national allergy strategy

Pre-budget Submission 2017

The National Allergy Strategy is an initiative of ASCIA and Allergy & Anaphylaxis Australia
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Fast facts

- Allergic diseases are among the fastest growing chronic conditions in Australia, affecting approximately 1 in 5 Australians[1].
- Hospital admissions for anaphylaxis (severe, life threatening allergic reactions) have increased 5-fold in the last 20 years[2].
- Deaths from anaphylaxis have increased by 7% per year for the last 7 years[3]
- Food allergy induced anaphylaxis has doubled in the last 10 years. One in 10 infants now have a food allergy[4].
- Introducing peanut between 4-11 months of age can reduce peanut allergy in high risk infants by 80%[5].
- Up to 1 in 10 adults with suspected but unconfirmed drug allergy are often unnecessarily treated with more expensive drugs[6].
- Although 5% of adults may be allergic to one or more drugs, up to 15% believe that they have drug allergy, and therefore are frequently unnecessarily denied treatment with an indicated drug[6].
- Being labelled penicillin allergic can result in the use of more broad-spectrum antibiotics increasing the risk of antibiotic resistant strains, increased morbidity with more ICU admissions and longer hospital stays[7].
- Delayed access to medical care and long waiting times for management of allergic diseases in all areas (rural, remote and metropolitan) is a major problem, due to the high number of diagnosed patients, newly diagnosed patients and low number of appropriately trained health care professionals[1].
- A US study reported that childhood food allergy results in significant direct medical costs for the healthcare system and even larger costs for families with a food-allergic child[8].

The purpose of this submission is to advocate for funding for key areas identified by the National Allergy Strategy as requiring urgent attention.

Current National Allergy Strategy progress

Allergic diseases are amongst the fastest growing chronic health conditions, affecting 1 in 5 Australians, resulting in increased costs of care[1]. To address these issues, the Australasian Society of Clinical Immunology (ASCIA) and Allergy & Anaphylaxis Australia (A&AA), as the leading medical and patient organisations for allergy in Australia, have developed a National Allergy Strategy in collaboration with key stakeholder organisations. ASCIA and A&AA are progressing with the implementation of the National Allergy Strategy and have made the following progress:

- A partnership has been developed with the Western Australian Primary Health Alliance (WAPHA) to update existing allergy HealthPathways and develop new allergy HealthPathways for allergic conditions across both metropolitan and rural areas of Western Australia. Once these HealthPathways are published in Western Australia, they will be available to all Primary Health Networks (PHNs) across Australia.
- Engagement with HealthPathways Community with the aim of standardising allergy HealthPathways across Australia. By standardising the allergy HealthPathway content, we aim to optimise management of allergic conditions.
- The National Allergy Strategy will be hosting an Infant Feeding Implementation Meeting in March 2017 to engage with key stakeholders to determine effective communication strategies to implement the ASCIA guidelines for infant feeding and allergy prevention.

In May 2016, the National Allergy Strategy received federal government funding for the following projects:
- Standardise management of drug allergy to prevent drug allergy deaths in hospitals.
- Improve allergy management for teens and young adults
- Improving allergy management in food service – to improve the provision of appropriate food to individuals with food allergy, in the food sector including hospitals.

These projects will be completed in June 2016 and will provide additional guidance on future resource requirements for drug allergy, allergy management in food service and improving allergy management in teens and young adults.

Where support from the Australian Government is now required?

These areas have been identified as urgent projects that cannot be completed without support from the Australian Government:

- Implementation of the ASCIA guidelines for infant feeding and allergy prevention;
- Development of national guidelines for drug allergy de-labelling to strengthen medication safety;
- Development of a clinical care standard for the acute management of anaphylaxis;
- Scope the development of a Shared Care Model for allergy.

The details of these projects, the partner organisations and funding needs are detailed in the Budget Request section.

What cost savings can be achieved?

The develop of national guidelines for drug allergy de-labelling would allow more patients to be safely de-labelled and will contribute to cost savings for both the health sector and for consumers. For example:
- Access to drug challenges to confirm who needs to avoid certain medications, removing unnecessary avoidance.
- Accurate diagnosis of drug allergy and de-labelling of individuals who do not have true drug allergy will enable the use of more appropriate and often less expensive antibiotics.
- Reduce the potential for increased antibiotic resistance.

