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# The Menzies Centre for Health Policy

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

### Policy Issues Paper

#### What is COPD?

COPD is characterized by progressive shortness of breath. This is due to narrowing of the bronchial tubes. This occurs first on exertion and, as the disease progresses, can become a problem even at rest. Chronic bronchitis (in which the bronchial tubes clog due to inflammation caused most often by tobacco smoke) and emphysema (where the lungs' support of the bronchial tubes weakens) are the principal underlying diseases. Often, they occur together.

Inconsistencies in the clinical definition of this disease make it difficult to know precisely how extensive the problem is in the community, but it is a common cause of great suffering and disability.

#### Prevalence

The overall prevalence of COPD in Australia in 2004-05 as measured by the ABS National Health Survey was approximately 3% or 589,900 people. This self-reported data under-estimates the real prevalence. The Australian Lung Foundation (ALF) cites two recent studies that indicate that COPD prevalence is in the range of 620,000 to 2.6 million cases, and that one in six Australians over the age of 45 are living with COPD.

Some 75% of these people are unaware they have the condition. COPD is generally diagnosed late when it has already begun to restrict a person's lifestyle.

The prevalence increases with age and was estimated by the ABS to be 8.8% in people aged over 75.

There is a lack of data on the prevalence of COPD among Indigenous Australians but it is considered to be a larger problem in this population because of the greater rates of smoking and recurrent respiratory infections.

#### Risk factors

Tobacco smoking is the principal risk factor for COPD (globally, smoking accounts for 82% of deaths due to COPD). Other risk factors include exposure to environmental tobacco smoke, air pollution and occupational dusts



and chemicals, and possibly viral respiratory infections. These additional risk factors may worsen respiratory symptoms or contribute to the risk of developing COPD.

## **Mortality**

In 2004, COPD was the fifth leading cause of death in Australia. It was listed as the underlying cause of 5,199 deaths and the contributing cause of another 7,100 deaths. Most deaths are in people aged over 65, with the male death rate about double the female rate.

COPD is a leading cause of death in Indigenous communities and in 2003, 3.1% of all COPD deaths in Australia were among Indigenous Australians.

## **Burden of disease**

In 2004, COPD was estimated to account for 3.6% of the total disease burden, 3.7% of the years of life lost due to premature mortality and 3.5% of the years of healthy life lost due to poor health and disability.

Australians living with COPD generally become incapable of maintaining employment within 7-8 years of diagnosis.

## **Management of COPD**

The management of COPD is estimated to be well below the recommended guidelines specified by the Global Initiative for COPD and the ALF and Thoracic Society of Australia and New Zealand's recently published COPD-X guidelines. In 2002-03 COPD represented less than 1% of all encounters managed by a GP.

## **Costs of COPD**

The ALF states that COPD is costing the nation an estimated \$818 to \$898 million annually in direct and indirect costs. This is a conservative estimate because it is based on 1993-94 figures extrapolated to the year 2001. The addition of hidden costs could increase the estimate to more than \$1 billion per year.

The current misdiagnosis, misclassification and masking of the diagnosis of COPD by other co-morbid illnesses leads to a major underestimate of the economic burden of COPD. The enormous burden on carers represents a hidden/additional cost not accounted for in the current cost estimates.

There are on average, 1,740 people visiting a GP every day for COPD, and 1,000 people occupying a hospital bed. The average length of stay in hospital is 7.2 days, at a basic average cost of approximately \$3,700 per admission. Hospital costs for COPD increased by almost 50% in the decade to 2004-05 and the ageing population will ensure this increase continues.

## **Suggested Areas for Policy Action**

### 1. Prevention

Improving access to smoking cessation support and additional tools after diagnosis of COPD would serve to not only improve quality of life of patients but also reduce long term costs to the health system. Such an approach

could include providing Nicotine Replacement Therapy with counselling on the PBS for COPD patients in order to support them with quitting smoking, as part of an overall "Quit" strategy.

## 2. Improved diagnosis

This will require:

- Greater public awareness of COPD and its symptoms, especially among consumers aged 45 years or more;
- Greater GP awareness of COPD and the use of spirometry testing as the leading diagnostic tool;
- Widespread implementation of the COPD-X guidelines, including regular training of GPs on the current diagnostic criteria and clinical definition of COPD; and
- Enhanced access to spirometry testing through the MBS.

## 3. Greater awareness and uptake of pulmonary rehabilitation

Currently less than 1% of COPD patients get access to pulmonary rehabilitation, despite the potential for this therapy to improve quality of life and reduce hospitalizations.

This will require:

- Improving awareness among healthcare professionals; and
- A review of specific funding mechanisms and infrastructure to make the treatment more affordable and accessible to patients who are housebound.

Programs of integrated care involving general practitioners, rehabilitation therapists and hospitals are under development in many places and the challenge is now to scale these up to provide more readily available, sustained community support for patients with COPD and their carers.

## 4. Improved access to oxygen therapy

Access to oxygen therapy is essential for many COPD patients but current arrangements are complicated and inconsistent from state to state. Those most in need often find it difficult to afford the oxygen they need and to access the information about the subsidy that is available to COPD patients.

## 5. Research

Nationally, there is a strong case for extending current epidemiological research into COPD, to improve diagnostic criteria and in order to better understand the extent of the problem in Australia, its real costs to the community, the individual and their family, and the impact of an ageing population on COPD rates.

## References

ABS (2006) *2004-05 National Health Survey: Summary of results*. ABS Cat. No. 4364.0 Australian Bureau of Statistics.

AIHW (2005) *Chronic respiratory disease in Australia: Their prevalence, consequences and prevention*.

Australian Lung Foundation [www.lungnet.com.au/copd/chronic-health.html](http://www.lungnet.com.au/copd/chronic-health.html)

## Further information

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*This paper was developed in collaboration with the Australian Health Policy Institute at the University of Sydney.*