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The coming of age of asthma guidelines

The first international asthma guidelines meeting was held in Toronto almost 20 years ago and the consensus conclusions from this meeting were published the following year.[1] Since then, many national and international groups have developed asthma guidelines as evidence-based documents.[2,3] For what purpose and for whom are these documents intended? The intended audience and outcomes are seldom stated explicitly by the authors of guidelines, but it is widely assumed that the documents are written to inform primary-care physicians, who care for most asthma patients, and that the intended result is to improve the outcomes of asthma management. This common failure to identify the target audience and intended outcomes might explain why the guidelines so often fail to meet the hopes of their authors.

An early innovation of the Canadian Asthma Guidelines group was to introduce the concept of asthma control as a pragmatic outcome measure after office-based treatment and as a decision-making tool, which suggests a strategic approach to asthma management that has since been widely incorporated, clarified, and refined by subsequent guideline documents. Despite widespread adoption by academic specialists, translating this consensus knowledge into improved practice patterns and outcomes has been unsuccessful.[4] The latest and largest study to document our failure to improve asthma control outcomes in primary practice has been the Personal Practice Assessment Program, in more than 350 Canadian primary-care settings where physicians surveyed the asthma control status of more than 10 000 patients.[5] Of the surveyed patients, 59% were considered uncontrolled. These uncontrolled patients were six times more likely to have an unscheduled health-care visit, almost four times more likely to seek care in an emergency department, and twice as likely to be admitted to hospital for out-of-control disease, compared with their controlled counterparts.

Such suboptimum outcomes probably reflect several management recommendations that are more often neglected than implemented. Despite universal recommendations that the diagnosis of asthma requires an objective measurement of lung function to show airway variability (ie, an increased bronchodilator response to a fast-acting β agonist), spirometry is seldom used in primary practice and methacholine challenge remains almost unknown. Environmental assessment and educational interventions are commonly neglected. Treatment remains over-reliant on high doses of inhaled corticosteroids and the introduction of combination inhaler therapy (inhaled corticosteroid plus a long-acting bronchodilator in a single inhaler) is often delayed

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inappropriately.[6] Despite recurrent controversy,[7,8] we now have more than 10 years experience to confirm long-acting β agonists are the first choice add-on therapy to inhaled corticosteroids for patients who are not adequately controlled with low doses of inhaled corticosteroid. Combination therapy is safe and cost effective, and should be prescribed in a single inhaler to avoid the possibility of treating asthma with a long-acting β agonist alone.[9] Action plans to guide the self-management of exacerbations are also seldom discussed and even less often committed to writing.

How has the academic respiratory community responded to these findings? A casual review of recent guidelines and guideline discussions shows that considerable effort has been expended to grade the levels of evidence on which guideline recommendations are based.[10] These efforts are replete with acronyms, workshop reports, and further guidelines on evaluating and grading the evidence used in guidelines. Although clearly of importance to scholars that their academic rigour is on display in the guidelines, it is less clear (and seems unlikely) that busy practitioners have failed to implement guideline recommendations because they have doubts about the evidence on which recommendations are based. Instead, it seems more plausible that the harried general practitioner omits spirometry because the measurement is not readily available, is too costly, has not been explained clearly, or requires more time to arrange and evaluate than is available (or seems available) in a busy office.

Against this background, ever more elegant grading schemes for weighing the academic evidence must seem akin to medieval scholars debating how many angels can dance on the head of a pin. Fortunately, the obvious needs of the overburdened primary practitioner have not gone unnoticed by those who propose writing guidelines. Increasingly, there is awareness that those who are to be guided by guidelines must be an integral part of the guideline development process from the outset. Indeed, the implementations of guidelines are more and more to be viewed as an integral part of the guideline process and not an afterthought once the recommendations have been published. A new-found focus on practical and implementable recommendations is welcome. At about 20 years of age, the guidelines might be leaving behind their self-absorbed and self-indulgent teenage years to arrive at a sensible and achievable goal—the widespread adoption of simple and practical measures to improve asthma control and reduce preventable asthma disability.

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