the three-year period 1999–2002. In addition to its potential for coordinating activity at Commonwealth and State and Territory levels, it aimed to serve as a reference or guide for the range of organisations nationwide that have an active interest in the asthma area. It identifies arenas or action and key strategies for addressing these.

ACAM (2005) Asthma in Australia 2005

www.asthmamonitoring.org

This report incorporates data from a range of sources to describe the status of asthma in Australia. It aims to provide health professionals, health planners and policy officers, academics, consumers and interested readers with concise summaries of the latest available data and trends for asthma in Australia.

National Service Improvement Framework for Asthma

National service improvement frameworks are a joint initiative of the Australian, State and Territory Governments and have been developed under the auspices of the National Health Priority Action Council.

The national service improvement frameworks are intended to be high level guides outlining the most effective care across the care continuum. Advice on their development has been provided by expert panels comprising clinical and health service experts, non-government organisations, consumers and State and Territory Governments.

Along with national service improvement frameworks for osteoarthritis, rheumatoid arthritis and osteoporosis; diabetes; and heart, stroke and vascular disease, the National Service Framework for Asthma was endorsed by the Australian Health Ministers' Advisory Council in November 2005.

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