

# Primary care and chronic lung disease

## INTRODUCTION

The World Health Organization (WHO) estimates that better use of primary health care principles and approaches and better access is the only way to cope with today's global disease burden.<sup>1</sup> This IPCRG Position Paper summarises the potential positive impact of primary care on two of the major contributors to the global disease burden (tobacco dependence and chronic lung disease) and describes how it could reduce variation in access to care and health outcomes. Firstly we support the [WHO](#) and [NCD Alliance](#) calls to take action now to combat chronic lung disease. Secondly, we advocate primary care strengthening, and a reduction in the variation of investment between countries and faster progress towards the goals of the World Health Assembly resolution WHA62.12.<sup>2</sup> Lastly, we highlight the role and contribution of clinically-led non-governmental organisations (NGOs) such as the IPCRG working locally, but collaborating globally.

## BURDEN OF CHRONIC LUNG DISEASE

In a survey of 9 countries, WHO-GARD<sup>3</sup> found that the proportion of patients over 5 years consulting primary care for any reason with respiratory symptoms ranged from 8.4% to 37%. This demonstrates how prevalent lung disease is, why primary care needs to be equipped to deal with it, and the potential for some primary care services to do more, given the right support.

It is also not fully appreciated that much of the burden lies, and will increasingly lie, in low and middle-income countries.<sup>3</sup>

- Half of the billion smokers in the world will die of tobacco-related illness; and over 70% of these will be in low and middle income countries<sup>4</sup>
- Globally COPD is projected to be the 4th cause of death by 2030
- Worldwide asthma prevalence is increasing. Countries with the highest rate of asthma deaths are those in which

'controller' therapy is not available

- Over 600 million people suffer from allergic rhinitis of whom about a third also have asthma
- Lower respiratory infections cause the most disability-adjusted life years worldwide<sup>5</sup>

## PRIMARY CARE

Primary care is the cornerstone of a health system. It has a role in prevention, diagnosis, patient engagement and supported self-management, treatment and palliation. It can work with populations and with individuals. Its principles, values and health economic value have been fully described.<sup>2,6</sup> The current variation in access to primary care and the increasing divide between the rates of growth in numbers of general practitioners and specialists is unacceptable. According to the OECD Europe 2010, there are more specialists than generalists in most countries, except Romania and Portugal. In the Asia/Pacific region we can see significant variation in the expenditure on hospital and ambulatory care providers.<sup>7</sup> Yet primary care is associated with a more equitable distribution of health in populations.<sup>8</sup> Populations do not necessarily benefit from an overabundance of specialists in a geographic area.<sup>9</sup>

## PRIMARY CARE AND CHRONIC LUNG DISEASE

There is international recognition that if the economic impact of the trend in the growing burden of chronic lung disease is to be manageable, there needs to be transformation in prevention, education and management strategies.<sup>10</sup> Primary care is pivotal; though to perform its role competently, it needs standards, guidelines, guidance and education developed specifically for primary care, acknowledging the limited resources available in many countries, answering questions of relevance to primary care using evidence derived from long-term real-life pragmatic studies on populations that reflect primary care practice.<sup>11</sup>

## WHAT SPECIFICALLY CAN IT DO?

### Smoking

The IPCRG supports reframing smoking as tobacco dependency<sup>11</sup> and reframing stop smoking support as a treatment as well as a preventative intervention. We believe this may encourage clinicians to take the problem more seriously and to see it as their core work. Primary care clinicians see very large numbers of patients, so that the quit rate achieved from a brief intervention can make a huge impact. Therefore the IPCRG advises primary care clinicians to create a [one minute smoking cessation strategy](#) that could be used with all patients who smoke.<sup>12</sup> This includes water-pipe smoking, which although sometimes considered harmless, is in fact a form of tobacco dependency with its associated adverse effects.<sup>13</sup> [Cannabis smoking](#) also has adverse respiratory effects similar to those of smoking tobacco.<sup>14</sup> A recent UK paper found a 1% increase in smoking rates in asthma or COPD patients was associated with an increase in the rate of admissions of a similar magnitude:<sup>15</sup> stop smoking support is an important treatment.

### Maternity and newborn care

Smoke inhalation causes failure of lung growth and development predisposing infants to respiratory disorders in early life. Poorly controlled asthma is associated with poor maternal and foetal outcomes in pregnancy and there is evidence of undertreatment of asthma in pregnancy in high income countries. Our experience of [working in low income countries](#) suggests extremely low or no awareness in local communities of chronic diseases such as asthma and COPD.<sup>16</sup> Primary care teams with a respiratory interest can be powerful advocates for stopping smoking and can be champions for evidence-based and locally appropriate strategies to reduce tobacco dependency and indoor smoke, especially from biomass burning. Our [FRESH AIR](#) studies exemplify this.

