

Current practice and new approaches in asthma:

Perspectives of asthma practitioners and patients

Contents

Executive summary	3
Acknowledgements	4
1. Background	5
2. Introduction	5
3. Method	6
4. Findings	6
a) Support effective self-management practices.....	6
b) Develop the health professional workforce.....	10
c) Enhance asthma care and management.....	12
d) Create supportive community environments	16
e) Promote research, evidence and data.....	16
5. Conclusion.....	18
6. References.....	19

Recommended citation

National Asthma Council Australia. (2019). *Current practice and new approaches in asthma: Perspectives of asthma practitioners and patients*. Melbourne: National Asthma Council Australia.

Executive summary

This exploratory paper explores current practice and new approaches to asthma healthcare in Australia, in order to stimulate new thinking and action to target care gaps and redress stalled progress against asthma outcomes.

Unfortunately, asthma is sub-optimally managed in Australia. This is concerning when you consider the excellent access to effective pharmacological treatments that can control the condition for most patients. (Contributor 6)

This is an in-depth paper that reflects the views and opinions of the contributors, a diverse group of stakeholders with demonstrated knowledge and expertise in the asthma field. The findings are presented under the headings of the five high-level objectives in the *National Asthma Strategy 2018*.

Support effective self-management practices

Contributors were frustrated by the suboptimal uptake of self-management practices by patients, and their own lack of skills to affect change. Five key factors that influence self-management practices were identified and discussed: the psychology of asthma; the skills and engagement of health professionals; the broader social and environmental context; the language of asthma and health literacy; and healthcare systems and processes. Contributors agreed that asthma increasingly needs to be managed from the perspective of the patients' personal disease experience and their social and environmental context. A more holistic, personalised approach that considers the psychology of asthma was deemed critical.

We've come a long way in asthma but there's still a long way to go...I think we are focusing much more on that notion of personalised care and people's beliefs and understandings about asthma and how that's going to affect adherence. (Contributor 9)

Written Asthma Action Plans and patient education were discussed as key approaches for supporting effective self-management practices. Contributors supported a rethink of the current asthma action plan strategy.

Develop the health professional workforce

The roles of relevant health professionals in asthma care were a concern for stakeholders. Workforce roles and responsibilities were examined, with an emphasis on increasing the role of pharmacists, and practice nurses in asthma management.

Training and support for health professionals was identified as an area of ongoing need. The inclusion of communication skills, the psychological aspects of asthma, and innovative approaches to patient-centred behaviour was deemed particularly important.

Enhance asthma care and management

In addition to self-management practices, contributors identified a number of care gaps, including asthma diagnosis, medication use and adherence, and the current inequities in asthma outcomes, particularly for Aboriginal and Torres Strait Islander people.

New approaches to asthma medications were an important consideration of stakeholders, including:

- The potential for down-scheduling preventers
- The possibility for making relievers less easily available, perhaps by some minor up-scheduling
- The greater promotion of inhaled corticosteroids (ICS) plus rapid-onset long-acting beta₂ agonist (LABA), possibly also in mild asthma
- Ensuring medication affordability

More sophisticated use of technology was seen as a priority, and the emerging precision medicine approach to asthma management as the next frontier for asthma care.

Create supportive community environments

Stakeholders were concerned about the low profile of asthma in the community. They spoke of the importance of raising the profile of asthma through education programs and awareness campaigns.

Promote research, evidence and data

Contributors agreed that a large amount of asthma knowledge has been accumulated and the priority now is to translate that knowledge into practice.

So it really is very, very complex and systemic...I didn't come up with a lot of the answers, I have to confess, but I came up with a lot of the issues. (Contributor 6)

Overall, the stakeholder comments all point to the need for a rethink of many aspects of asthma management. This exploratory paper demonstrates the need for a series of consultations in the areas highlighted, including the following priority areas:

- Written asthma action plans
- The psychological aspects of asthma
- The roles of the health professionals involved in asthma care
- Equitable availability of asthma medications
- Research and knowledge translation

It is critical that these structured consultations are informed by consumer realities, and lead to practical, sustainable steps to drive asthma management forward.

Acknowledgements

The National Asthma Council Australia sincerely thanks the individuals and organisations who contributed time, expertise and resources to the development of this paper, including the twelve contributors, project expert advisors, lead author, and corporate supporter.

Contributors

This discussion paper reflects the views and opinions of the contributors, a diverse group of stakeholders with demonstrated knowledge and experience in the asthma field. The discussion paper findings are based on a series of interviews conducted with the following contributors:

- Ms Julianne Badenoch, Registered Nurse, Registered Midwife, and Director, National Asthma Council Australia
- Professor Amanda Barnard, General Practitioner, and Chair, National Asthma Council Australia Guidelines Committee
- Associate Professor Nathan Bartlett, Researcher and Senior Lecturer, Viral Immunology and Respiratory Disease, The University of Newcastle
- Dr Sabrina Campbell, General Practitioner and Aesthetic Physician
- Ms Naomi Fenton, Nurse Practitioner
- Mr Brad Gellert, External Relations and Policy Adviser, NPS MedicineWise
- Ms Kate Green, Respiratory Educator, Asthma Foundation WA
- Ms Pauline Jacobs, Person with asthma

- Associate Professor Bandana Saini, Community Pharmacist and Senior Lecturer, Faculty of Pharmacy, University of Sydney
- Associate Professor Sheryl van Nunen, Clinical Immunologist, Department of Clinical Immunology and Allergy, Royal North Shore Hospital, and Clinical Associate Professor, University of Sydney
- Professor Peter Wark, Respiratory and Sleep Physician, John Hunter Hospital, Newcastle, and conjoint Professor, University of Newcastle
- Dr Kim Watkins, Community Pharmacist, and Lecturer, Curtin University

Project expert advisors

- Mr Stephen Hughes, Community Pharmacist, and Director, National Asthma Council Australia
- Ms Kristine Whorlow AM, Consultant, and inaugural National Asthma Council Australia Chief Executive Officer (1991-2017)

Lead author

Ms Rebecca Zosel, Zosel Consulting.

Corporate supporter

Funded by a grant from AstraZeneca.

AstraZeneca has not been involved in the development, recommendation, review or editing of this publication.

1. Background

Australia is a world leader in asthma prevention, management and research, and an active member of the global asthma community. Comprehensive, evidence-based strategies to coordinate national action on asthma have been in place since 1999 (National Asthma Campaign, 1999, Australian Government Department of Health and Aged Care, 2001, Australian Government Department of Health and Ageing, 2006, Commonwealth of Australia, 2018). The current overarching strategy to reduce the impact of asthma in Australia is the *National Asthma Strategy 2018* (Commonwealth of Australia, 2018).

National Asthma Strategy 2018

The National Asthma Council Australia led the development of the *National Asthma Strategy 2018* (the Strategy), in partnership with Asthma Australia, and with funding from the Australian Government Department of Health.

The Strategy builds on the considerable progress made in asthma in the 1990s and early 2000s, and

the commitment and hard work of many health professionals, asthma organisations and volunteers in the asthma field along with support from government and sponsors, in order to realise further improvements in asthma outcomes.

The goal of the Strategy is to reduce the health, social and economic impacts of asthma with a targeted and comprehensive approach to optimise asthma diagnosis and management, including within the Aboriginal and Torres Strait Islander population and other priority populations.

The Strategy focuses on areas where the biggest gaps between evidence and practice lie, and where the potential for impact is greatest. It identifies the need for innovation and new approaches to prevent, manage and cure asthma.

The findings in this exploratory paper are from in-depth interviews with key Australian practitioners in asthma as well as a person with asthma. Their views are presented using the five high-level objectives in the Strategy as a structure.

2. Introduction

Asthma is responsible for considerable morbidity and health care costs. In Australia, substantial progress in reducing hospital attendances and mortality was made in the 1990s and early 2000s, but little progress has been observed in the past 10 years, despite substantial healthcare investment.

