

# NSW Clinical Service Framework Chronic Respiratory Disease

Executive

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## Background

Greater longevity and improvements in health status have resulted in an increase in the prevalence of chronic diseases such as cancer, heart disease, Chronic Obstructive Pulmonary Disease (COPD), asthma, stroke, arthritis, mental illness and diabetes mellitus, and an increasing burden on health care systems across the world.

Significant potential exists to improve service provision for people with chronic and complex health care needs, while decreasing the burden on the acute care system, by reconfiguring health services in favour of an integrated, coordinated and more patient focused approach across all health care sectors, emphasising self-management and ambulatory care.

The NSW *Chronic and Complex Care Program*, established under the *NSW Government's Action Plan for Health*, addresses these issues for the three priority health areas of cardiovascular disease (and its risk factors), cancer and respiratory disease.

The *Chronic and Complex Care Program* has three broad aims:

- to improve the quality of life of people with chronic and complex conditions
- to improve the quality of life of their carers and their families
- to prevent crisis situations and reduce avoidable admissions to hospital.

## The new approach

The following concepts are essential aspects of the new approach to integrated, coordinated and more patient focused care for those with chronic respiratory disease:

- **Placing patients at the centre of care**  
Through a range of strategies including implementation of a personal health record, individualised multidisciplinary care planning and closer collaboration with general practitioners, specialists and other health care providers.
- **Fostering an integrated, coordinated approach across the continuum of care**  
Ensuring that there are strong linkages in terms of responsibilities and communication processes within and between services provided in the primary, community health and acute care sectors.
- **Development of agreed statewide standards of care**  
Through the development of an evidence-based best practice clinical service framework which will provide health professionals and Area Health Services with clear roles and responsibilities as well as guidance on key components of care.
- **Clinical governance**  
The development of strong and effective partnerships between clinicians and managers to continuously improve the quality of services and safeguard high standards of care
- **Fostering more timely and effective treatment in a community setting**  
Strategies to reduce acute presentations to Emergency Departments, and avoidable admissions to hospital, include self-management education for patients, support programs such as pulmonary rehabilitation, and the use of written management

plans. These strategies aim to enhance the capacity of patients (and their carers) to participate more fully in their own health care to more effectively navigate through the health care system and prevent acute exacerbations.

- **Streamlining admission and discharge planning processes and practices**

Strategies to avoid unnecessary admissions, reduce waiting times in Emergency Departments, and ease the transfer of care between the acute care sector and the community, include the use of fast-track triage systems, care plans and multidisciplinary care coordination, and providing patients with access to a point of contact with a care coordinator at all times.

- **Patient education**

That provides patients and their carers with knowledge and skills to participate at an individually appropriate level in the daily monitoring and management of their illness strengthens the partnership between patients and their multidisciplinary health care team, and contributes to better outcomes.

## **The framework**

The *NSW Clinical Service Framework* provides a practical, evidence-based and flexible approach to the management of COPD and asthma, and:

- sets standards of care, both clinical and organisational, for treatment and prevention
- establishes initial milestones, goals and performance indicators against which progress within agreed timeframes can be measured
- identifies practical tools to support implementation and monitor progress.

This framework consists of two volumes:

### **Volume 1: NSW Clinical Service Framework for Chronic Respiratory Disease**

This volume identifies the essential components of the new approach to coordinated chronic and complex care, and the responsibilities of Area Health Services in the management of chronic respiratory disease.

Volume 1 provides a summary of the evidence-based best practice standards that Area Health Services are to reach, and targets and milestones for COPD and asthma by which Area Health Services will mark their rate of progress towards achieving these standards. A framework implementation strategy is included, as are the performance indicators by which progress will be assessed at both a statewide and Area Health Service level.

### **Volume 2: A Practice Guide for the optimal treatment of Chronic Respiratory Disease**

This volume is a more clinically focused document that provides the latest evidence-based best practice standards and models of care for the management and treatment of people with COPD and asthma.

Volume 2 also contains a number of 'Quick Guides', to the most appropriate management of stable COPD and asthma as well as acute exacerbations.