Implementation of the ASCIA guidelines for infant feeding and allergy prevention will help reduce the development of food allergy, particularly peanut allergy which is often life-long, with the majority of peanut allergic individuals needing to carry an adrenaline autoinjector (e.g. EpiPen) for life. Preventing the development of peanut allergy can assist in reducing the cost to government, individuals with allergy and the community in the following ways:

- Reduced presentations to hospital and hospitalisations for severe reactions.
- Reduced ambulance call outs.
- Reduced PBS subsidised adrenaline autoinjector (EpiPen) prescriptions.
- Reduced costs for individuals and families for doctor visits (including specialists) and medications.

In addition to reduced costs, the prevention of food allergy, greatly increases the quality of life for individuals and families.

What is the current government policy?

The Australian Government recognises the burden of chronic diseases and is working to address this through the National Strategic Framework for Chronic Conditions. Recently the Australian Government has engaged with ASCIA and Allergy & Anaphylaxis Australia to discuss the National Allergy Strategy, recognising allergic diseases as a chronic disease.

Budget request

1. Implementation of allergy prevention strategies

We currently do not have a clear explanation as to why food allergy seems to have increased so rapidly in recent years, particularly in young children, nor why children who once outgrew their egg or milk allergy, now continue to have their allergy in well into their school years and sometimes teen years. Although infants with a family history of allergic disease are at higher risk of allergies, infants with no family history can also develop allergies. Many previous allergy prevention strategies have been ineffective, including delayed introduction of common food allergens.

In 2016, the Australasian Society of Clinical Immunology and Allergy (ASCIA), the peak medical body for allergy and clinical immunology in Australia, updated their Guidelines for infant feeding and allergy prevention. These guidelines are:

- Based on current published evidence and a consensus agreement by participants at the Infant Feeding Summit hosted by the Centre for Food & Allergy Research (CFAR) in May 2016.
- Relevant for all families (including those without a family history of allergy and those with a family history of allergy) and aim to outline practices that may help reduce the risk of infants developing allergies, particularly early onset allergies such as eczema and food allergy.

Implementation of the ASCIA guidelines for infant feeding and allergy prevention will help reduce the development of food allergy. Studies show that introducing peanut between 4-11 months of age can reduce peanut allergy in high risk infants by 80%[5]. Peanut allergy is most commonly life-long with the majority of peanut allergic individuals needing to carry an adrenaline autoinjector (e.g. EpiPen) for life. Preventing the development of peanut allergy will not only greatly improve the quality of life for individuals and their families, but it can assist in reducing the cost to government, individuals with allergy and the community in the following ways:

- Reduced presentations to hospital and hospitalisations for severe reactions (hospital admissions for food allergy induced anaphylaxis have increased 4-fold in the last 14 years[2]).
- Reduced ambulance call outs and emergency department admissions.
- Reduced PBS subsidised adrenaline autoinjector (EpiPen) prescriptions (most individuals with peanut allergy will require an EpiPen for life).
- Reduced need for government subsidised psychological care due to the stress food allergy management and potentially life threatening allergic reactions, places on both the parent and child.
- Reduced costs for individuals and families for doctor visits (including specialists) and medications.

With the increasing prevalence of food allergy, particularly peanut allergy and the risk of anaphylaxis, many parents, particularly parents of infants at increased risk of developing allergy, are too scared to introduce common allergens in the first year of life. Many will wait to see an allergy specialist for advice before introducing these foods and due to current long waiting times, it is often after the infant is one year old before the foods are introduced and the 'window of opportunity' to prevent food allergy, particularly peanut allergy has been missed.

The proposed strategy is to develop communication strategies to increase the uptake of the ASCIA guidelines. The following communication strategies are planned and would be informed by the National Allergy Strategy Infant Feeding Implementation Meeting to be held in March 2017:

- A communication strategy including for health professional (general practitioners, pharmacists, maternal, child and family health nurses, paediatricians and dietitians).
- Education resources and tools for health professionals (e.g. HealthPathway for infant feeding and allergy prevention).
- A communication strategy for the community to raise awareness encouraging the introduction of the most common food allergens within the first year of life, particularly in high risk infants.
- A phone service (1800 number) supported by appropriately trained staff to provide support to parents introducing solid foods to infants.

Additional allergy prevention information would also be disseminated including:
- Optimising eczema management in infants to prevent food allergy sensitisation.
- Addressing current myths about allergy prevention and providing credible information regarding allergy prevention in infants.