Innovative strategies are urgently needed to take Australia to the next stage of improvement in asthma outcomes, as recognised in the recently published *National Asthma Strategy 2018* (Commonwealth of Australia, 2018) and *Lancet Commission After asthma: redefining airways diseases* (Pavord et al., 2017).

As the national authority for asthma knowledge, the National Asthma Council Australia has developed this thought leadership paper, *Current practice and new approaches in asthma: Perspectives of asthma practitioners and patients*, to reflect on current and emerging practice, to stimulate new thinking and, importantly, promote action to redress stalled progress against desired asthma outcomes.

The objectives of this paper are to:

- Understand the current thinking, practice and approaches to asthma healthcare in Australia
- Help to progress action area 3.4 in the *National Asthma Strategy 2018*: 'Identify and use new and emerging technologies and strategies in asthma interventions'
- Stimulate discussion, innovation and action by asthma stakeholders.

This paper is intended for stakeholders across all levels of government, the health sector and others working to improve the lives of people with asthma.

3. Method

In June 2018, the National Asthma Council Australia commissioned Zosel Consulting to develop an exploratory paper to understand current practice and explore new approaches to asthma healthcare in Australia. This involved exploring the views and opinions of key Australian practitioners in asthma including the patient perspective.

This qualitative study examined narrative data arising from in-depth, semi-structured interviews with key stakeholders ($n=12$) who had knowledge and expertise in the asthma field. The interviews focused on describing current practice ('where are we now?') and new approaches to asthma prevention, management and research ('where do we want to go?'), using the five high-level objectives in the *National Asthma Strategy 2018* as a structure:

- Support effective self-management practices
- Develop the health professional workforce
- Enhance asthma care and management
- Create supportive community environments
- Promote research, evidence and data.

A diverse group of stakeholders was assembled by the National Asthma Council Australia, in consultation with the project's expert advisors and according to the following selection criteria:

1. a track record of involvement and achievement within asthma prevention, management and research
2. English speaking
3. over 18 years
4. based in Australia
5. willing to participate.

Contributors represented stakeholder areas, including nursing, respiratory medicine, pharmacy, NPS MedicineWise, general practice, allergy and immunology, and people with asthma.

The de-identified data was categorised around the five objectives in the *National Asthma Strategy 2018* and within these categories, analysed thematically.

4. Findings

A Support effective self-management practices

Self-management refers to the decisions and behaviours that people engage in that affect their health. Self-management has been defined as *"the individual's ability to manage the symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition."* This includes the *"ability to monitor one's condition and to effect the cognitive, behavioural and emotional responses necessary to maintain a satisfactory quality of life."* (Barlow et al., 2002).

Self-management a prominent care gap

Contributors spoke of the importance of people self-managing their chronic conditions. They felt in particular this was an imperative with asthma, due to its high degree of variability and the availability of effective medications.

Asthma is a pretty serious condition and it is one that can be managed effectively. We do have the tools to be able to do that. But it's a condition that requires, like any chronic condition, it requires an element of self-management. (Contributor 5)

There was agreement that self-management practices were not optimal in Australia, yet critical for improving asthma outcomes. A common theme was that people with asthma were not doing what practitioners told them to do, and practitioners felt frustrated that they lacked the skills to affect changes in behaviour, particularly around medication adherence.

We're falling short in the things we try and get people to do, they don't do...for the majority of people, what we ask them to do probably just doesn't ring true for them. And yes, adherence really demonstrates that. (Contributor 12)

It's frustrating because we know that we have good pharmacotherapy, it's effective for the majority of patients and yet, there seems to be this niggling inability to use the medications optimally. (Contributor 6)

Contributors agreed that evidence-based interventions, both current and emerging, to support self-management practices are critical. Contributors identified five key factors that influence self-management practices and two self-management strategies, which are discussed further below.

Key factors that influence self-management practices

1. The psychology of asthma

Contributors perceived various barriers to consumer uptake of self-management practices. A frequently reported barrier was that people with asthma don't always understand that they have a disease.

They had no idea, even though a few of them had asthma, that it was a disease. Even that concept was foreign to them....wow, how can we get people to manage a disease when they don't even know they have one? (Contributor 6)

People just don't perceive it as a real disease that needs managing. It's an annoyance that comes up now and again and interferes with things...it's reactive rather than proactive management. (Contributor 6)

Contributors felt that people with asthma often don't understand the need to self-manage and, in contrast to other medical conditions, don't recognise the need to manage asthma proactively. They noted a common misconception that asthma is a childhood condition that people outgrow.

Patients think about asthma in a different way to how they think about a lot of other medical problems...So people will take anti-hypertensives because they want to prevent a stroke, even if they have no symptoms from their high blood pressure, or they'll take statins for their high cholesterol to prevent a heart attack even though there are no symptoms from their high cholesterol, but asthma is not regarded by patients in the same sort of way. (Contributor 9)

There's a misconception that some people outgrow asthma...there's an assumption that it won't be with them always. (Contributor 11)

Contributors spoke about the variability of asthma symptoms and how periods of good control can exacerbate the common perception among individuals that asthma isn't a serious or priority condition.

Unless they come in gasping and blue, it's not a priority. (Contributor 1)

It can be well controlled and dormant, if you will, for long periods of time and people lapse into a state of complacency. (Contributor 3)

In addition to poor understanding, contributors also mentioned the high level of denial amongst people with asthma as a considerable barrier to adoption of self-management practices.

A lot of people tend to try and ignore it and hope that it resolves itself. They don't want it impacting on their life and they roll the dice essentially, hoping that it will just not develop into anything that's a real problem so it's a real psychological barrier. (Contributor 3)

They just say "oh, I have a touch of it." So, the patient doesn't actually consider that their asthma is top ranking amongst their other issues...There's a lot of denial about asthma. (Contributor 1)

Contributors agreed it was vital that practitioners were better trained to understand the psychology of asthma and more broadly, the psychology of chronic conditions. Furthermore, one contributor noted the importance of being mindful of the person with asthma and any carers' ability to self-manage.

It needs to come down to a really good understanding by the GP of that individual's asthma and an understanding of how that person deals with their asthma. Their psychology as much as the biology and the disease itself. (Contributor 3)

Sometimes people have ideas about things and we don't give them enough time to tell us. And they're really not doing something because they think 'oh that's not a problem because I'm going to die of X before I'm 40 anyway'. (Contributor 10)

Many felt that the psychology of asthma was complex and beyond their level of comfort and scope of practice; one proffered a suggestion of working with psychologists to frame public awareness and education messages.

The psychology behind chronic disease and behaviour, I don't even - that's certainly not my area of expertise but I can only imagine it's a really complex, difficult equation to understand. (Contributor 3)

2. Skills and engagement of health professionals

Contributors emphasised the important role of health professionals in supporting people with asthma to self-manage their condition. They stressed that this role needed to be broad and therefore to encompass understanding of the individual with asthma and their knowledge, experiences, values, beliefs, attitudes and goals, and tailoring support for self-management practices accordingly.

Yet, they felt that health professionals did not always have the knowledge or skills to effectively support self-management practices and were challenged by motivating consumers to self-manage their asthma. Contributors emphasised the need to upskill health professionals in these areas.

GPs felt like they were sort of swimming against the tide when it comes to encouraging people to self-manage and to be motivated to self-manage their asthma....motivating people is pretty hard. (Contributor 5)

That's where the training and skills in things like behavioural interviewing and motivational techniques from health professionals becomes so important, because if they're not engaging with people in the right way they're not going to change their behaviour and perceptions and they're not going to turn them into more proactive patients rather than reactive patients. So you have to really get to the core of what's underlying that patient's behaviour, and that's quite a skilful thing for a health practitioner to be able to do. And time consuming. (Contributor 6)

Contributors suggested that health professionals were in need of more tools to support their interactions with 'disengaged patients'.

