# **Future Direction**



Respiratory disease is one of the major health challenges of the 21st century for Ireland. This report outlines the size and the burden of respiratory disease using available national data. It is an under-estimate of that size and burden.

In recent years national strategies for cancer and cardiovascular disease have led to significant improvements in outcomes. For instance, the number of people dying from cardiovascular disease between 2007 and 2016 fell by 7.5%. The number of people dying from respiratory disease over the same period increased by 14.6%. It is time that respiratory disease was put on an equitable footing. The authors hope that the data within this document will be a valuable resource for policy makers, researchers, health care providers and professionals, and the commercial health care sector, as well as patients and patient groups.

### Awareness and advocacy

Every breath is as important for life as each heartbeat. Yet, despite the overwhelming burden of respiratory disease in Ireland, there is still a general lack of understanding about the range and impact of respiratory disease.

The onset of many chronic respiratory diseases is slow and insidious unlike the often sudden onset of cardiovascular disease such as heart attacks or strokes. Persistent breathlessness and persistent cough are not normal. Greater public awareness of signs and symptoms of respiratory disease and the importance of presenting earlier to a primary care physician are crucial for improving quality of life and outcomes, and reducing impact on health services. Many patients with COPD currently remain undiagnosed. Additionally, our report highlights that over a quarter of lung cancer patients are diagnosed following an emergency hospital visit. National campaigns to raise awareness of symptoms of lung disease need to be accompanied by improved diagnostic and treatment capacity.

# Prevention

There are a range of preventable factors that cause and worsen lung disease. Some, such as smoking, air pollution, obesity and lack of exercise, are shared between cancer, lung and heart disease. Social inequality is linked to a higher proportion of deaths from respiratory disease than any other disease group. Therefore a focus on prevention and improved diagnosis and management of respiratory disease amongst marginalised and vulnerable groups should be a key consideration in the government's commitment to reducing inequality.

We commend Ireland's leadership in implementing anti-tobacco legislation, however more needs to be

done, especially in view of the continuing challenge posed by the tobacco industry. Smoking remains the most common cause of the two biggest lung disease killers (COPD and lung cancer), and a factor in worsening many other conditions. Public health strategies should continue to target reductions in tobacco smoking, particularly in disadvantaged groups, while limiting the numbers of children and young adults who begin to smoke.

Air quality, both indoor and outdoor, is a major respiratory health issue. In line with WHO standards, it should be an integral part of cross government transport, industrial and energy policies.

Factors in childhood such as obesity and poor nutrition, exposure to smoke (including during pregnancy), poor social and living conditions and inadequately managed respiratory conditions, all impact on the child and their respiratory health as adults.

With respect to protection against respiratory disease, 95% coverage for childhood vaccinations in all populations should be achieved. All antenatal mothers should be offered both pertussis and influenza vaccination. All those aged over 65 years should be offered both pneumococcal and annual influenza vaccination. Patients with chronic respiratory disease (i.e. attending health services) should be offered both pneumococcal and annual influenza vaccination.

We support strengthening immunisation programmes to maximise uptake of vaccination in children, the elderly and other at risk groups, which would help to further reduce the incidence of preventable respiratory infections in Ireland.

Currently, the only population based screening programme for respiratory disease in Ireland is for cystic fibrosis. The authors of the recent NELSON trial which examined screening for lung cancer recommend that EU countries work together to develop lung cancer screening guidelines in order to help member states implement a comprehensive screening programme for high risk people. Internationally, work is ongoing to identify screening approaches to detect COPD. WHO recommendations exist for screening for alpha-1 antitrypsin deficiency.

# **Clinical care**

This report highlights the burden of respiratory disease on Irish hospitals. For this to be addressed, the focus needs to move to supporting patient centred care at primary care level, with a multidisciplinary approach, harnessing the expertise of the allied health professionals. Primary care physicians need access to pulmonary function tests and improved access to community outreach, pulmonary rehabilitation and timely access to specialist respiratory expertise when required. This also applies in the acute setting. Over the past decade, progress has been made in establishing National Clinical Programmes for some respiratory diseases, developing models of care, adapting international guidelines, improving integrated care and supporting patient self care. These now need to be implemented in a structured systematic way, with set targets and actions.

New approaches to clinical care are needed in order to ensure we can provide for future needs and deliver genuine patient centred care to all sections of society including the vulnerable and marginalised.

We hope that Irish policy makers will enhance clinical care for patients with respiratory disease through the provision of adequate clinical facilities and personnel for investigating and treating those with respiratory disease.

# Research

We need research focused on people and patients to identify the barriers in terms of diagnosis, self care and access to health services. We also need research focused on quality of life outcomes as well as evaluation focused on implementation of interventions.

We urge increased support for respiratory research to develop programmes, tools and strategies to better prevent and treat respiratory diseases and to combat antibiotic resistance.

# Data: Surveillance, monitoring & evaluation

### "No data, No Problem, No Problem, No action."

#### – Michael Marmot

From a data perspective we have highlighted the huge gaps in information that currently exist, particularly in primary care. Throughout this document attention was drawn to the lack of national data for many diseases on prevalence, primary care data, respiratory aids and appliances and data from the private sector.

Nevertheless, we have sufficient, good quality data to identify areas for action and targets. The burden on our hospitals is clearly outlined in this report, thanks to easily accessible data. However the burden on the totality of health services and, more importantly, on individuals, families, society and our economy is much greater. Formulation of optimal policy demands accurate and up-to-date information. This is essential as a basis for improvements for prevention and care, monitoring progress and in order to estimate the magnitude of specific problems, determine the distribution of illness, portray the natural history of a disease, generate hypotheses, stimulate research, evaluate control measures, monitor changes and facilitate planning. We encourage the standardised recording of incidence, prevalence, severity and management of respiratory diseases across primary care, public and private hospital sectors to enable development of better informed national strategies.

Surveillance data on all respiratory disease, to include primary care, non inpatient care, diagnostics, therapeutic interventions, for the total population would contribute greatly to improving care of patients and saving lives.

### New and re-emerging challenges

We encourage vigilance in relation to new and emerging threats such as worsening antibiotic resistance in bacterial infections and multidrugresistant tuberculosis.

The increase in the number of people living with non communicable diseases (NCDs), is also a challenge for the sustainability of the health system as currently configured.

# Conclusion

The enjoyment of the highest attainable standard of health is a fundamental human right according to the World Health Organisation.

The increased awareness of respiratory disease and its symptoms, along with the provision of adequate clinical facilities for investigating and treating those with respiratory disease (based on improved data) the quality of care for those with respiratory disease and comorbidities will achieve this fundamental human right for the Irish population.