## COPD: Standards and milestones

Standard	Evidence-based recommendations	Milestones and targets
<p><b>Standard 1 – COPD prevention</b></p>	<p><b>NSW Department of Health and Area Health Services should:</b></p> <ol style="list-style-type: none"> <li>Develop, implement and monitor programs that reduce the prevalence of COPD in the population.</li> <li>Contribute to a reduction in the prevalence of smoking.</li> </ol> <p><b>All health care providers should:</b></p> <ul style="list-style-type: none"> <li>At every contact, where appropriate, educate smokers on the dangers of smoking and offer practical advice on how to stop.</li> </ul>	<p><b>By December 2003</b> – smoke free campus policies will be implemented in hospital areas in line with the <i>NSW Department of Health Smoke Free Workplace Policy (1999)</i>.</p> <p><b>By June 2004</b> – 100% of Area Health Services will have Smoking Cessation programs in place at all major hospitals.</p> <p><b>By December 2003</b> – 50% of admitted patients will be screened for smoking, referred to smoking cessation services or Quitline (131 848) and advised on nicotine replacement therapy or other pharmacotherapy for nicotine addiction.</p> <p><b>By June 2004</b> – 100% of admitted patients will be screened for smoking, referred to smoking cessation services or Quitline (131 848) and advised on nicotine replacement therapy or other pharmacotherapy for nicotine addiction.</p> <p><b>By December 2004</b> – 100% of COPD patients admitted to hospital will be advised to stop smoking, offered referral to a smoking cessation program and advised on nicotine replacement therapy or other pharmacotherapy for nicotine addiction.</p>
<p><b>Standard 2 – Diagnosis and severity of COPD</b></p>	<p><b>General practitioners, primary care teams and specialists should:</b></p> <ol style="list-style-type: none"> <li>Use spirometry to confirm a diagnosis of COPD.</li> <li>Identify people with established COPD.</li> <li>Identify people at significant risk of COPD (ie smokers).</li> </ol>	<p><b>By December 2003</b> – 100% of COPD patients will have access to spirometry.</p> <p><b>By December 2003</b> – 50% of inpatients with a smoking history of 15 pack-years* will be assessed by spirometry.</p> <p><b>By June 2004</b> – 100% of inpatients with a smoking history of 15 pack-years* will be assessed by spirometry.</p> <p>(*1 'pack year' = 1 year of smoking = 1 pack (20 cigarettes) per day)</p>
<p><b>Standard 3 – Management of stable COPD</b></p>	<p><b>General practitioners, specialists and other health care professionals should:</b></p> <ol style="list-style-type: none"> <li>Provide optimal management based on evidence including prevention of complications (eg influenza vaccination) and non-pharmacological treatment (eg pulmonary rehabilitation – refer to Standard 5).</li> <li>Educate stable COPD patients on strategies to optimise functional status and reduce risk factors in the ongoing management of the disease (possibly as part of pulmonary rehabilitation – refer to Standard No 5).</li> <li>Participate in developing an individualised care plan for the most effective management of people with COPD.</li> </ol> <p><b>Designated Area Health Services</b> with appropriate facilities should have protocols for surgical management of selected COPD patients.</p> <p><b>Other Area Health Services</b> should develop protocols to assess the suitability of selected COPD patients for specialist assessment for surgical treatment.</p>	<p><b>By June 2003</b> – 50% of appropriate patients (people aged 65 and over diagnosed with COPD) will be informed about the benefits of influenza vaccination.</p> <p><b>By June 2004</b> – 100% of appropriate patients (people aged 65 and over diagnosed with COPD) will be informed about the benefits of influenza vaccination.</p> <p><b>By December 2003</b> – 100% of patients admitted with COPD will be given information about their disease and the value of a regular exercise program.</p> <p><b>By December 2003</b> – 25% of appropriate COPD patients admitted with COPD who are graded as severe will be provided with a care and management plan that should include an action plan for exacerbations. Such an action plan should state when to start antibiotics, increase bronchodilators, oral corticosteroids, and when to see their general practitioner.</p> <p><b>By December 2003</b> – Area Health Services with appropriate facilities will have protocols for surgical management and treatment of selected COPD patients. Other Area Health Services will have developed protocols to assess the suitability of patients with COPD for referral for surgical management and treatment.</p>