...want access to tools that can help them have better conversations with patients who aren't interested in managing their asthma and don't want to discuss it. (Contributor 5)

The potential for health professionals to disengage as a result of patients not being engaged with asthma self-management was identified by contributors as a possible scenario.

All those issues around patients not being engaged with chronic disease management, and then that flows on to the interactions they have and the way they seek support with managing their asthma. That reluctance to engage with health professionals affects the interaction. So therefore you get health professionals disengaging, because the mantra was, well they don't want my help, they get upset if I try and ask them questions, they seem to be going ok. And not wanting to push because there's a bit of reluctance to engage. (Contributor 6)

3. The broader social and environmental context

Contributors agreed that asthma increasingly needs to be managed from the perspective of the patients' personal disease experience and their social and environmental context. They perceived this more holistic, personalised approach to be a shortfall in current healthcare practice.

That understanding of the patient perspective is something that health professionals don't necessarily have, we're so focused on their disease and their drug, and we almost get annoyed with them, oh, I'm trying to ask you the right questions, I'm doing this for your own good, why are you not engaging with me? And then of course you hit brick walls if you're communicating in that way. (Contributor 6)

Thorough consideration of the science of implementation is required. (Contributor 6)

Contributors felt that many initiatives that support consumers to self-manage their asthma are 'falling short of the mark' and could be strengthened by addressing the underlying factors in the broader social and environmental context that act as barriers or enablers to optimal self-management.

We need to focus more on the passenger experience...there are all these barriers to making it easier. The simple thing of seeing what the patient experience is like and trying to make it better would be good...if we just took the different types of people with asthma through their journey, saying what bugs you, what stops you, what doesn't work, and then we could get things working better for a lot of people. (Contributor 10)

They emphasised the importance of researching population groups to better understand how to engage them in asthma self-management, and to incorporate patient insights and the realities of living with asthma into the design of asthma products and self-management initiatives.

The Ventolin inhaler hasn't changed in years....why haven't we jazzed it up for the teenagers so it's an accessory? We're not looking at the social context. (Contributor 10)

Partnerships with new stakeholders should be explored, contributors felt, in order to better tailor asthma product design and self-management initiatives to the broader social and environmental context of people with asthma. Specifically, partnerships with advertisers, psychologists, product designers and gaming companies were suggested.

4. The language of asthma and health literacy

Contributors highlighted the various terminology used in asthma and concern about the confusion this generated.

There's twenty different ways to describe one medical condition. (Contributor 5)

Patients will call it an attack...if they're Aboriginal or Torres Strait Islander they'll call it short wind...there's a lot of different descriptors out there...we've even got puffers and inhalers...it's very confusing. (Contributor 4)

They highlighted how consumers and health professionals use different language. Contributors agreed that consumers appear to prefer the term 'asthma attack', rather than 'exacerbation' or the less often used 'flare-up'.

I've only ever found health professionals referring to exacerbation and people mostly use asthma attack...they're not really quite familiar with flare-up, but we do talk about flare-up. (Contributor 2)

Complex and inconsistent language was identified as a barrier to consumer health literacy and a barrier to consumers acting upon health professional advice in order to self-manage their condition.

From a health literacy point of view, it's essential that we don't have confusion over terms...It's also incredibly important that a discharge summary that is provided to a patient, or written action plans are in a language that is consistent and understandable. (Contributor 5)

A number of contributors agreed on the need to develop a common set of words and terminology for asthma that simplifies and harmonises existing language, and that is developed with input from all stakeholders, particularly consumers.

We should try and agree, from all perspectives, on the language we use, and try and go with that. (Contributor 4)

Language is a barrier...you need strong consumer input with this, certainly. (Contributor 1)

5. Healthcare systems and processes

Contributors cautioned against putting too much emphasis on education and awareness activities to support self-management practices, and emphasised the importance of focusing on healthcare systems and processes.

There's a lot of awareness, but I still think that they're looking for answers in tools and resources, and educational interventions without really looking at systems and processes. (Contributor 6)

...it was more entrenched than just knowledge. And I think that a lot of the solutions in asthma has been to, well, we'll educate the professionals more, we'll try and educate people. And interestingly what I found was that people are more knowledgeable than even I'd given them credit for, both patients and health professionals, and there were other things, organisational systems, attitudinal barriers, functional barriers that were getting in the way of optimal management. (Contributor 6)

Specific examples of systems changes that have the potential to enhance effective self-management practices were suggested. These included an asthma medication review system, greater prescriber access to dispensing data, and pharmacist inhaler technique remuneration.

A key change to implement is a medication review system in primary care where you are unable to continue to prescribe without a 6-monthly full asthma review. (Contributor 2)

Access of prescribers to PBS dispensing information would give better ideas about the true level of adherence to treatment. (Contributor 12)

The pharmacist is the professional that people would see more often than a GP because they are getting their repeats and they can check inhaler technique... In Denmark the government had in addition to the dispensing fee, a fee for each asthma prescription so that each asthma prescription had a patient coming in for inhaler technique which was built into the system which makes it easier for it to really happen. I think it's called inhaler IT and that system has been there for 7 years...which means at least a certain percentage of people who have never had their inhaler technique checked are actually having it checked in Denmark. (Contributor 7)

Self-management strategies

1. Written Asthma Action Plans (WAAPs)

Contributors were cognisant of the body of evidence showing that WAAPs support consumers to self-manage their condition.

We've had evidence for yonks about how written asthma plans are useful. (Contributor 9)

We know they're [WAAPs] the evidence-based method of getting people engaged and managing their asthma appropriately. (Contributor 6)

They were also acutely aware of the suboptimal uptake of WAAPs in Australia.

WAAPs have clearly been shown to be beneficial but they're often not done. (Contributor 12)

Even with WAAPs, when they are provided, too often I see that it's actually notes like "Here's your action plan", and that's it. It's actually not explained what all the different sections mean. (Contributor 2)

Asthma action plan ownership is still incredibly low. (Contributor 6)

Contributors discussed how the negotiation and provision of asthma action plans in Australia is not ideal and contributes to poor uptake and use. For example, WAAPS can only be signed off by a prescriber, usually the GP, who are often time poor with multiple competing demands. There was support for other health professionals such as pharmacists to play an increased role in WAAPs and some clear benefits identified.

I can't see why pharmacists couldn't be trained and remunerated to provide asthma action plans as a more in-depth service...that could be a really useful way of boosting asthma action plans. (Contributor 6)

Others spoke of the need to differentiate roles based on whether they were initiating or signing off the action plan. They felt it would be appropriate for a range of health professionals to initiate WAAPs, yet have GPs sign them off as part of their broader asthma prescribing role.

The GP would need some sort of sign-off role or initial input to one but I think there's certainly a role for practice nurses, asthma educators and pharmacists to develop and work with patients on asthma action plans. (Contributor 9).

It's almost like prescribing with a WAAP so if someone is settled in their medications then that's more than fine to assess them and if they've already been prescribed medication then – and things don't need to change – and I'm sure a registered nurse can certainly decide that, then that's perfectly fine. But to initiate one? I think it probably needs team work with a GP and that's pretty much how it does work – the registered nurse in their consultation will initiate it and then it will get sign off and agreement for the patient with the GP. (Contributor 1)

Aside from increasing the role of other health professionals, contributors identified a number of new approaches to strengthen WAAPs and boost their uptake, including integration into clinical software, integration of asthma into other condition plans, and more sophisticated use of technology. Technological solutions proffered include smart devices, electronic communication and SMS transmission. Apps were discussed, however contributors emphasised their limitations.