### Children's health

Asthma and rhinitis (often co-existent) represent the most common NCD among ►

children. Early treatment of (allergic) rhinitis may prevent the development to asthma.<sup>17</sup> Despite advances in their care over the last decades in many countries, there remain many children who are not optimally managed, compromising schooling and examination performance. Such suffering is unnecessary: there are effective interventions available that can be delivered effectively and safely in primary care.<sup>18</sup>

Mortality seems to be high in countries where access to 'controller' drugs is low.<sup>3</sup> We support the call by the NCD Alliance for universal access to good-quality, affordable asthma inhalers by 2012.

Deaths in children and young adults peak in the months when allergen levels are high and it should be possible for health care systems to have pollen calendars and other seasonal information to predict and mitigate some of this risk.

#### Adults – asthma and cost effective care

In OECD countries proactive primary care management of asthma (including available anti-inflammatory and bronchodilators treatments) can prevent most exacerbations. If exacerbations occur, most can be handled in primary care without any need for hospitalisation. The OECD therefore considers high hospital admission rates may be an indication of poor quality care or lack of access to properly funded and supported primary care. There is considerable variation by country and substantial opportunities for improvement. High continuity of care with a family doctor may be associated with lower risk of admission for all age groups for ambulatory care sensitive conditions including asthma and COPD.<sup>15</sup> Where hospital care is required, integrating – improving coordination – with primary care can be effective in reducing admissions.<sup>15</sup>

In a systematic approach in Finland in a ten-year programme based on primary care, despite an increasing incidence of asthma, hospital days and disability payments decreased, as did associated costs.<sup>19</sup>

#### Chronic obstructive pulmonary disease (COPD)

Strong primary care is fundamental to prevention of COPD through supporting reduction in exposure to smoke,

recognising and establishing an early diagnosis, and providing on-going care for people with established disease through to end-of-life. The IPCRG advocates development of lung function testing using spirometry, access to exercise programmes, multidisciplinary collaboration and effective communication between primary and secondary care for those who need admission to hospital. Importantly, primary care professionals are ideally placed to address the holistic needs of people with COPD patients who have physical, psychological, social and spiritual needs as their disease progress towards end-of-life.<sup>20</sup>

Improving access to care is more likely to reduce hospitalisation rates for COPD than changing patients' propensity to seek healthcare or eliminating variation in physician practice style. Public funding of primary care is likely to improve its access.<sup>20</sup>

In low income countries with scarce resources adaptation of COPD guidelines including only essential drugs is required.

Influenza vaccination plays its part in reducing COPD and asthma exacerbations<sup>21</sup> and there is substantial variability by country for example Czech Republic at 21.2% of the over 65 population (2008 figures) compared to 77% in the Netherlands with an average coverage of only 54.2% in the EU 18 countries.<sup>22</sup>

Where infrastructure allows, we advocate a registry or database of asthma and COPD patients, to enable long-term review. Also, given uncertainty about the best value interventions for COPD, we advocate a dynamic database of international primary care COPD registries to answer relevant real-life research questions.<sup>23</sup>

#### Allergic rhinitis (AR)

Only a minority of people with symptoms seek medical advice but those who do attend are normally treated in primary care. Healthcare systems differ substantially and so recommendations have to be tailored to local circumstances but they should involve supporting and strengthening the role and capacity of primary care including community pharmacy. We are aware that knowledge and skills in the management of AR in the primary care setting need further development.<sup>24</sup>

## CONCLUSION

The global burden of chronic respiratory disease in low- middle- and high-income countries will have an increasing economic and health impact. Primary care offers a cost-effective and appropriate model of care to address this burden. However some of its potential is constrained by national health policies that do not recognize its strengths sufficiently, and therefore do not invest in reimbursement, education, recruitment or procurement strategies that strengthen and sustain its role and contribution.

As a clinically-led NGO, the IPCRG will continue to play its part in investing in primary care by supporting research initiatives to improve understanding of the scale of the problem and the best value solutions.<sup>11,12</sup> **FRESH AIR** and **UNLOCK** are two such studies. In addition, it has now launched its **E-Quality programme** to test effective educational interventions in line with the **Lancet Commission on Education**.<sup>25</sup>

We call on governments, donors and industry to invest in:

- Production of real-life evidence that feeds into guidelines and guidance
- Solutions to reduce women and children's exposure to indoor smoke
- Right incentives for primary care to support patients to stop smoking
- Universal access to good quality inhaled medicines for asthma and training in how to use them properly
- Integrated care involving patients, multi-disciplinary health and social care
- Practical training and education for primary care led by peers
- Compact, pragmatic NGOs such as the IPCRG that can leverage major clinician-led change

## REFERENCES

For the full reference list, please see

[http://www.theipcr.org/resources/positionpaperone\\_refs.php](http://www.theipcr.org/resources/positionpaperone_refs.php)