**COPD: Standards and milestones** (continued)

Standard	Evidence-based recommendations	Milestones and targets
<p><b>Standard 4 – Acute exacerbations of COPD</b></p>	<p><b>People with symptoms of a possible acute exacerbation of COPD should:</b></p> <ol style="list-style-type: none"> <li>Receive appropriate investigation and treatment to relieve their symptoms.</li> <li>Be assessed for admission to hospital.</li> <li>Have a management plan indicating steps to take and changes to medications, if appropriate.</li> <li>Be treated at home if possible.</li> </ol> <p><b>Area Health Services should:</b></p> <ol style="list-style-type: none"> <li>Put in place agreed protocols and systems of care so that people presenting to hospital with acute exacerbations of COPD are appropriately assessed and offered treatments of proven clinical and cost effectiveness to reduce their risk of disability and death.</li> <li>Consider the development and/or enhancement of outreach services of coordinated care to promote and assist management in the community.</li> <li>Develop, implement and monitor a program to provide multidisciplinary coordinated and comprehensive care, including supportive and, when appropriate, palliative services for patients with COPD.</li> </ol>	<p><b>By December 2003</b> – all Area Health Services will have developed protocols and systems of care to assess and manage COPD exacerbations.</p> <p><b>By December 2003</b> – all Area Health Services will have developed or enhanced outreach services to promote and assist management of people with COPD in the community.</p> <p>As above</p> <p>As above</p> <p><b>By December 2003</b> – all Area Health Services will have developed plans or protocols for multidisciplinary coordinated care for patients with COPD.</p> <p><b>By June 2004</b> – developed protocols and systems of care for the assessment and multidisciplinary coordinated management of COPD exacerbations will be reviewed and revised if required.</p>
<p><b>Standard 5 – Pulmonary Rehabilitation</b></p>	<p><b>Area Health Services should:</b></p> <ol style="list-style-type: none"> <li>Put in place agreed protocols/systems of care so that patients with moderate and severe COPD have access to participate in a multidisciplinary rehabilitation program including education and exercise.</li> </ol> <p>The aim of this comprehensive program will be to enhance health-related quality of life and self-efficacy, promote and improve exercise performance, and reduce symptoms of dyspnoea and fatigue.</p>	<p><b>By December 2003</b> – all Area Health Services will have multidisciplinary pulmonary rehabilitation programs in place.</p> <p><b>By December 2003</b> – 100% of patients admitted for COPD will be offered the opportunity to participate in a pulmonary rehabilitation program.</p> <p><b>By December 2003</b> – a minimum of 10% of appropriate patients admitted for COPD will have completed a pulmonary rehabilitation program.</p> <p><b>By June 2004</b> – a minimum of 50% of appropriate patients admitted for COPD will have completed a pulmonary rehabilitation program.</p>
<p><b>Standard 6 – Home oxygen therapy</b></p>	<p><b>Health Care Providers should:</b></p> <p>Identify patients with COPD who are eligible for oxygen therapy and refer them for specialist assessment.</p> <p><b>Area Health Services should:</b></p> <p>Put in place agreed protocols and systems of care so that, prior to leaving hospital, all patients admitted for COPD have been assessed for suitability to receive oxygen therapy.</p> <p><b>People with COPD who are prescribed oxygen therapy should:</b></p> <ol style="list-style-type: none"> <li>Receive education on how to operate and obtain optimal benefit from their oxygen equipment.</li> <li>Be assessed regularly after starting oxygen therapy to determine continuing need.</li> </ol>	<p><b>By December 2003</b> – all Area Health Services with specialist respiratory facilities will have protocols/ systems of care defined to ensure that all admitted COPD patients have been assessed for suitability to receive oxygen therapy and are reviewed to determine ongoing need.</p> <p><b>By June 2004</b> – 100% of COPD patients prescribed oxygen therapy will have received instructions on how to operate the equipment for optimal benefit.</p>