The world is pretty high-tech now. In this day and age for a lot of people, a paper-based product is really redundant. We do need to look at electronic platforms. (Contributor 6)

The way we're doing it, it's not very 2018... We should have an app where the teenager puts it on their phone, and there's some sort of reward, via a game... we should be partnering with people who have these fabulous games and the first message is 'go to level 6 if you've taken your preventer. (Contributor 10)

There are a squillion asthma apps out there...a lot of the research has just found that none of the asthma apps are comprehensive enough to be a total management tool. (Contributor 6)

Is there a way that WAAPs can be entered into GP software that then translates into an application that people can then carry on their smartphones? (Contributor 2)

Many of these plans [GP management plans] don't even mention asthma...because they tend to be focused on other issues such as diabetes, heart disease, maybe cancer...I use the asthma action plan as an add-on to the general management plan as the people I work with rarely have one problem, and rarely just have asthma...I use it mainly as a first aid type thing (Contributor 1)

Contributors had few answers to the many challenges of how to increase uptake of WAAPs.

I'm not sure I have any great ideas myself on this. It's a tough one. (Contributor 3)

2. Consumer education

Contributors agreed that consumer education was critical for effective self-management practices.

Just a little bit of knowledge makes a big difference to a person's outcomes, and their confidence, and the way they're able to manage their asthma. (Contributor 1)

Contributors felt that quality consumer education and resources were available yet not always accessed due to a lack of public awareness. Contributors spoke of the need to raise awareness of available education and resources, and to support and empower individuals to access and use them.

There is probably also some gaps in consumer awareness of who is out there that can help them,

the organisations that can help them and the tools that are available to them. (Contributor 5)

Education and public awareness have always been a huge issue for asthma. (Contributor 3)

...but they weren't actually using those specific resources, even though they acknowledged that there are lots of good quality resources there that are readily accessible. (Contributor 5)

One contributor felt that consumer education should predominantly focus on empowering people with asthma to engage with health professionals.

A lot of it is just getting people to engage with health professionals. (Contributor 6)

The opportunity to explore group consultations as a new approach to consumer education was suggested.

B Develop the health professional workforce

Workforce roles and responsibilities

Contributors recognised that currently asthma is managed predominantly in primary health care by GPs; this was largely viewed as appropriate, although GPs' lack of time, skills and opportunities, for example, to support patient self-management, were noted. There was broad agreement that other health professionals – with appropriate training and support – could play an increased role in asthma care, particularly community pharmacists and practice nurses.

The GP-centric health model does not seem to work as well in managing a chronic disease such as asthma with its high degree of variability. GPs are limited in their opportunities to provide ongoing management if patients only present at times they are experiencing an acute exacerbation of their condition. Yet asthma educators, pharmacists and NGOs seem to be underutilised in the provision of patient support. (Contributor 6)

There is 20 years' worth of robust evidence suggesting that community pharmacists can enact very positive and effective roles in asthma care – yet there are no incentives that have been developed for this group. With coming advent of the electronic health record this role is likely to be even more pragmatic. Similarly, clearly established protocols for practice nurses should be developed and incentivised. This will allow better chronic management rather than managing exacerbations reactively. (Contributor 7)

Despite some agreement on the potential for change, there were varying views regarding the precise changes. A key overall theme emphasised by contributors was the importance of different health professionals working in partnership. When discussing the potential to change health professionals' scope of

practice to prescribe asthma medication, the recent legislative change to enable pharmacists to administer vaccines was cited as an example. A 'competency-based' approach was suggested as a way to determine which health professionals could prescribe what.

A key change...would be to enhance the role of the pharmacists in asthma management...changing the legislation around asthma medications would assist in the quality use of medicines in asthma. Changed legislation would allow pharmacists, who are more accessible to patients, to play a bigger role in supported self-management of this condition. (Contributor 6)

As long as a profession is able to meet the competencies required to prescribe then they should be able to. (Contributor 5)

As long as the systems are put in place to make sure they're collaborating with the GP and keeping the GP in the loop and creating this collaborative partnership of supported self-management, then I think we might achieve something different to what we've done by just trying to give doctors more incentives, and that hasn't really worked. (Contributor 6)

As long as it's all connected, as long as whatever's done in the pharmacies is directly linked to the patient's healthcare home or general practice. I'd be terrified of siloing healthcare whatsoever. (Contributor 1)

A number of contributors suggested pharmacists should have an increased role in asthma care because of their accessibility to patients and the resulting opportunities to engage people with asthma to support self-management practices. Specific opportunities for pharmacists to have an increased role in asthma care were identified by contributors, and included authority to prescribe asthma medications and increased involvement in asthma self-management education and support, including authority to sign off WAAPs (Refer to Section 4a).

Community pharmacists are highly accessible health professionals who are an under-utilised resource in improving asthma management and could play a more significant role. (Contributor 6)

I know pharmacists get criticised a lot for being retailers and not being real health professionals, but the plus side of being in a retail environment and heavily embedded in the community is that our accessibility is massive...the data shows that the average person accesses their pharmacist 14 times a year, and they access their GP once a year. So we've got a huge amount of potential to influence patients and how they manage themselves in the community, and obviously when they come in to buy a reliever over-the-counter, then that's a very good chance for us to step in and have the right conversations with them. (Contributor 6)

Medicine being an area of expertise for pharmacists, clearly that's an area in which they could assist in caring for asthma. (Contributor 7)

The different models for expanding health professionals' scope of practice to include prescribing rights were noted by one contributor, alongside the importance of rigorous training of health professionals affected by scheduling changes.

There are lots of different models out there...expanding a health professionals scope of practice, that goes right from a health professional having completely free access to prescribe whatever they want as long as they meet a competency...and there are other ways, things like very specific formulae based on tight algorithms that a health professional has to follow in order to prescribe something so it removes the risk of harm occurring. There are also models where health professionals do it in partnership with a GP so it could be a pharmacist working in a GP practice. (Contributor 5)

Contributors expressed frustration with the lack of action to increase pharmacists' involvement in asthma care.

What we haven't done is look at what role different professionals can take and to create incentives to allow people to do that. (Contributor 7)

A lot of the work from the University of Sydney has demonstrated the potential of pharmacists to have an impact, but I don't think we've translated it that further step. (Contributor 6)

More broadly, 'ongoing turf wars' and 'egos' of health professional groups were seen as possibly inhibiting translation of evidence into practice.

In general practices across Australia, there's still ongoing battles about the GP wanting to own the space and it's just ridiculous because, you know, we work together. (Contributor 1)

Contributors stressed the importance of clarifying workforce roles and related support mechanisms. Remuneration was identified as a critical issue for all health professional groups involved.

The remuneration pathways are a problem for both doctors and for pharmacists, and for other health professionals. (Contributor 6)

Pharmacists are one of the only health professionals who get very little remuneration, or in the past no remuneration, for their advice and the conversations they have with people. They get paid for the products they sell, and that's really problematic for community pharmacy, because obviously all health professionals are in a business. (Contributor 6)

...it has to have a business bottom line. (Contributor 1)

Training and support for health professionals

Contributors spoke of the importance of training and support for health professionals, and the need for continued efforts to develop the workforce and build its capacity to provide consistent, best practice asthma care.

The thing with asthma is that every person is different and that's where the workforce being properly educated and able to be used to their full scope is so important. (Contributor 1)

Asthma has dropped off the radar in terms of GP education...there is enormous variation in terms of basic knowledge and understanding and so I think more active education with primary health networks in the way they had been in the past would be useful. (Contributor 9)

There's a huge workforce that's still untapped in many ways. (Contributor 1)

A sense of fatigue in the field was evident in some discussions.

There's a bit of disillusionment that the things that they've tried to do so far haven't worked. (Contributor 6)

Contributors identified a number of training priorities based on gaps in health professional knowledge and the importance of upskilling around motivational interviewing and asking the right questions (Refer to Section 4a).

