Barriers to delivering asthma care: a qualitative study of general practitioners

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ABSTRACT

Objectives: To ascertain what general practitioners' priorities are for achieving optimal outcomes in people with asthma, and the barriers they face in delivering this care.

Design: A qualitative study using the Nominal Group Technique (a highly structured meeting to gain information from experts about a particular issue) was conducted between August 2002 and September 2003. GPs in six discussion groups were asked "*What do you think is needed to achieve best outcomes for asthma care?*" To augment analysis of the discussion, sessions were taped and transcribed.

Participants: Forty-nine GPs were recruited: 34 from metropolitan and 15 from rural areas.

Results: All groups nominated asthma education for patients and continuing professional education for GPs as major priorities, but they also described educational and structural barriers to achieving these priorities. Other priorities were: medication adherence, facilitating regular patient review, negotiated treatment/management plans, making the correct diagnosis, increased remuneration and consultation time, and safer asthma medications and access to these. Health promotion initiatives and increased public awareness were also priorities. Spirometry was a significant cause of uncertainty. Overall, written asthma action plans were not considered a high priority.

Conclusions: Remarkable consistency was found between GPs' priorities for delivering best asthma care. Our study identified barriers to asthma guideline adherence, including accessible, relevant education for GPs, and structural, time and cost barriers GPs must overcome in providing asthma treatment and patient education.

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For most people with asthma, general practitioners provide education as well as treatment.[1] To lower the morbidity and mortality of asthma, treatment guidelines have been developed that focus on achieving best outcomes by self-management.[2,3] However, the provision of asthma action plans, a key indicator of adherence to guidelines, is progressively falling, and community studies reveal that less than 60% of guideline standards are achieved.[4,5]

In recent studies of patients' priorities for asthma care, one of the recurrent themes was the importance of the doctor–patient relationship.[6,7] Improving the implementation of asthma guidelines requires not only insights into the perspectives of those living with asthma,[6,7] but also an understanding of what GPs' priorities are for achieving optimal outcomes in people with asthma, and the barriers they face in delivering this care. We therefore conducted a qualitative study asking GPs "*What do you think is needed to achieve best outcomes in people with asthma?*"

METHODS

Participants

GPs were recruited by invitation and advertisement through the Royal Australian College of General Practitioners (RACGP) and Divisions of General Practice. We purposively invited participants from inner city, suburban and rural areas, and both male and female practitioners across a range of age groups. The study was conducted between August 2002 and September 2003.

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Data collection

Nominal Group Technique sessions

The Nominal Group Technique is a highly structured meeting to gain information from experts about a particular issue.[8] Participants were asked the question: "*What do you think is needed to achieve best outcomes in people with asthma?*" After group discussion, similar suggestions were grouped together. Once all ideas were listed, participants collectively chose the six most important. By audiotaping sessions and producing transcripts, the reasons behind participants' priorities could also be explored.

Discussion transcripts

The audiotapes were transcribed and entered into the qualitative data management software package NVivo (version 2, Qualitative Solutions & Research International, Melbourne, Vic). The transcripts were read by four of us (DPG, JAD, LAS and RAA) and consensus was reached on the emerging themes related to each of the priorities listed by the various groups.

General practitioners' priorities for asthma care

Top 6 priorities	Group 1	Group 2	Group 3	Group 4 (rural GPs)	Group 5	Group 6
Patient education	1	1	2	2	1	1
Continuing professional education of GPs	4	6	3	4	4	6
Adherence to medication	2	4	—	—	—	3
Regular review of patients with asthma	6	5	—	—	—	4
Treatment/management plans for individual patients with asthma	5	3	—	—	5	—
Correct diagnosis of asthma and asthma severity	—	—	1	—	—	2
More consultation time and remuneration for treating patients with asthma	—	2	—	5	—	—
Raising asthma awareness/public health messages: 3+ Visit Plan, vaccination (eg, influenza virus vaccine) and antismoking messages	—	—	4	3	—	5
Community education: work/schools/clubs/carers	—	—	—	6	2	—
Improving quality of life for patients with asthma	—	—	6	—	3	—
Banning smoking in public places	—	—	—	1	—	—
Provision of asthma action plans	3	—	—	—	—	—
Funds for research/public awareness/doctors	—	—	4	—	—	—
Safer medications for treating asthma	—	—	—	—	6	—

Numbers 1–6 represent the top six priorities of each group and the order of each priority, with one being the highest priority. (Group 3 rated "funds for research" and "raising asthma awareness" equally.) ◆

Ethics approval and consent

The Alfred Hospital and RACGP ethics committees gave approval for the study. Written informed consent was obtained from each participant.

