

A PUBLIC HEALTH APPROACH TO FOOD ALLERGY PREVENTION – PILOT RESULTS

ABSTRACT

Rationale: In conjunction with the National Allergy Strategy, four approaches were used in a public health approach to implementing the ASCIA Guidelines for Infant Feeding and Allergy Prevention. The project aimed to promote key food allergy prevention (FAP) recommendations of the ASCIA Guidelines and develop resources to improve knowledge in health professionals (HPs) and consumers.

Method: Implementation comprised four phases: 1 - A guideline-based website (with end-user evaluation) developed based on HP and consumer focus group consultation; 2 - Child health nurse (CHN) online survey of current infant feeding knowledge and practice; 3 - HP education (online training with pre-post quiz); 4 - SmartStartAllergy (SSA) SMS delivered through general practice.

Results: Each phase identified the need: 1 - for a FAP consumer education website and social marketing strategy; 2 - for FAP education materials for CHNs; 3 - for HP education resources including FAP e-training (including pre-post assessment); 4 – for a tool to determine common food allergen introduction and monitor allergic reactions (parent-reported), therefore, the SSA SMS program was developed.

Conclusion: A public health approach to implementing the ASCIA guidelines has been achieved through the four phases of the project. This approach allows the determination of resource requirements, trains HPs and measures knowledge change. Consumer friendly information provided via the FAP website encourages uptake of the ASCIA Guidelines with a feedback survey in place to assess the website’s usefulness. A social marketing strategy actively promotes resources, while SSA determines common food allergen introduction and monitors allergic reactions in participants.

Acknowledgements

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SmartStartAllergy has been developed with Alan Leeb, Ian Peters, Michael O’Sullivan Jessica Metcalfe and Karin Orlemann. We acknowledge the in-kind support of technology and experience provided by the SmartVax team and acknowledge the general practices participating in SmartStartAllergy.

Thank you to St John Ambulance WA for providing infant anaphylaxis data for this project.

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Focus groups

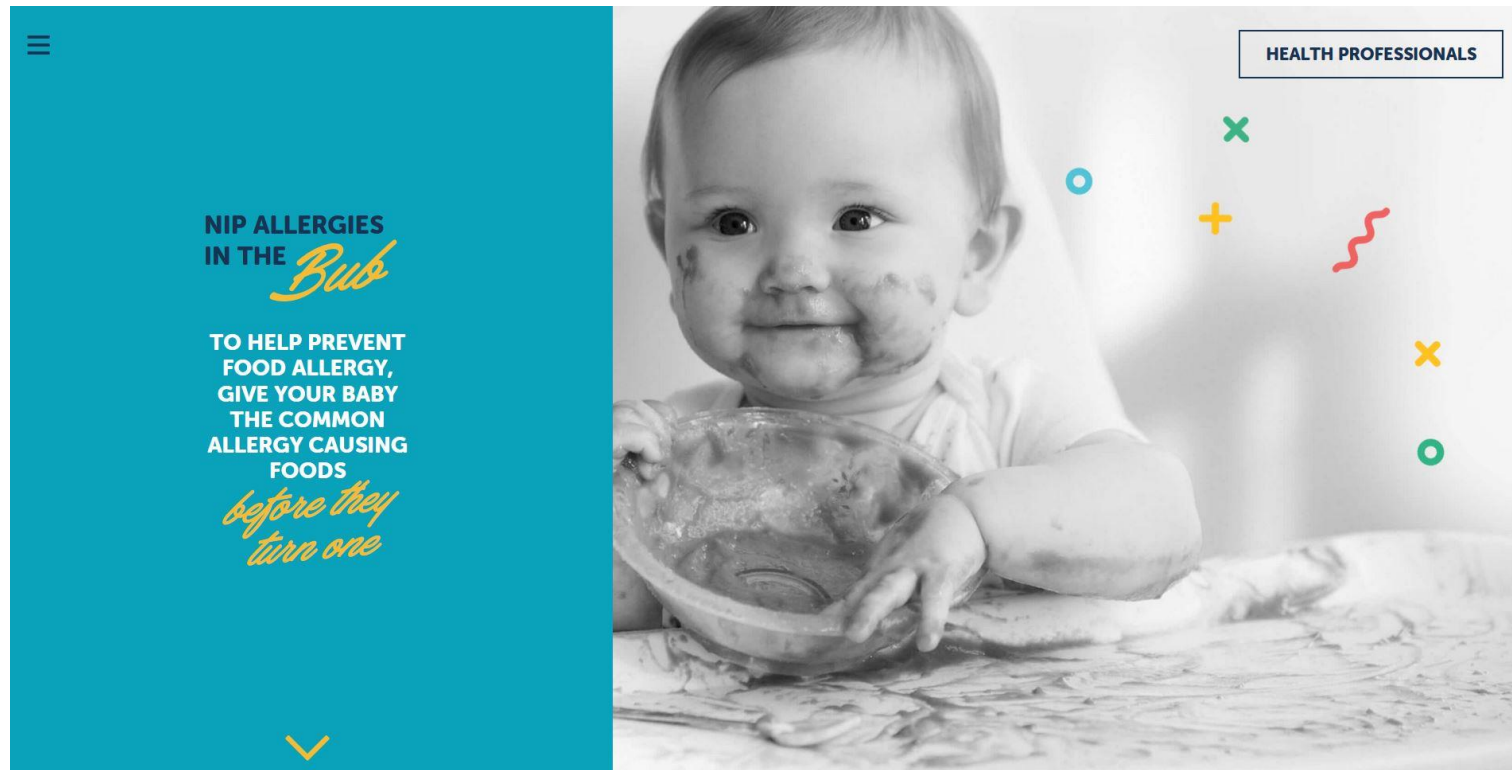
- 7 focus groups
 - Mums of high risk infants (x2)
 - Mums
 - Dads
 - Health professionals (x2)
 - General practitioners