Gaps in health professional practice and knowledge were around things like adherence, recommending self-management strategies to patients, assessment of asthma control, management of comorbidities and also some gaps around understanding the newer medicines. (Contributor 5)

You can't just say "How is your asthma going?" You really need to ask some of those other questions. "Show me how you use your devices. What medicines are you on? What dosages are you on? When do you take it?" (Contributor 4)

Health professional training on asthma best practice treatment guidelines was deemed important, alongside disseminating the guidelines, and asthma research results more broadly, in a practical format that would support health professional practice.

There's a role for, like, seminars to be held on how to actually write them [WAAPs]. But for health professionals. I think a lot of understanding how to write them comes down to understanding the guidelines themselves. (Contributor 2)

I think we can translate all that wonderful research which just puts me to sleep into something that I can ingest and then use would be fantastic. (Contributor 1)

Contributors suggested incorporating the guidelines into an electronic health pathway, with the aim of supporting implementation of asthma best practice treatment guidelines and optimising referral pathways.

...if the guidelines were actually created in a health pathway. Almost like, if there was some kind of software that, rather than when a patient is identified as having asthma, it kind of like comes up with a pop-up series of questions which is following the guidelines, because I think the guidelines is a pathway...if it was almost a pop up of each section in the guidelines. I think probably the easiest way for the GPs to get the practice right or in primary care to get the practice right is to have the guidelines sitting there next to them on one screen and then following that – but it's quite wordy. There's a lot of sections to it. But yeah, kind of pop up guided pathway would be very useful. (Contributor 2)



Enhance asthma care and management

Care gaps

Contributors were concerned about gaps between evidence-based care and clinical practice. Implementation of asthma best practice treatment guidelines was identified by contributors as a key challenge in Australia.

Guidelines for asthma management are fantastic and very clear however do not always translate into practice. (Contributor 2)

There's a gap in interpreting the guidelines and translating them into practice and incorporating the new medications that are also now becoming available. It's only going to increase as more and more of these biologics and other options become available, so that's a big challenge I think, going forward for treatment. (Contributor 3)

Implementation's the big thing, because the info's there. (Contributor 4)

In addition to self-management practices (Refer to Section 4a), contributors identified a number of care gaps, including asthma diagnosis, medication use and adherence, and the current inequities in asthma outcomes, particularly for Aboriginal and Torres Strait Islander people.

Not enough time is invested in ensuring the diagnosis is correct in primary care. This leads to over-prescription of inhaled steroids and LABAs and the perception that while common it is an intermittent problem of little impact. (Contributor 12)

It's quite challenging for people to accept the need for regular preventers...we've got this dichotomy of probably not enough people being on low dose corticosteroids as preventers and far too many people being on high dose and particularly high dose combination drugs. (Contributor 9)

While the Australian healthcare system is certainly a very general one and there's a good deal of access, those who do worse with asthma are the most disadvantaged. (Contributor 12)

Large pockets of the asthma population are unengaged – culturally and linguistically diverse communities, Aboriginal and Torres Strait Islander people, young adults and those with mild asthma. (Contributor 7)

As discussed earlier in relation to self-management practices, healthcare systems and processes were considered as predominantly responsible for the care gaps.

...these are systemic issues rather than professional practice issues. (Contributor 7)

So it really is very, very complex and systemic. (Contributor 6)

Contributors spoke of the increasing need to consider people with asthma in the context of multiple comorbid diseases, particularly other chronic conditions.

Comorbidities are very common, and in older people with airways disease they're probably the norm...they have four or five different comorbidities, and that will impact enormously on how they're going to be managed. (Contributor 12)

There may be issues around anxiety, depression, that just treating their asthma alone might not take care of and need to be focused on. So identifying what those problems are and tailoring treatment to them becomes important. Others include obesity and how that impacts on asthma control. That multidisciplinary approach becomes more important. (Contributor 12)

Underpinning any approach to redressing care gaps is a need to streamline efforts and be consistent, one contributor emphasised.

Streamlining what we have tried in the past which has somewhat worked but not totally successful. Also, consistency. We keep rotating from asthma three plus plan, to asthma cycle of care. If we had a Medicare rebate item for asthma education with clear standards for topics, goals and being reviewed every so many months, if all that's listed under that item and the item stays constant that would be a great thing to improve. (Contributor 7)

Care coordination and multidisciplinary teams

Contributors acknowledged that Australia's health system is fragmented and can be difficult for people to navigate.

We need better integration between primary, tertiary, allied health and all other levels of care. (Contributor 2)

Contributors spoke of the importance of a multidisciplinary team approach, acknowledging

it was difficult to achieve, particularly in light of ongoing discussions around workforce roles and responsibilities (Refer to Section 4b).

Suggestions regarding new models of multidisciplinary care to develop and/or test were proffered such as the innovative use of TeleHealth, an outreach model using a spirometry bus, and models of care involving general practice and pharmacy, including non-dispensing pharmacists in general practice, and a two-way referral system between GPs and pharmacists (Refer to Section 4e).

We should definitely have a more multidisciplinary team approach, so every individual involved, they don't feel like it's someone else's responsibility. (Contributor 11)

We all know that we're supposed to collaborate more, but ultimately we're individuals working in silos, and very busy and there's not a lot of remuneration to allow us to do all this warm and fuzzy collaborating. So I think very structural things that acknowledge the role that each health professional plays and try to get that engagement and working together a bit more would be helpful. (Contributor 6)

Concern regarding the unintended consequences of people seeing multiple health professionals was raised by one contributor.

You can have unintended consequences of having people going to a number of different health professionals for all of their different chronic problems...you know that fragmentation of peoples whole medical selves...we are in danger of losing that integration and that whole sort of patient focus if we start dividing things up too much. (Contributor 9)

Availability of asthma medications

Contributors reflected on the current availability of asthma medications. Potential changes were discussed including down-scheduling of preventers, up-scheduling of relievers, prescribing as needed ICS/LABA for people with mild asthma, and affordability of medications.

1. Down-scheduling preventers

Contributors expressed mixed views regarding the availability of preventers. Most expressed tentative support for making preventers more freely available; emergency contraception was cited as a like example.

There is some merit in that idea of down-scheduling and removing a barrier to preventer medicine, if a comprehensive analysis of the risk benefit is undertaken...to make the down-scheduling of preventer medicine work, you need something like My Health Record...that would be an essential component to making this work (Contributor 5)

If we're going to keep short-acting relievers available with pharmacists dispensing them, then we probably should make inhaled steroids just as available. (Contributor 12)

Rather than making preventers available over-the-counter, some contributors offered alternative ideas for increasing access.

Slight down-regulation with very tight controls of preventers...we've done that sort of thing around emergency contraception. (Contributor 6)

We've done this in some practices in the UK, is making it easier for patients to request repeat prescriptions...in the UK it's easy for them to do an online request, and then we acknowledge and authorise the request, and send it to their pharmacy of choice, and they collect it at their convenience. So people that need their medication can get access to it, as they've had it prior, they've had a review in the last X amount of time. (Contributor 11)

Others expressed concerns over making preventers more available and felt they should continue to be available by prescription only.

...so preventers over-the-counter. That's one that kind of scares me a little bit...I don't know how people would choose which one...how do the checks happen in terms of device technique? (Contributor 2)

2. Up-scheduling relievers

The majority of contributors strongly supported relievers continuing to be available over-the-counter, and expressed some frustration with ongoing changes to this medication over time.

It is an emergency medication that should be freely available...a bit like EpiPens. (Contributor 2)

The reliever inhalers have been on script, off script, they keep toggling with what to do with this medication. (Contributor 6)

Despite strong support for over-the-counter access, it was acknowledged that most people with asthma accessed their reliever via prescription.