Proposed partner organisations include Centre for Food and Allergy Research (CFAR), Australian Breastfeeding Association, Primary Health Networks, Royal Australian College of General Practitioners (RACGP), Australian College of Rural and Remote Medicine (ACRRM) and NHMRC.

The National Allergy Strategy has already secured an unrestricted education grant (non-government) to conduct an Infant Feeding Implementation Meeting in March 2017 to engage with key stakeholders to determine effective communication strategies. Whilst funding has been secured to conduct this meeting, we currently do not have the funds to implement the outcomes of this meeting.

2. Development of a national guideline for drug allergy de-labelling

Up to 1 in 10 adults with suspected but unconfirmed drug allergy are often unnecessarily treated with more expensive drugs[6]. Although 5% of adults may be allergic to one or more drugs, up to 15% believe that they have drug allergy, and therefore are frequently unnecessarily denied treatment with an indicated drug[6]. Being labelled penicillin allergic can result in the use of more broad-spectrum antibiotics increasing the risk of antibiotic resistant strains, increased morbidity with more ICU admissions and longer hospital stays[7].

Access to standardised de-labelling protocols, and for some patients, drug challenges, to confirm drug allergies will allow the de-labelling of patients who do not have true drug allergy. This will enable the use of more appropriate, effective, and often less expensive antibiotics, and avoid unnecessary use of second tier antibiotics.

A number of regions across Australia are embarking on drug allergy de-labelling programs. Our aim is to engage with these services and all state services to develop nationally standardised de-labelling protocols and policies and clinical education resources.

This project will support the recommendations of the current drug allergy project funded by the Australian Government (due to be completed in June 2016), which scoping issues regarding a drug allergy database and clinical education requirements. Ideally the recommendations of the current drug allergy project and the proposed drug allergy de-labelling project should be implemented in parallel one cannot be successful without the other. This will enable effective de-labelling of patients and ensure that they are not erroneously re-labelled as being drug allergic.

This project would engage with the Australian Digital Health Agency to improve the drug allergy recording and information sharing through My Health Record, to enable a patient's true drug allergy status to be accessed by health professionals across Australia. The Australian Commission for Safety and Quality in Health Care would undertake the guideline development work in partnership with the National Allergy Strategy (refer to Appendix A).

Proposed partner organisations include Australian Digital Health Agency, Australian Commission for Safety and Quality in Health Care and state/territory Health Departments.

Please refer to Appendix A for an overview and projected budget provided by the Australian Commission for Safety and Quality in Health Care (ACSQHC) to undertake the project.

3. Scope the development of a Shared Care Model for allergy

People with allergic diseases need timely access to best-practice and evidence-based advice and therapy, together with effectively coordinated healthcare and support, as close as possible to where they live.

The National Allergy Strategy proposes a Shared Care Model approach may be required to improve access to care, particularly in rural, regional and remote areas. Key issues that need to be addressed include referral guidelines and up-skilling of primary health care providers linking them to tertiary health providers where possible.

The proposed strategy is to scope the requirements for a Shared Care Model for allergy to determine:
- How to improve access to care for people with allergic conditions, particularly those in rural and remote areas.
- The education requirements for healthcare professionals, particularly those in primary care.

Some work within the Shared Care Model has already commenced with unrestricted education grants from industry including:
- Development of allergy HealthPathways in partnership with the WA Primary Health Alliance.
- National Allergy Strategy Infant Feeding Round Table meeting scheduled for March 2017.

The federal Chief Medical Officer is supportive of the scoping of a Shared Care Model for allergy.

Stakeholder organisations for this project include Primary Health Networks, Royal Australian College of General Practitioners (RACGP), Australian College of Rural and Remote Medicine (ACRRM), state/territory Health Departments, Pharmacy Guild of Australia, Australian College of Nursing, Australasian College for Emergency Medicine and ambulance services.

4. Improving anaphylaxis management

Recently published data indicates that the incidence of all-cause anaphylaxis, and specifically anaphylaxis to food and medications, has increased over the past two decades in Australia[2]. This study also acknowledges the limitations in current reporting systems resulting in a large number of 'unspecified' anaphylaxis deaths[2].