## Asthma: Standards and milestones

Standard	Evidence-based recommendations	Milestones and targets
<p><b>Standard 1 – Asthma detection and diagnosis</b></p>	<p><b>General practitioners, specialists and other health care professionals</b> involved in the management and treatment of asthma should have access to a spirometer to confirm the diagnosis of asthma.</p>	<p><b>By June 2003</b> – all patients admitted to hospital with asthma or assessed in Emergency Departments with suspected asthma will have spirometry to confirm the diagnosis of asthma.</p>
<p><b>Standard 2 – Asthma self-management</b></p>	<p><b>Area Health Services should:</b></p> <ol style="list-style-type: none"> <li>Develop education programs for health care professionals and patients which seek to promote patient self-management techniques, highlight the importance of regular review and episodes of care that should be treated by general practitioners.</li> <li>Encourage the participation of carers in patient self-management education programs.</li> </ol>	<p><b>By December 2003</b> – all admitted patients will receive asthma education regarding device use, preventive medication and the need for regular medical review.</p> <p><b>By December 2003</b> – all admitted patients will receive a written asthma action plan at discharge or on first review.</p> <p><b>By December 2003</b> – all Area Health Services will have developed plans which foster the participation of carers in patient self-management education programs.</p>
<p><b>Standard 3 – Assessing asthma severity</b></p>	<p><b>General practitioners, specialists and other health care professionals should:</b></p> <ol style="list-style-type: none"> <li>Base the assessment of asthma severity on overall asthma severity, and not the severity of an acute attack.</li> <li>Assess asthma severity when the patient is stable, not during an acute attack.</li> </ol>	<p><b>By December 2003</b> – 100% of patients attending Emergency Departments for asthma will have asthma severity assessed based on National Asthma Council guidelines.</p>
<p><b>Standard 4 – Preventing acute exacerbations of asthma</b></p>	<p><b>Area Health Services should ensure that all health care professionals involved in the management and/or treatment of asthma:</b></p> <ol style="list-style-type: none"> <li>Receive ongoing education and up-skilling in the optimal management and treatment of asthma, including information on how to identify the high-risk patient.</li> <li>Assist people with asthma to avoid acute exacerbations of the disease by regular review and working in partnership with general practitioners, specialists and hospital and community based pharmacists to monitor and control the disease.</li> <li>Develop collaborative partnerships with general practitioners, and hospital and community based pharmacists to promote the '3+ Visit Plan' and inform people with asthma of the improvements in health status and quality of life they and their families can expect from contracting with their general practitioner to undertake the plan.</li> <li>Provide educational material and information on self-management techniques, including an explanation of, and the need for adherence to written asthma action plans, to enable patients to monitor and manage their own self-care.</li> </ol>	<p><b>By December 2003</b> – all Area Health Services will ensure that health care professionals involved in the management of asthma have access to ongoing education and up-skilling in the optimal management of asthma.</p> <p><b>By June 2003</b> – a general practitioner will be contacted for all admitted patients at discharge to arrange first review.</p> <p><b>By December 2003</b> – all patients who attend hospital with moderate to severe asthma will be provided with a written asthma action plan.</p>

## Asthma: Standards and milestones (continued)

Standard	Evidence-based recommendations	Milestones and targets
<p><b>Standard 5 – Stabilising chronic asthma</b></p>	<p><b>General practitioners, specialists and other health care professionals should:</b></p> <ul style="list-style-type: none"> <li>a. Explain the benefits of the National Asthma Council’s Six-Step Asthma Management Plan and ‘3+Visit Plan’ to all patients with asthma.</li> <li>b. Provide optimal management based on evidence as outlined in the Six-Step Asthma Management Plan</li> </ul> <p><b>General practitioners should:</b></p> <p>Offer the ‘3 + Visit Plan’ to all asthma patients in order to achieve best quality of life.</p>	<p><b>By June 2003</b> – all patients with moderate to severe asthma who attend an Emergency Department or are admitted for asthma will be provided with information about the Six-Step Asthma Management Plan and the ‘3+Visit Plan’.</p> <p><b>By June 2003</b> – all patients attending hospital with moderate to severe asthma will be prescribed inhaled corticosteroids.</p> <p><b>By June 2003</b> – all patients with moderate to severe asthma who attend an Emergency Department or are admitted for asthma will be advised on the benefits of the ‘3+Visit Plan’ and will receive an appointment to visit their general practitioner for follow-up care (see Standard No 7).</p>
<p><b>Standard 6 – Management of the acute episode in the Emergency Department</b></p>	<p><b>Area Health Services should:</b></p> <ul style="list-style-type: none"> <li>a. Ensure that appropriate treatment protocols are in place at every hospital Emergency Department for management of acute episodes of asthma.</li> <li>b. Ensure that these treatment protocols include the need to effect rapid symptom relief by:                             <ul style="list-style-type: none"> <li>– administering a short-acting beta<sub>2</sub> agonist</li> <li>– determining asthma severity by spirometry and/or peak flow measurements to gain an objective measure of airflow obstruction</li> <li>– considering the need for oral corticosteroids and oxygen.</li> </ul> </li> </ul>	<p><b>By December 2003</b> – all patients managed in the Emergency Department with an acute episode will have an assessment of the acute attack documented.</p> <p><b>By December 2003</b> – all patients managed in the Emergency Department with an acute asthma episode will have oxygen saturation assessed.</p> <p><b>By December 2003</b> – all patients managed in the Emergency Department with an acute episode will have spirometry or peak expiratory flow (PEF) measured.</p>
<p><b>Standard 7 – Management of the transition of care</b></p>	<p><b>Area Health Services should:</b></p> <p>Ensure that the transition of care for patients discharged to community-based care from the acute health sector includes a written asthma action plan and effective follow-up care plan developed in collaboration with relevant health care professionals.</p>	<p><b>By June 2003</b> – all patients discharged from Emergency Departments will receive an appointment to see a general practitioner or specialist within two weeks.</p> <p><b>By June 2003</b> – general practitioners of all patients will be contacted on discharge of all patients presenting to Emergency Departments with asthma.</p> <p><b>By December 2003</b> – all patients being discharged from hospital following an admission for asthma will be provided with a written asthma action plan and arrangements for follow-up care by their general practitioner or specialist.</p>