Only 20 per cent of short-acting beta agonists use though is sold over-the-counter, 80 per cent of it is in fact prescribed. So the reliance on the short-acting beta agonists is still there anyway. (Contributor 12)

A slight upregulation of relievers was suggested as a way to shift consumer perceptions, overcome the limitations of self-reported medication use and as a way of identifying and engaging people with high medication use.

Making it [reliever] a recordable but over-the-counter sale...up-scheduling it a little bit, but not to prescription, but add a little bit more formality around it...so it would go onto the patient's medication record, so then you've got it in their medication history...it's about changing the patients' perception as the serious nature of these medications and how they have to be used appropriately. (Contributor 6)

...when a certain number are dispensed in a given period of time I think there needs to be some sort of triggering mechanism...it's not that the pharmacist can't give it, but there's an attempt made to make

a medical appointment or something like that. You never want people not to be able to get a rescue medication but you need some way of trying to get those frequent flyers who fly under the radar. (Contributor 9)

3. Prescribing as needed ICS/LABA for people with mild asthma

Contributors were divided about the appropriateness of prescribing as needed ICS/LABA for people with mild asthma. Some were supportive and felt that it was aligned with how many people with asthma currently behaved.

I think that would better fit with people's behaviour rather than try to change their behaviour, which is a very difficult thing to do. (Contributor 12)

I'd see it as a positive change because I think a lot of the time, that's how people use it anyway...the implications though are people then often overestimate their level of asthma control (Contributor 2)

That's potentially a game changer in terms of how we manage people with asthma that require inhaled steroids. (Contributor 9)

Overall most asthmatics should be on low dose of inhaled corticosteroids, and they probably do better on that, but taking it is a big barrier and it's just a realistic barrier. Using them on an as-needed basis has now been shown to be a safe and reasonable approach to treatment. It gives you another step before you have to use Prednisone. So this sort of approach to treatment is something which we should be doing more of, but it hasn't really taken off and part of that is vested interests from pharma who have people on very fixed doses and using regular doses and there's a lot of intransigence there in how to use the medication. I think that's a problem, and now with increasing evidence and particularly the conversation around adherence, I think this is a model for people with milder disease, that would probably work better. (Contributor 12)

Other contributors opposed the over-prescribing of ICS/LABA, particularly for people with mild asthma and when it is not being reviewed for possible step-down.

There is a place for patients to have ICS and LABAs if they're not responding to the slightly milder or as needed inhalers. Should all asthmatics be on ICS/LABAs? I'd say no. It only concerns people that need to be escalated. (Contributor 11)

I don't think it should be prescribed for mild asthma. (Contributor 4)

A lot of evidence shows combinations are being over prescribed and they need to be stepped down. (Contributor 7)

Where there are a lot of people taking LABAs, a high level preventer therapy, and there are probably too many people using that medication, which is expensive, and not necessary, unless their asthma

is not well controlled...they might need to step up to that, but then they're not being stepped down off that. And that's a problem too. So there's a lot of resource wastage. Over-use of relievers is resource usage. Overuse of the LABAs is resource usage... it's medication wastage as well if they're not on the right therapy at the right time, and they're not being stepped up and stepped down appropriately. (Contributor 6)

One contributor suggested a different approach.

There is a third option as well, which is actually having combination inhaled steroids/short acting beta agonists available, and I think that would be a very good option and could be a potential option to have available as a pharmacist dispensed. (Contributor 12)

4. Affordability of asthma medications

Contributors identified the cost of asthma medications as a barrier to adherence. In light of this, contributors suggested providing more financial support, concessions, and subsidised medicines to people with asthma.

People with asthma face significant out-of-pocket costs. (Contributor 5)

Greater financial support for those with asthma, particularly when a household has multiple residents/family members with asthma. (Contributor 2)

I'd like to think that we could have immunotherapy more freely available on the PBS for people of all ages – and that may or may not come after the thunderstorm asthma epidemic. (Contributor 4)

Precision medicine approach

Contributors spoke at length about the heterogeneity of asthma and how treatment is becoming increasingly complex and individualised. As Contributor 4 succinctly summarised, 'one size doesn't fit all'.

It comes back down to better understanding, personalised medicine, understanding an individual's disease. Asthma's a heterogeneous disease and so it comes down to a much finer understanding of what's driving an individual's asthma. (Contributor 3)

Overall, contributors were excited about the emerging precision medicine approach to asthma management, and felt the targeted treatment of asthma was the next frontier for asthma care.

It's really about professionals having access to that next level data, beyond basic lung function, basic spirometry which is not particularly useful a lot of the time...so we'll be able to use our steroids a lot more strategically, lesser amounts and we'll support them with other medications that specifically target new mechanism that drive an individual's disease. (Contributor 3)

The availability of new biologics as add on therapy for uncontrolled asthma provide promise to improve the status of asthma care – although it remains to be seen how easily these new treatments can be implemented and the real-world impact they will have on asthma care in Australia. (Contributor 3)

Opportunities to use personalised medicines earlier in the disease process were flagged.

So we wait until they get very ill and unwell and their immune systems are very committed before we actually do something about it...but if we rethink and do the studies, we might be able to identify when to use it earlier on in the disease process and therefore modify the disease process. (Contributor 12)

Better use of technology

In addition to better use of technology for WAAPs, contributors emphasised the need for more sophisticated use of technology in asthma care.

...should invest in digitised applications – apps that can record oxygen levels, respiratory rate, wheeze sounds and lung function – self-care is likely to be far more digitised – patient interaction with health care professionals may well be virtual to a great extent, except with pharmacists where they may have to physically present to pick up prescriptions – though this process may also be more virtualised. (Contributor 7)

Lots of ways technology can be used this area. And we probably need experts in this area, health informatics that can look at all the ways things can be done in asthma but we haven't really gone that way yet. (Contributor 7)

Optimism regarding the potential for the My Health Record to improve asthma outcomes was expressed by contributors.

It has a whole lot of potential but it depends on the quality of the data that's uploaded into it. (Contributor 9)

It has a very large potential to improve outcomes for people with every disease and every condition. For asthma, particularly when you've got GPs who are doing the bulk of the management of the condition, and you might also have respiratory physicians involved, and then you've got pharmacists who are able to prescribe OTC relievers...it's incredibly important for everyone in the team to get the full picture, the clinical picture and how they're managing it. The benefits to HPs obviously and the benefits to consumers themselves is very high in that they'll receive a greater standard of care because people are connecting the dots. (Contributor 5)

My Health Record has enormous potential...we certainly need to look at that. Why couldn't there be a tab 'My respiratory health'...there can be consumer as well as clinician contribution to that...the progression next will be connectivity for clinicians' software. (Contributor 1)

If chronic asthma is recorded can be used to generate reminders for appointments or warnings about high pollen days. (Contributor 7)

Focus on asthma prevention and cure

Contributors felt that health system resources should be directed towards asthma prevention and cure.

Everyone knows there's a lot of asthma, but a lot of people are so busy treating it that we don't have time to stop it happening...we stop the emergency but don't look at how we got there. (Contributor 10)

Unfortunately, that's pretty much the way it stayed... And those are sexy diseases I guess. If we can sexy up asthma, then maybe we could win half the battle. (Contributor 1)

Contributors spoke of the importance of raising the profile of asthma through education programs and awareness campaigns.

That's something that we have to work on, is raising the profile of asthma. (Contributor 2)

We need policy aimed at influencing and increasing the recognition and profile of asthma nationally. (Contributor 1)

D Create supportive community environments

Contributors acknowledged the importance of supportive community environments, however the role of different sectors and settings to promote health, reduce asthma risk and strengthen asthma prevention was not a focus of discussions.

Profile of asthma in the community

A number of contributors spoke of the high prevalence of asthma and expressed concern over the low profile of the condition in the community.