Other recent Australian studies have highlighted continuing issues in anaphylaxis management. One study reviewed anaphylaxis management in 8 Australian emergency departments and found that:
- 27% of reactions consistent with anaphylaxis were NOT given adrenaline (adrenaline is the first line treatment for anaphylaxis)[10].
- for 5.7% of reactions, the patient was given subcutaneous adrenaline which is the incorrect route[10] (adrenaline should be administered intramuscular, in severe cases an intravenous adrenaline infusion may be required by skilled physicians).

Further to this, with regards to follow-up care for anaphylaxis in an Australian emergency department:
- Less than half of patients with anaphylaxis are provided with a prescription of self-injectable adrenaline (e.g. EpiPen) when discharged[11].
- Only one-third of patients with anaphylaxis are referred to an allergist[11].

Across Australia, anaphylaxis in emergency departments and within primary care continues to be mismanaged[9-11]. Many patients are being treated sub-optimally (not being given adrenaline, the first line treatment for anaphylaxis) and are being discharged without a prescription for an adrenaline autoinjector (EpiPen) or a referral to see a specialist for follow up care[9-11]. Despite standardised acute management of anaphylaxis guidelines being available since 2011, clinical practice continues varies and suboptimal treatment is provided. A Clinical Care Standard for Anaphylaxis is needed to address the ongoing issues

with acute management of anaphylaxis including appropriate follow up care with the aim of standardising clinical practice.

The Australian Commission of Safety and Quality in Health Care has agreed to undertake the development of a Clinical Care Standard for Anaphylaxis in partnership with the National Allergy Strategy. Please refer to Appendix B for an overview and projected budget provided by the Australian Commission for Safety and Quality in Health Care (ACSQHC) to undertake the project.

The National Allergy Strategy is currently undertaking the following projects which will require additional future resources based on the consultation undertaken:

- Standardise management of drug allergy to prevent drug allergy deaths in hospitals
  - Scope the development of an allergy database and prepare a report on the findings of the scoping exercise; and
  - Scope the clinical education requirements for the management of patients with drug allergy.

- Improve allergy management for teens and young adults
  - Conduct round table discussions with teens and young adults focusing on allergy management barriers, areas of need and effective communication/education methods;
  - Develop resources such as but not limited to websites, social media and online forums based on the outcomes of the round table discussions; and
  - Prepare a report on the outcomes of the round table, including any identified future activities required.

- Improving allergy management in food service – to improve the provision of appropriate food to individuals with food allergy, in the food sector.
  - Conduct round table discussions with the food service sector focusing on improving the provision of appropriate food for individuals with food allergy;
  - Develop an online training course for food service providers on managing food allergy as a food safety issue; and
  - Prepare a report on the outcomes of the round table, including any identified future activities required.

Lead organisations

Australasian Society of Clinical Immunology and Allergy (ASCIA)

ASCIA was established in 1990 as a not for profit, peak professional medical organisation for allergy and clinical immunology in Australia and New Zealand. ASCIA members include specialist allergy and immunology physicians, other medical practitioners, scientists and allied health professionals who work in the areas of allergy and immunology.

The mission of ASCIA is to advance the science and practice of allergy and clinical immunology, by promoting the highest standard of medical practice, education and research, to improve the health and quality of life of people with allergic diseases, immunodeficiencies and other immune diseases.

ASCIA is a member society of the World Allergy Organisation (WAO) and the Asia Pacific Association of Allergy, Asthma and Clinical Immunology (APAAACI). ASCIA is also affiliated with the Royal Australasian College of Physicians (RACP) as a specialty society.

Allergy & Anaphylaxis Australia (A&AA)

A&AA was established in 1993 as a charitable, not for profit organisation, to improve awareness of allergy and anaphylaxis in the Australian community, by sharing current information, education, advocacy, research, guidance and support.

A&AA is primarily a volunteer based organisation that is supported by membership fees, sale of resources and donations. Their outreach extends to individuals, families, school, workplaces, health professionals, government, food industry and all Australians.

A&AA is part of an international alliance of like-minded organisations and works closely with peak medical bodies, including ASCIA. Their Medical Advisory Board comprises ASCIA members who are specialist immunology and allergy physicians from across Australia.

Commitment to improve the management of allergic diseases

ASCIA and A&AA are committed to improving the health and quality of life of Australians with allergic diseases. Over the past 15 years ASCIA and A&AA have developed educational programs and patient support services in response to a need for education, training and resources in the area of allergic diseases.

