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## The IPCRG Guidelines: Developing guidelines for managing chronic respiratory diseases in primary care

In most countries, primary care clinicians treat the vast majority of patients with chronic respiratory diseases. In the UK [1] and in the Netherlands [2], for example, approximately 85% of all patients with asthma and chronic obstructive pulmonary disease (COPD) are managed almost entirely by general practitioners (GPs) and primary care nurses. An estimated 1 in 20 people in the world now have asthma [3], and COPD is predicted to be the third leading cause of death worldwide by 2020 [4]. Many patients with asthma also have allergic rhinitis [5]. The management of chronic respiratory diseases therefore constitutes a significant proportion of the total workload in primary care.

Twenty years ago, it was clear that considerable improvements were needed in the management of respiratory disease in primary care, particularly the management of asthma. There was clear evidence of delayed diagnosis [6,7], under treatment [8], and ongoing concerns regarding preventable asthma deaths [9], often in patients with identifiable psychosocial and behavioural risk factors [10,11]. This need for improvement in primary care management led to the development of GP special-interest groups (such as the General Practice Airways Group (GPIAG) in the UK [12]) and an evolution in the role of the primary care asthma nurse [13,14]. This development was replicated in many other countries worldwide, culminating in the formation of the International Primary Care Respiratory Group (IPCRG) in 2000, an organisation

which now has thousands of members in 34 countries who have a special interest in primary care respiratory medicine.

At the same time, national asthma management guidelines (for example [15,16]) were being written with the explicit aim of improving the quality of care given to patients. Subsequently, we now have evidence-based, well established, highly respected global guidelines available worldwide for the management of asthma, COPD and rhinitis: the Global Strategy for Asthma Management and Prevention (GINA) guidelines [3]; the Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines [17]; and the Allergic Rhinitis and its Impact on Asthma (ARIA) guideline [18], respectively.

The question is, therefore, whether or not these easily accessible international guidelines are impacting on the quality of care provided in primary care for patients with asthma, COPD and rhinitis. The answer is a guarded yes – but not much. As regards asthma, the Executive Chair of GINA, Paul O’Byrne, writes in his editorial [19] that, despite declining death rates, the depressing evidence is that asthma guidelines are still not being fully implemented and that asthma morbidity remains unacceptably high [20]. Part of the reason may be poor symptom perception by patients [21] as well as their low expectations of what can be achieved by good asthma management [22]. Recently published data from the UK confirm that up to 80% of

asthma deaths are still potentially preventable, and that routine asthma care did not follow guideline recommendations in two-thirds of the patients who died from asthma [23].

The situation regarding the management of COPD is perhaps even worse. According to Sonia Buist [24], the recently appointed Chair of GOLD, we are underdiagnosing COPD to such an extent that less than half of our patients with COPD are actually being diagnosed, and there are barriers to performing spirometric testing - such as lack of time, lack of familiarity with the procedure, and lack of access to spirometry - which no longer make sense. As for rhinitis, Jean Bousquet, the Chair of ARIA, states in his editorial that guidelines are not widely accepted by GPs [25]. Certainly, it is well established that the implementation of primary care clinical guidelines can be poor, thus producing little improvement in clinical outcomes [26].

The reasons for poor implementation of clinical guidelines in primary care are less clear. Is it that global secondary care-produced guidelines are perceived as being overly complex or irrelevant to the primary care setting? Is it that primary care physicians are managing a completely different spectrum of (milder) disease? Is it that such guidelines are specifically difficult to implement in a primary care setting where patients present with undifferentiated symptoms and not with a 'ready-made diagnosis'? Certainly, global practice guidelines, such as those produced by GINA [3], GOLD [17] and ARIA [18], include a range of appropriate activities for diagnosis, monitoring, and treatment, but are more focussed on secondary than on primary care.