Asthma doesn't have the profile it warrants or deserves with clinicians or consumers. (Contributor 1)

It really highlights the disheartening lack of public recognition and support of how important and what a burden chronic respiratory diseases like asthma are. (Contributor 3)

They felt that progress towards improved asthma outcomes was hindered by a widespread misperception that the asthma problem is 'solved', especially following the marked decrease in asthma mortality from its peak in the late 1980s.

People are a bit blasé about asthma...with the fact that the death rate has dropped, people aren't looking at the long-term consequences of not treating appropriately. (Contributor 10)

One contributor juxtaposed the low profile of asthma with the high profile of other chronic conditions such as diabetes and heart disease. A sense of competition between chronic conditions was evident in the discussion.

Asthma and COPD tend to run a second position in the race...Twenty years ago nurses increased in numbers enormously in general practice because they were driving the fight against diabetes. So, all care management was ploughed into diabetes and

E Promote research, evidence and data

World-leading asthma research

When reflecting on asthma research, contributors spoke of Australia's world-leading research and unique context.

Every country health system and pharmacy system is slightly different. Australia's quite unique with our PBS and the roles our pharmacists play. And if you look at the research, we are far ahead of many countries. (Contributor 7)

I don't actually see that those other countries are going about things in a different way...I'm not aware of anybody doing things radically different. (Contributor 12)

Some concern was expressed around the inadequacy of current funding levels and a desire for changes to the way research is funded.

Let's focus on NHMRC: the amount of money in that pot has not increased in the past couple of years, it's not projected to increase. Yet the cost of doing research continues to increase and the amount of people needing that money increases. So, the actual amount of money available is becoming less and less. Which increases competition, which is not the best way to support important research or identify important research. (Contributor 3)

It always demoralises me, I guess is the best word, at how poorly recognised asthma is as a disease that needs research support. (Contributor 3)

There needs to be a shift in what is deemed to be valuable research...how do we determine what is the important, valuable research with real potential? (Contributor 3)

Focus on knowledge translation

Contributors agreed that a large amount of asthma knowledge has been accumulated and the priority now is to translate that knowledge into practice. Throughout the discussion, the need for research that leads to tangible improvements in health outcomes was emphasised.

We need to focus more on translation. (Contributor 3)

More tailored health initiatives and practice-based research are required. (Contributor 6)

Everyone wants to produce something, whether it's producing a leaflet, producing a model of care, or producing some sort of written document that solves the problem. And that's not translating. We need to focus more on real action that we can take that will make a difference. (Contributor 6)

Although contributors agreed that knowledge translation was a priority for asthma, views regarding the focus of knowledge translation activity differed. A number of contributors spoke of the need to focus on new medicines and individualised treatments in order to deliver real precision asthma medicines.

Steroids and beta agonists have been the frontline medication for asthma for many years and there's no doubt in anyone's mind that they've improved quality of life and saved countless numbers of lives. But, they haven't really changed much over that time. Really, just altering the combinations and the fine chemistry of these very effective drugs but they're not perfect and there are key areas where they are particularly imperfect and those are around exacerbations and particularly those caused by infections...How do we take all this wonderful knowledge about mechanisms that we've generated in the last several decades, how do we turn that into something that's better than a steroid? Or better than a beta agonist? (Contributor 1)

Others emphasised the need to focus on understanding and using what we currently have more effectively, including a suggestion to evaluate existing services such as home care reviews.

There's still clinical research that needs to be done for asthma which is all futuristic, better treatments and cures. But we need to look at what we have right now, the professionals we already have, the treatments we already have. We should work more effectively with what we already have. Our PBS, guidelines, these fantastic things are not reaching the patient effectively. (Contributor 7)

I'd like to see more research actually into services and their outcomes...I think a lot of research goes into identifying treatments and the pathophysiology of what's going on inside the body and type of thing. That's really important as well, but not as much research goes into services and outcomes. (Contributor 2)

The role of consumers

One contributor spoke at length about the emerging role of consumers in research, and the importance of actively engaging consumers in research.

It's really only recent times that it's been encouraged for researchers to include actual community members in research and how that really needs to be pushed that more research is including consumers. So, whether it's in them looking at plain language summaries or actually guiding research, like what's relevant, what's important and then that it's translated into a way that can be easily understood by everyone. (Contributor 2)

They suggested that, similar to an annual survey conducted by Asthma UK, Australia conduct a recurrent national survey of people with asthma to better understand the consumer perspective, including their health care use and experiences.

...looking towards people that have asthma to see what is it that they want and trying to identify through surveys where does people's lack of knowledge about asthma come from, or where is there gaps in knowledge or gaps in treatment? (Contributor 2)

It was also suggested that further studies into medication use and access were undertaken to improve our knowledge in this important area.

One of the touchpoints that all people have with asthma is medications, so, how are they using their medications in terms of the technique but also their adherence so greater studies into that, but also about how do people access it? Is it through the same pharmacy? Is it through different pharmacies? Sometimes we see people who actually – their issue of why they don't get their script filled is because they actually don't have transport. They've managed to get to the doctor because their transport will take them there, but they don't have transport to the pharmacy. (Contributor 2)

New models of care

The importance of multidisciplinary care, particularly in light of increasing comorbidities in the Australian population, was emphasised by contributors when reflecting on international practice and discussing new models of care for Australia to develop and/or test.

A number of contributors spoke of the potential of remote models such as Telehealth to increase access to services, particularly for people living in rural, regional and remote areas.

One of the interesting things that's happening in the UK...the idea of taking secondary care to primary care...and you could do it by teleconferences or skype, tele-health...thinking about care and how you can start to innovatively use Telehealth...I am particularly aware of areas where it may be difficult for people to see a relevant or even an asthma educator. (Contributor 9)

One contributor suggested an outreach model using a spirometry bus, as a way to increase access to formal lung function testing.

One of the things that we talk, which is pie-in-the-sky is do we need to have a spirometry bus. You know how you have the hearing bus? That go out to test people's hearing and the breast screen buses? Something like that to assist people would be a great support. (Contributor 2)

Models of care involving general practice and pharmacy were mooted, including non-dispensing pharmacists in general practice, and a two-way referral system between GPs and pharmacists.

There are new initiatives to have non-dispensing pharmacists working in general practice...and I think that's a particularly promising area in terms of asthma education, medication, inhaler technique, all the things we know are really important. (Contributor 9)

A two-way referral system is always going to help that too. So maybe the doctors could tell patients when they develop their plan, say, well you need to have the plan updated, you can go and see your pharmacist who will convey it to me and if it's convenient you come back to me. (Contributor 6)

5. Conclusion

The views of this small and diverse group of asthma stakeholders demonstrates the sense of frustration felt by many in the field that, although considerable progress has been made in asthma management over the past three decades, particularly in reducing asthma-related deaths and hospital attendances, progress has stalled in recent times.

Asthma-related deaths in Australia, after peaking in the 1980s, declined by almost 70% to 1.6 per 100,000 population in 2003 and has since remained stable, below 2.0 per 100,000 population (AIHW et al., 2014). Australia's increasing population appears not to have affected this so far.

Similarly, Australia has seen a marked change in the frequency and severity of hospital admissions and emergency department presentations (Australian Institute of Health and Welfare, 2018, Australian Centre for Asthma Monitoring, 2011). However, after declining steadily during the 1990s and early 2000s, the rate of health service use related to asthma has not changed substantially over recent years (Australian Centre for Asthma Monitoring, 2011).

Contributors' frustrations were particularly evident in a number of areas: suboptimal uptake of self-management practices by patients and the lack of health professional skills to affect change; workforce roles and responsibilities, where there was consensus that change was required and acknowledgement of robust evidence to support the increased role of pharmacists in particular, yet contributors felt that action to translate evidence into practice was inhibited by the turf wars and egos of health professional groups; and some inconsistencies in Australia's approach to tackling asthma over time, particularly in relation to the availability of relievers and Medicare item numbers.