- 4 conducted in Perth and 3 in Sydney

- 4 brand identities presented – Nip allergies in the Bub preferred branding by both consumers and HPs

- Key messages wording guidance sought

Website development and utilisation

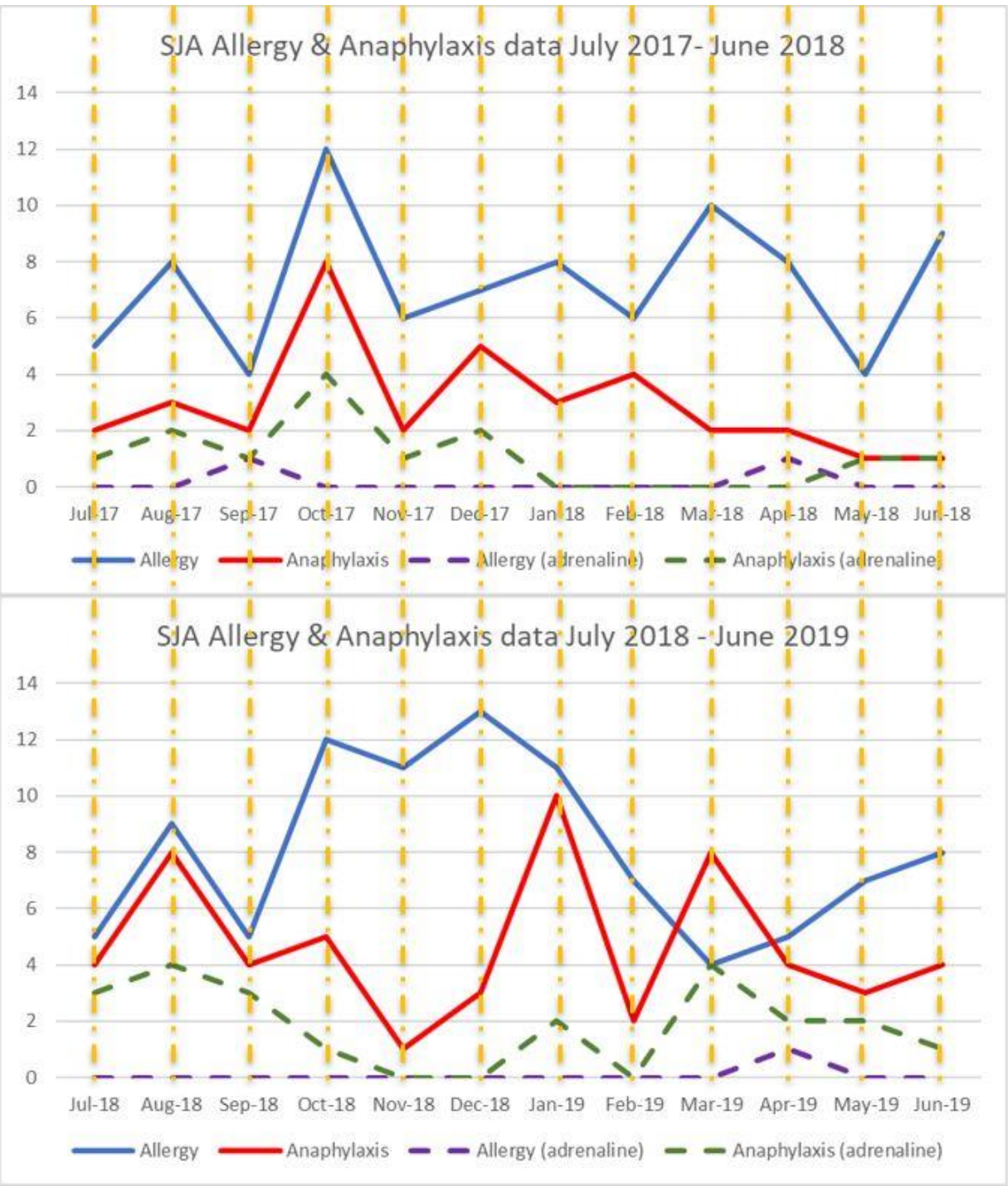


www.preventallergies.org.au