ASCIA has proven its ability to bring key stakeholders together to achieve the development of resources appropriate for the end-user. ASCIA's consultation process has always been transparent and inclusive, informing and inviting key stakeholders including consumers, to engage in the development process.

ASCIA has sourced funding through unrestricted education grants from industry and state health and education departments to fund the development of resources, education and training programs, including:

- Web based patient information since 2000
- National ASCIA Action Plans for Anaphylaxis since 2003
- Anaphylaxis e-training for schools and childcare since 2010
- Anaphylaxis and food allergy e-training for health professionals since 2011
- Allergic Rhinitis and Immunotherapy e-training for health professionals since 2012
- Allergy e-training for pharmacists since 2013
- Allergy and anaphylaxis Active Learning Module for GPs since 2014

Over the past 5 years, ASCIA has spent approximately $1M. The majority of these funds have been provided as unrestricted education grants from industry and some contribution from state health and education departments. This does not include the thousands of hours provided by ASCIA members, unremunerated to enable the development of ASCIA educational resources.

A&AA continues to provide ongoing support to:

- Patients, their families and carers
- Food industry
- Healthcare professionals
- Government
- Schools and childcare
- Workplaces
- Sporting clubs; and
- Other individuals or groups involved in the management of allergic disease.

A&AA sources unrestricted education grants from industry to fund this work. A&AA currently also receives funding from the Department of Health & Ageing. A&AA has removed individual/family membership fees in an effort to share current evidence based information with an increased number of people. This will reduce income in 2017 but hopefully assist A&AA in reaching a larger number of Australians managing allergic disease.

ASCIA and A&AA will continue to source additional funding from industry and philanthropic organisations to support their education, training and research programs. However, these grants are not recurrent and are becoming increasingly difficult to obtain. Resources that have been developed with these funds are at risk of cessation due to lack of funds to continue sustain. In addition, insufficient funds are available for new initiatives urgently required.

References

1. Mullins RJ, et al. The economic impact of allergic disease in Australia: not to be sneezed at. ASCIA/Access Economics Report, November 2007. www.allergy.org.au/content/view/324/76/

2. Mullins RJ, Dear KBG, Tang ML. Time trends in Australian hospital anaphylaxis admissions 1998/9 to 2011/12. J Allergy Clin Immunol; 2015.

3. Mullins RJ, Wainstein BK, Barnes EH, Liew WK, Campbell DE. Increases in anaphylaxis fatalities in Australia from 1997 to 2013. Clin Exp Allergy. 2016 Aug;46(8):1099-110. doi: 10.1111/cea.12748. Epub 2016 May 31.

4. Osborne NJ, Koplin JJ, Martin PE, Gurrin LC, Lowe AJ, Matheson MC, Ponsonby AL, Wake M, Tang ML, Dharmage SC, Allen KJ; HealthNuts Investigators. Prevalence of challenge-proven IgE-mediated food allergy using population-based sampling and predetermined challenge criteria in infants. J Allergy Clin Immunol. 2011 Mar; 127 (3):668-76.

5. Du Toit G et al. Randomized trial of peanut consumption in infants at risk for peanut allergy. N Engl J Med. 2015 Feb 26;372(9):803-13.

6. De Swarte R. Drug allergy – problems and strategies. J Allergy Clin Immunol. 1984; 74: 209-221.

7. Macy E, Contreras R. Health care use and serious infection prevalence association with penicillin 'allergy' in hospitalized patients: A cohort study. J Allergy Clin Immunol. 2014; 133: 790-6.

8. Gupta R, Holdford D, Bilaver L, Dyer A, Holl JL, Meltzer D. The Economic Impact of Childhood Food Allergy in the United States. JAMA Pediatrics. 2013; 167 (11): 1026-31.

9. Burnell FJ, Keijzers G, Smith P. Review article: Quality of follow-up care for anaphylaxis in the emergency department. Emergency Medicine Australasia (2015) 27, 387–393 doi: 10.1111/1742-6723.12458

10. Brown SGA et al. Anaphylaxis: Clinical patterns, mediator release, and severity. JACI. 2013; 132 (5): 1141-9.

11. Murad A, Katelaris C. Anaphylaxis audit in a busy metropolitan emergency department: a review of real life management compared to best practice. Asia Pacific Allergy. 2016; 6: 29-34.