Conversely, there was a strong sense of optimism amongst contributors that Australia was in a strong

position to realise further improvements in asthma outcomes. In some areas, clear actions and some new approaches were identified to strengthen asthma healthcare in Australia, alongside acknowledgement that certain issues require further consideration and consultation.

A key area of ongoing need identified by contributors was training and education for health professionals, including the need for primary care health professionals to have specialised asthma training. This has been provided nationally for 17 years, principally by the National Asthma Council Australia, with government funding. The inclusion of communication skills and innovative approaches to patient-centred behaviour is particularly important. Additionally, the psychological aspects of asthma must be more clearly understood and engaged with by health professionals if they are to provide a meaningful role in supporting people with asthma in their self-management. This is not a new problem but is an area which must be re-examined, today's consumers consulted and health professionals informed.

The Asthma Foundations have provided asthma education to consumers and carers for many years, and this is still regarded as an area of need.

Based on the findings in this paper, it appears that current opportunities for educating health professionals and consumers must be even more publicised and made more widely available.

Contributors felt that a rethink of asthma action plans was required. Written asthma action plans, though supported by Level One evidence as to content and effectiveness, having been distributed nationally and made generally available in different formats since the early 1990s, still appear to have limited uptake. In the absence of international comparisons of asthma action plan ownership, it is impossible to benchmark Australia's success or lack of success in this area.

Efforts to promote action plans, including use of apps and website formats, by the National Asthma Council Australia and supported by many other stakeholders, appear to have reached an effectiveness ceiling. Further consultation with consumers on novel approaches to action plans is required.

Confusion over asthma terminology remains despite ongoing development and refinement through asthma stakeholder consultation, and communication through national campaigns, social media and consumer education. Further action to improve consistency and understanding is currently unclear and should be explored in a structured consultation.

The ongoing debate regarding roles of relevant health professionals in asthma care was a concern for stakeholders, who emphasised the opportunity to increase the role of pharmacists and practice nurses in asthma management. It is time for a structured debate on these overlapping roles in asthma care and the formulation of resolutions.

New approaches to asthma medications were an important consideration of contributors and their suggestions need to be discussed in a national forum. The major issues are likely to be:

- The potential for down-scheduling preventers
- The possibility for making relievers less easily available, perhaps by some minor up-scheduling
- The greater promotion of ICS plus rapid-onset LABA, perhaps also in mild asthma
- Ensuring medication affordability

Stakeholders generally saw asthma as no longer being high profile so, in a way, a victim of the progress made in asthma. Asthma has received steady national media coverage over three decades since the National Asthma Council Australia was formed, and, in recent years, the asthma organisations have made much use

of social media. Raising community awareness and achieving cut-through in increasingly crowded health media are challenges for all health conditions including asthma, and need to be further explored.

In relation to research, contributors emphasised the need for a greater focus on knowledge translation. In Australia, no single body is dedicated to promoting collaboration and 'joining the dots' in the asthma and broader airways disease research community, and no national asthma research agenda exists, despite it being identified as a key action in the *National Asthma Strategy 2018*. This warrants further consultation and discussion.

Next steps

The stakeholder comments all point to the need for a rethink of many aspects of asthma management. This exploratory paper demonstrates the need for a series of consultations in the areas highlighted, including the following priority areas:

- Written asthma action plans
- The psychological aspects of asthma
- The roles of the health professionals involved in asthma care
- Equitable availability of asthma medications
- Research and knowledge translation

It is critical that these structured consultations are led by consumer realities, and lead to practical, sustainable steps to drive asthma forward.

The National Asthma Council Australia, as the national authority for asthma knowledge, is well placed to lead these consultations, and is currently planning an initial forum on asthma action plans to be held early 2019.

6. References

AIHW, Poulos, L., Cooper, S., et al. (2014). *Mortality from asthma and COPD in Australia*. Canberra: Australian Institute of Health and Welfare.

Australian Centre for Asthma Monitoring. (2011). *Asthma in Australia 2011*. Canberra: Australian Institute of Health and Welfare.

Australian Government Department of Health and Aged Care. (2001). *National Asthma Action Plan 1999–2002*. Canberra: Australian Government Department of Health and Aged Care.

Australian Government Department of Health and Ageing. (2006). *National Asthma Strategy 2006–2008* [Online]. Available: <https://assets.nationalasthma.org.au/resources/national-asthma-strategy-2006-08.pdf> [Accessed January 2019].

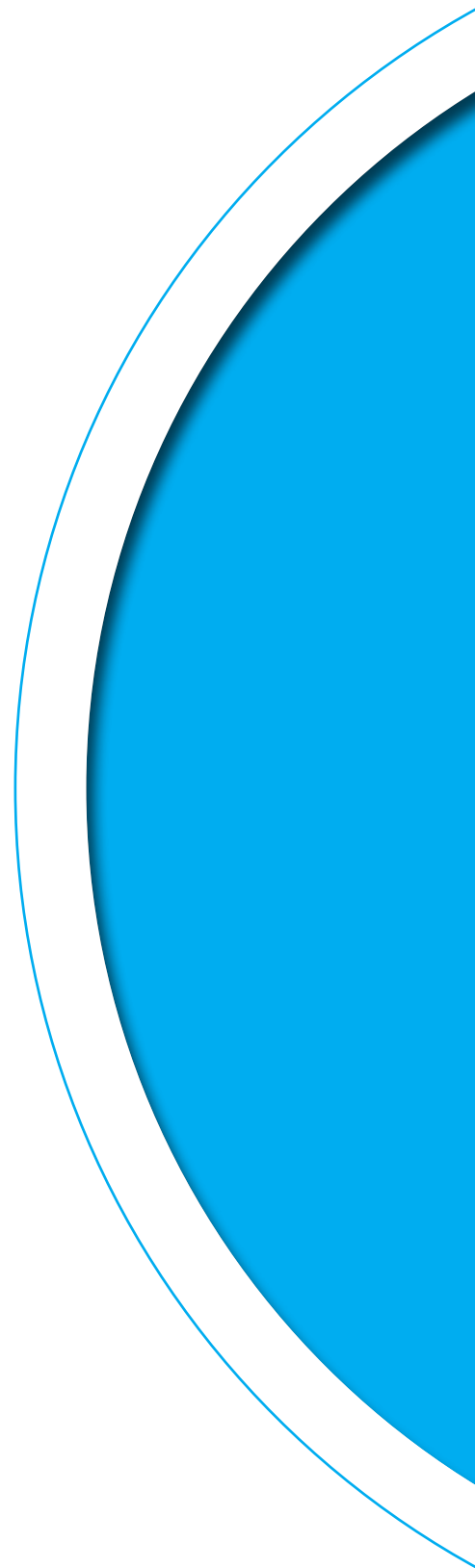
Australian Institute of Health and Welfare. (2018). *Australia's Health 2018*. Australia's health series no. 16. AUS 221. Canberra: AIHW.

Barlow, J., Wright, C., Sheasby, J., et al. (2002). Self-management approaches for people with chronic conditions: a review. *Patient Education and Counseling*, 48, 177–87.

Commonwealth of Australia. (2018). *National Asthma Strategy 2018*. Canberra: Department of Health.

National Asthma Campaign. (1999). *National Asthma Strategy Implementation Plan 1999* [Online]. Melbourne: National Asthma Campaign. Available: <https://assets.nationalasthma.org.au/resources/national-asthma-strategy-1999-implementation-plan.pdf> [Accessed January 2019].

Pavord, I. D., Beasley, R., Agusti, A., et al. (2017). After asthma: redefining airways disease. *The Lancet*. 391, 350–400.



National Asthma Council Australia
ABN 61 058 044 634

Suite 104, 153-161 Park Street
South Melbourne VIC 3205

nationalasthma.org.au