Website

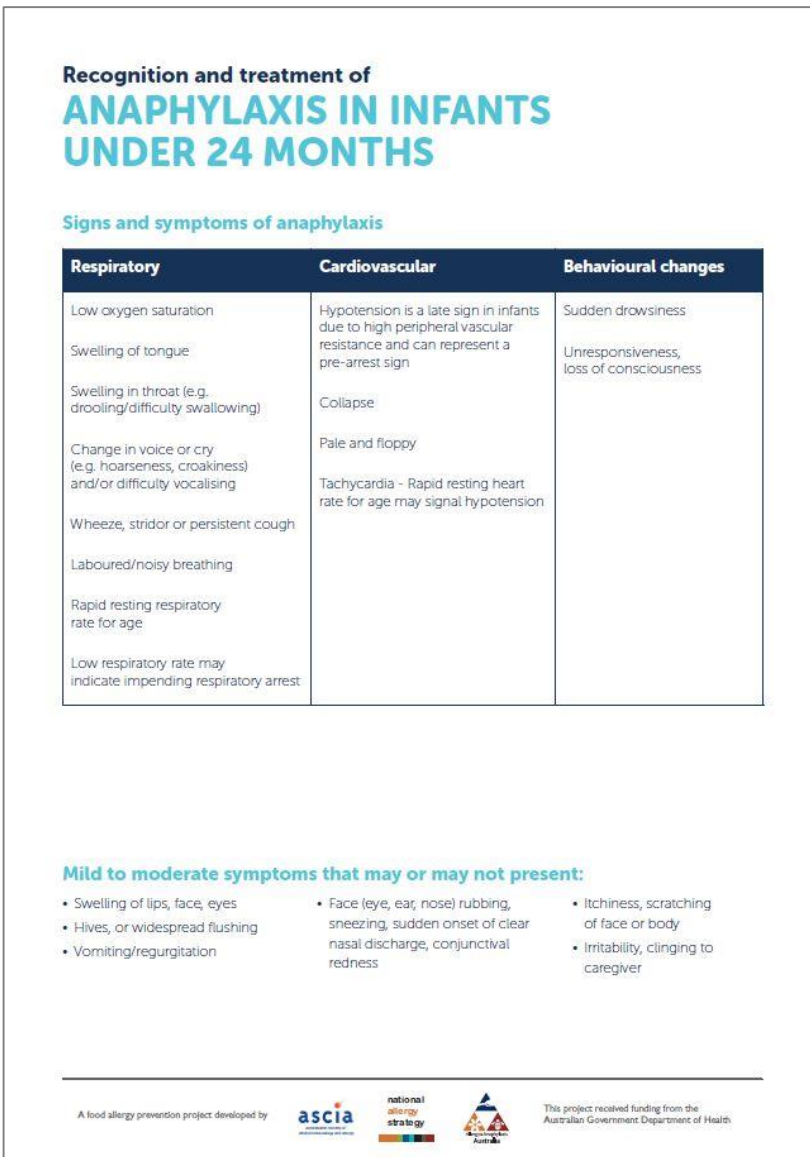
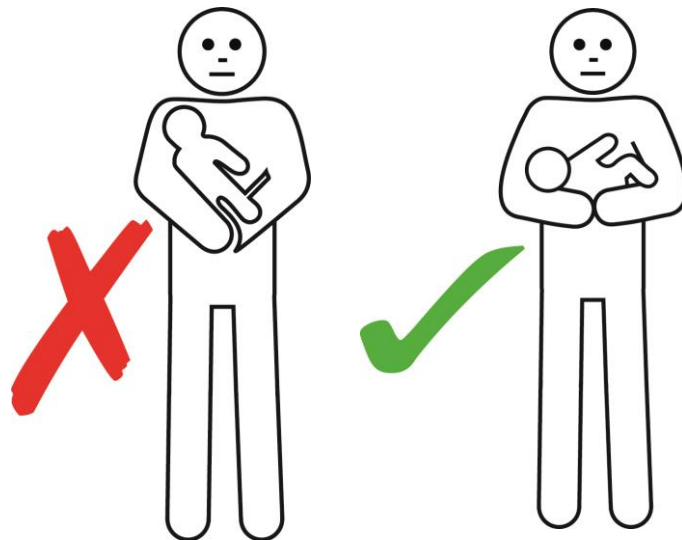
- Most accessed content (in order):
 - Introducing solid foods
 - What foods should I feed my baby
 - Helpful tools – food ideas
 - Eczema
 - Identifying allergic reactions
 - Health professional section