However, clinical guidelines can indeed be implemented successfully and effectively in primary care, leading to improvements in clinical outcome measures. Implementation of an asthma programme in Finland led to a dramatic reduction in asthma morbidity and mortality in tandem with a change in the diagnostic and therapeutic behaviour of GPs [27]. A 12-year prevalence study of respiratory symptoms and their treatment in Dutch children showed clear changes in GPs' diagnostic skills and in their therapeutic knowledge of respiratory diseases [28,29] which coincided with the introduction of the Dutch asthma guidelines in primary care. And these changes in GPs' diagnostic and therapeutic behaviour are not limited to the developed world: implementation of paediatric asthma guidelines in Latin America led to drastic reductions in disease mortality and morbidity [30].

It is in this context that the IPCRG initiated a programme of work aimed at rendering the specialist guidelines from GINA [3], GOLD [17] and

ARIA [18] more applicable and easier to implement in primary care. Primary care specialists from a number of countries were invited to an initial scoping meeting in Berlin in 2001 (the International Primary Care Airways Group — IPAG) with the specific aim being to develop guideline materials that would be appropriate for the diagnosis and management of asthma, COPD, and rhinitis in primary care practice. These have since been published as a booklet and are also available on-line [31]. This project included some original work aimed at developing questionnaires suitable for improving the diagnosis and recognition of COPD and the differentiation between these chronic respiratory diseases [32,33].

This entire issue of the Primary Care Respiratory Journal has therefore been given over to these IPCRG Guidelines. There are two papers on Diagnosis, the first of which summarises the work involved in developing the diagnostic questionnaires [32], and the second of which clarifies the diagnostic process in a step-by-step fashion [33]. There are then papers on the management of asthma [34], COPD [35] and rhinitis [36]. Finally, given that the dissemination and implementation process for these guidelines has always been considered to be of paramount importance, the last paper is written by Ron Tomlins, the chairman of the IPCRG dissemination and implementation subgroup, who documents the IPCRG implementation work plan [37].

All of these guideline papers have been written by primary care experts from a number of different countries. Following the initial scoping meeting, the primary care clinicians were split into four groups corresponding to the four main Guideline topics — diagnosis, asthma, COPD and rhinitis. The methodology involved extensive literature searches, analysis of databases, and extensive analysis of the questionnaires to be used for the diagnosis section. Twice-yearly meetings were held from 2001–2004, as well as an annual meeting of the 'base' group consisting of the group leaders of the four groups — Mark Levy, David Price, Thys van der Molen and David Bellamy — under the overall chairmanship of Onno van Schayck. Peer review was provided by the whole Guidelines group, and there were numerous presentations of the methodology, questionnaires, and draft guideline documents at international meetings.

In addition, on behalf of IPAG and the IPCRG, we thank Professors Leo Fabbri, Martyn Partridge, and Tim Clark, all of whom played a crucial role in setting up IPAG and in participating in the initial IPAG meetings. This close collaboration with secondary care expertise from the start has

helped to ensure that these IPCRG Guidelines are consistent with GINA [3], GOLD [17] and ARIA [18] guidelines.

We believe strongly that clinical management which follows evidence-based practice guidelines will yield better patient care [27–30]. Even when available resources do not permit “ideal practice” care, appropriate management which is consistent with evidence-based practice guidelines and which is achievable with available resources can still be performed and will improve patient care.

These IPCRG Guidelines are specifically relevant to the management of respiratory diseases in the primary care setting. They should encourage primary care physicians worldwide to select from the recommendations in evidence-based global guidelines [3,17,18] those practical diagnostic and therapeutic measures which can be delivered in the primary care environment. We believe that these Guidelines are sensitive to the needs of primary care practitioners worldwide.

Nevertheless, the crucial step is yet to come. Guidelines by themselves have been shown to be of little value in driving up standards of care. When guidelines have been implemented carefully, with primary care input, they have been shown to be effective in altering the diagnostic and therapeutic behaviour of GPs [27–30]. Dissemination and sound implementation of these IPCRG guidelines is essential [37], as highlighted clearly in the editorials by Professor O’Byrne [19] and Professor Buist [24]. Evaluation of the effectiveness of the implementation strategy is also essential. Finally, as highlighted by Professor Bousquet in his editorial [25], regular updating will be required in order to maintain the currency of these Guidelines and to ensure that they remain fully consistent with the recommendations from GINA, GOLD and ARIA. The aim is that we can then provide patients with the best possible standards of care for the management of their chronic respiratory diseases in primary care.

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