RESULTS

Forty-nine GPs participated in one of six Nominal Group Technique sessions. Thirty-four GPs from a city or suburban area attended one of five group sessions, and 15 regionally based GPs attended one group session.

Priorities for asthma care

There was a high level of consistency between the top priorities of each group, as shown in the Box.

Patient education

Patient education ranked as the highest priority for four of the five metropolitan GP groups. Further analysis of this revealed that factors considered important included: self-management of asthma, asthma triggers, recognition of symptoms, device use, and knowing when to seek emergency care. While one group prioritised written asthma action plans, other groups indicated a need to understand the asthma and the individual patient's response rather than just to record a written plan.

> Maximise appropriate patient response to their illness. Patient's disease is not static, it's dynamic. So, [at] different times we're going to need different treatments. Understand what they've got to do at the appropriate times. Not just instituting an action plan, but understanding it (*metropolitan GP*).

Continuing medical education

Continuing medical education was a high priority for all groups studied. Issues referred to were: education in the use of new agents, the use of spacers versus nebulisers, managing severe asthma, detecting early asthma, stages of treatment, complications of treatment, diagnosis of asthma, and the use of spirometry. Conversely, lack of time and access were identified as a limitation to continuing medical education by both rural and metropolitan groups.

Drug side effects were a particular concern.

> It's better to at least have their symptoms in control. It's the better of two evils, isn't it, to be overtreating and have less people going to hospital. I guess that's a bit of the attitude that's going around. But we don't know the long-term effect. There's the osteoporosis (*metropolitan GP*).

Consistency of the education and information provided to patients by health professionals of all disciplines was recognised as crucial to achieving good outcomes. One group strongly supported education for doctors on how to effectively educate patients.

> . . . GP education to educate the patient, "train the trainer" (*rural GP*).

Another group discussed the challenges of managing patients who knew more about managing asthma than their doctor.

> . . . the media, I believe that when they hear about a new drug, the patients hear [about] it before us. They get so aware of it. They come and ask us, and I haven't heard of it because I don't watch TV (*metropolitan GP*).

Improving adherence

Improving adherence to medication was given a high priority by three of the groups of metropolitan GPs. Arguably, medication adherence could be seen as a component of patient education, and in some groups this was the case.

> The patient needs to understand how the disease works, so that they can comply better with what we tell them and understand why they're doing what they're doing (*metropolitan GP*).

Patients' access to medicine, devices and medical care was perceived as a significant barrier to adherence, with the frequent acknowledgement that cost was a substan-

tial obstacle to patients' optimal adherence to asthma medication.

> Again it's providing subsidised medicine and subsidised meters and things. This is not an area to try and save money in the health care budget (*metropolitan GP*).

Suggestions for achieving improved medication adherence included the importance of addressing patients' concerns about medication.

> . . . the benefits versus the risks of medication, as some anxiety often comes out when people ask questions — "Are there long-term side effects? I don't want to be on this all my life. What are the risks?" . . . So there's a matter of balancing benefits with risks in an objective way, that you put it in perspective (*metropolitan GP*).

Regular review

This was rated highly by three groups who felt that regular review of patients was essential yet hard to achieve. Some GPs suggested that, to enforce regular review by a doctor, β_2-agonists should not be available over the counter without a prescription.

> I'll say priority is regular patient contact, which means that you need to make some sort of contract with the patient. What happens with asthma patients is they come [once] and a year later they turn up again . . . (*metropolitan GP*).

Some systematic solutions to this problem were suggested, such as automated recall systems and the assistance of specialist nurses.

GPs also mentioned the conflicts they experienced in providing care according to suggested government incentives for repeat reviews.[9] In their experience, patients often queried the need to return for care, implying this was "overservicing".

Management/treatment plan

Developing an asthma management plan in conjunction with the patient was prioritised more highly than providing a formal written Asthma Action Plan promoting self-management.

> Plan something with the patient — that this is going to be our approach. So I just put it like a plan — a management plan (*metropolitan GP*).

Correct diagnosis of asthma

Correct diagnosis of asthma and asthma severity were rated by two groups of metropolitan GPs as one of their top six priorities. There was support for education in these areas, which would result in better care from GPs.

> Right diagnosis. I mean we're assuming that they do have asthma (*metropolitan GP*).

While spirometry was considered an element of this, there was concern regarding the diagnosis of asthma and difficulties in practical interpretation of severity, both in regard to under- and over-medication. Few general practices had access to a spirometer and, even when a spirometer was available, some GPs were uncomfortable about their ability to use it correctly.

> . . . if you don't use it, you're not going to be au fait with it. I'm not au fait with it. I mean I know what FEV_1 over FVC is, but what I use is, I use peak flows because that's what I've got (*metropolitan GP*).