Infant anaphylaxis

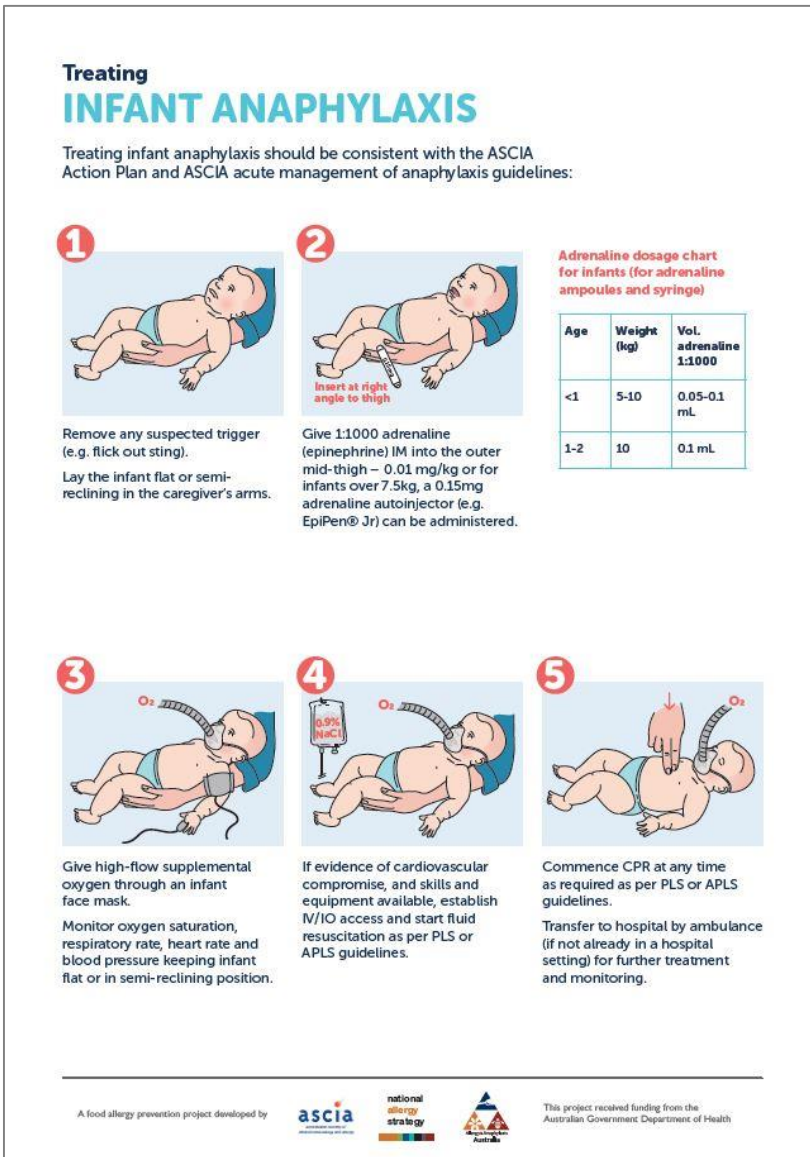


St John Ambulance WA data shows a comparison of allergic reactions and anaphylaxis in infants pre and post implementation of the Nip allergies in the Bub website