## Asthma: Standards and milestones (continued)

Standard	Evidence-based recommendations	Milestones and targets
<p><b>Standard 8 – Paediatric asthma management</b></p>	<p><b>Area Health Services should:</b></p> <ul style="list-style-type: none"> <li>a. Ensure that information concerning the most effective management and treatment of acute exacerbations of asthma in children is readily available in all hospital Emergency Departments and other health care facilities, including community health centres and pharmacies.</li> <li>b. Ensure that hospital discharge planning processes include the provision of a written asthma action plan and personal health record containing relevant information concerning diagnostic test results, medication regimens, known allergic reactions, emergency contact details and other essential information.</li> <li>c. Ensure that effective protocols are in place for appropriate follow-up care of children discharged from hospital following an acute exacerbation of the disease.</li> </ul>	<p><b>By June 2003</b> – information concerning the most effective management and treatment of acute exacerbations of asthma in children will be readily available in all hospital Emergency Departments and other health care facilities, including community health centres and pharmacies.</p> <p><b>By December 2003</b> – hospital discharge planning processes will include the provision of a written asthma action plan and personal health record containing all relevant information.</p> <p><b>By December 2003</b> – all children discharged from hospital following an acute episode of asthma will be provided with an extra copy of their written asthma action plan to provide their school with information regarding regular medications, any requirements for medications before exercise, a plan for acute management and the child’s doctor’s contact details.</p> <p><b>By December 2003</b> – effective protocols will be in place in all Area Health Services for appropriate follow-up care of children discharged from hospital following an acute exacerbation of asthma.</p>
<p><b>Standard 9 – Asthma education</b></p>	<p><b>All health care professionals</b> involved in the management/treatment of patients with asthma, particularly general practitioners, specialists, pharmacists (hospital and community based) and asthma educators, should collaborate in educating and reinforcing the key concepts of asthma management.</p> <p><b>Area Health Services</b> should ensure that all patients with asthma are provided with a personal health record incorporating an individualised written asthma action plan and information concerning medication, diagnostic test results, allergies, emergency contact details and any other essential information.</p>	<p><b>By December 2003</b> – all patients with moderate to severe asthma will receive asthma self-management education, and a written asthma action plan.</p> <p><b>By December 2003</b> – all patients with moderate to severe asthma will be provided with a personal health record* which incorporates an individualised written asthma action plan.</p> <p>* <i>‘My Health Record’ is available from the Better Health Centre</i></p>

## Implementation

Successful implementation of the framework is dependent on the active involvement and commitment of all parties including NSW Health, Area Health Services, clinicians and other health care professionals, patients and carers in the development of change strategies and implementation of new models of care. Key steps include:

- identifying key stakeholders
- establishing a local implementation team with explicit accountability arrangements
- maintaining effective clinical governance procedures
- developing agreed protocols and implementation strategies
- professional up-skilling and education programs designed to support change
- developing multidisciplinary networks across the acute care, primary care and community health sectors
- effective ongoing collaboration with the Divisions of General Practice and general practitioners
- reporting strategies focusing on reviewing local performance data and identifying local priorities
- a scientific approach to continuous improvement.

Evaluation of progress with implementation will occur:

1. At a statewide level using a small number of performance indicators.
2. At an Area Health Service level by regular reports from Areas regarding their progress with the milestones and targets.
3. Through incorporation of key targets and performance indicators for COPD and asthma into the Performance Agreements between the NSW Department of Health and Area Health Services.

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