

# Closing the million patient gap of uncontrolled asthma

Australia's burden of asthma requires structural reform in health care delivery

**A**sthma control is the principal aim of asthma management. Uncontrolled asthma impairs quality of life, increases exacerbation frequency, heightens risk of death, and is four times more costly to treat than controlled asthma. Therefore, results from a web-based Australian asthma survey are disappointing and disquieting.<sup>1</sup>

One-quarter of respondents did not regularly use asthma preventers, despite having uncontrolled asthma. Another 20% of respondents had uncontrolled symptoms even while regularly using preventers. If these figures are truly representative of the nation's 2.3 million people with asthma, they suggest that about one million Australians have uncontrolled asthma. This is despite the fact that asthma guidelines have been available for 26 years.<sup>2,3</sup> Fundamental reforms to providing asthma care are therefore needed. A new National Asthma Strategy is on its way, and may provide a platform for structural changes.<sup>4</sup>

The first therapeutic gap highlighted by the web-based survey was the lack of regular preventer use by many patients, despite having uncontrolled symptoms.<sup>1</sup> These patients seemed to favour immediate symptom relief over long term disease control.<sup>1</sup> Ironically, the present dispensing system reinforces such behaviour. Relievers are readily available over the counter, but preventers require prescriptions, necessitating additional effort, time and expense.

The logical solution to this problem is to re-design access to asthma medications. Preventers must be made more accessible. It is encouraging that the possibility of dispensing low-dose inhaled corticosteroids without prescription is now under discussion.<sup>4</sup>

A less palatable but arguably more important measure would be to detect and attempt to reduce the high volume dispensing of relievers without adequate concomitant preventers, because this pattern of medication use is implicated in asthma deaths.<sup>5</sup> Such a move would require electronic coordination across pharmacies, with the ability to trigger referral for asthma review.<sup>6</sup>

These proposals would increase the rate of preventer dispensing, but they cannot guarantee adherence. One reliable way to improve preventer use would be to launch and promote a combined short-acting reliever and steroid preventer in a single device. This would ensure that every dose of reliever was accompanied by a corresponding dose of preventer.



There is now evidence that as-needed use of an inhaled corticosteroid combined with a short-acting  $\beta$ -agonist improves symptoms in mild persistent asthma.<sup>7</sup> There is less support for this approach in moderate to severe asthma, but an inhaled corticosteroid combined with a long-acting  $\beta$ -agonist may be used instead in such patients, for prevention and relief.<sup>8</sup>

The second therapeutic gap identified by the survey relates to patients who claim to take regular preventers, but whose asthma remains uncontrolled. The drivers for this situation are complex. Important contributing factors to this problem probably include limited understanding of the disease, incorrect inhaler technique, ongoing smoking and insufficient attention to other asthma triggers, such as aero-allergens, occupational exposures and non-specific irritants.<sup>3</sup> These problems are challenging to solve within general practice consultations, and rebates may need to be adjusted so they are based on realistic consultation times. An alternative approach also under consideration is to fund asthma educators and organise the appropriate credentials for them.<sup>4</sup> Finally, more patients could be encouraged to schedule regular reviews; for example, by discounting medication costs for those who do.

Even with optimal asthma management in primary care, a small proportion of patients will continue to have uncontrolled asthma, some of whom may be insensitive to corticosteroid-based therapies.<sup>3,9</sup> These

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patients need to be reviewed by respiratory specialists, and automated prompts to activate referrals should be built into asthma review programs.

For the most challenging patients, evaluation at a dedicated “difficult asthma” centre provides additional benefits for outpatient respiratory consultations.<sup>10</sup> Many of these patients will have truly severe asthma, but there are also high rates of misdiagnosis, comorbidities and psychosocial factors. According to results from a recent uncontrolled study, dealing with these issues through comprehensive multidisciplinary assessment can improve quality of life and use of health care services, and can also define the patient subgroups most likely to respond to the expensive biological agents now entering clinical practice.<sup>11</sup>

In the United Kingdom, there are at least 11 specialised centres for treating difficult asthma that operate along similar lines.<sup>11</sup> In Australia, this concept is less well developed, and services with interest in difficult asthma vary widely in the scope of their protocols and the extent of multidisciplinary support. Agreement is needed on which patients warrant extensive assessment, and how such patients should be evaluated. Resources could then be channelled to match demand.

We suggest radical steps to curb excessive reliance on relievers, enhance preventer adherence, encourage asthma review, and provide specialised evaluation for the most complex patients. The ultimate challenge is to fully integrate all these measures for maximal impact. Technological solutions are necessary for unhindered data sharing and seamless clinical transition across all levels of asthma care.<sup>6</sup>

Asthma management in Australia has come a long way, but innovative strategies are needed to bridge the remaining gaps.

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