GPs felt that trained asthma nurses would be able to help with lung function testing and patient education.

Time and remuneration

Two groups gave priority to time and remuneration. There was general support for the role of a nurse educator, or other professional, taking the task of patient support and education away from time-pressured GPs. It was often stated that GPs needed to be better paid so they could spend more time with patients.

> You need time. That's why I had time at the top of my list . . . It's about practice. Because we're so [busy], sometimes it's so difficult to find time for the patient. If we could have trained asthma nurses . . . (*metropolitan GP*).

> . . . less paperwork (*rural GP*).

> . . . higher rebates (*rural GP*).

> . . . availability of local asthma educators (*rural GP*).

Public awareness

GPs in regional areas placed a higher priority on improving care at the community level by the provision of education to carers, employers, schools and community groups. A specific issue raised by both rural and metropolitan GPs was the need for broader health promotion messages about asthma and respiratory health, similar to those used in other public health campaigns. Emergency treatment of asthma was also identified as a much needed component of health promotion messages.

Barriers to optimal asthma care

GPs in our study identified both structural and knowledge barriers. These included the time required and the cost of providing asthma management and patient education, as well as accessing relevant continuing medical education. The costs of medication, devices and medical care were identified as a barrier to patients' medication adherence.

DISCUSSION

Our study confirms the presence of a gap between current asthma guidelines and Australian GPs' priorities for optimal asthma care. The top priorities identified by GPs in our study included patient education, continuing professional education, medication adherence, promoting regular review, developing an asthma management treatment plan, and correct diagnosis and management.

Some of these priorities are included within asthma guidelines, but are not given the same prominence as the GPs gave them. For example, patient education is the final step of the 6-step Asthma Management Plan, and patient adherence is a small part of this step, yet was a top priority for the GPs in our groups. Our findings suggest that to deliver asthma care according to GPs' priorities, broader issues need to be addressed, such as facilitating relationships with patients, making an accurate diagnosis, establishing a patient recall system, and finding the time required to provide asthma education. The GPs commented that the 3+ Visit Plan dealt with some of these issues, in particular promoting spirometry to clarify diagnosis, but did not necessarily facilitate other issues, such as the time required, adequate remuneration, and patient recalls.

Despite the strength of evidence supporting their use,[10] written asthma action plans to deal with severe exacerbations were not a priority for the GPs we studied, consistent with reports from the United Kingdom and the downward trends occurring in action plan ownership.[4,6] There was, however, broad support for asthma management plans, as suggested by the 6-step Asthma Management Plan.[2] This was distinct from specific support for a written asthma action plan.

Translating guidelines into clinical practice remains a challenge for medicine, even when evidence of treatment efficacy is compelling.[11-13] A meta-analysis studying the effect of educational interventions in changing clinical practice revealed that multi-

faceted interventions, which include structural reinforcers and enabling mechanisms, are more likely to change practice.[14-17] Consistent with this, the GPs we studied prioritised widely targeted interventions encompassing clinicians, patients and the community. The structural changes to practice environments supported by this study included longer consultation times, the removal of barriers, such as expense, to patients' receiving optimal medication, and facilitating medical review.

Current models of chronic illness care emphasise a "patient-centred" approach,[7,18] which was recognised by the GPs in our study when discussing the challenges of dealing with "expert patients", and they indicated a need for continuing professional education so they were better equipped to educate their patients.[19,20] These results support the value of professional development focusing not only on improving physicians' therapeutic skills, but also their skills in communication and patient education, as in the highly successful PACE (Provider Asthma Care Education) program.[21]

The use of practice nurses is well established in the United Kingdom, the United States and New Zealand.[22] While this model is still evolving in Australia, with only 40% of practices having a nurse,[23] it provides the possibility for a huge improvement in the provision of optimal asthma care, as it would overcome many of the structural barriers identified by GPs.

It has been argued that improving access to spirometry in primary care may improve accurate diagnosis and compliance with guidelines.[24] However, many GPs, especially those from regional areas, thought spirometers too expensive, and some GPs lacked confidence in their use. Our study suggests a significant divergence between recommendations regarding spirometry and GPs' confidence to perform and interpret the tests.

As far as we are aware, our study is the first to ascertain Australian GPs' priorities for the delivery of optimal asthma care. The GPs were able to nominate structural barriers to implementing best care, and their priorities for optimal asthma care showed remarkable consistency. To deliver care according to asthma guidelines, the priorities of GPs need to be incorporated into multifaceted interventions addressing structural and systematic issues in care delivery.

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COMPETING INTERESTS

None identified.

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