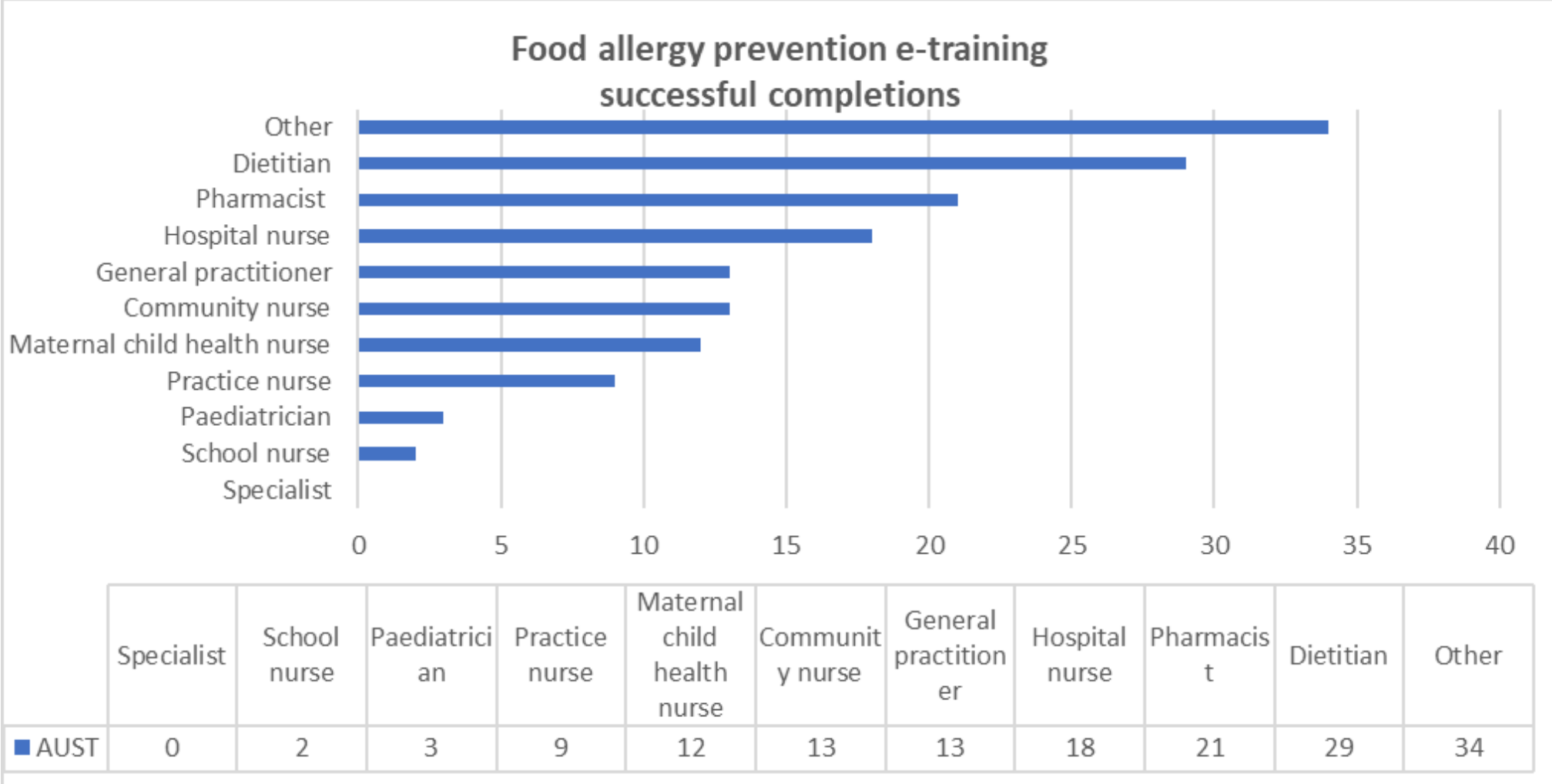
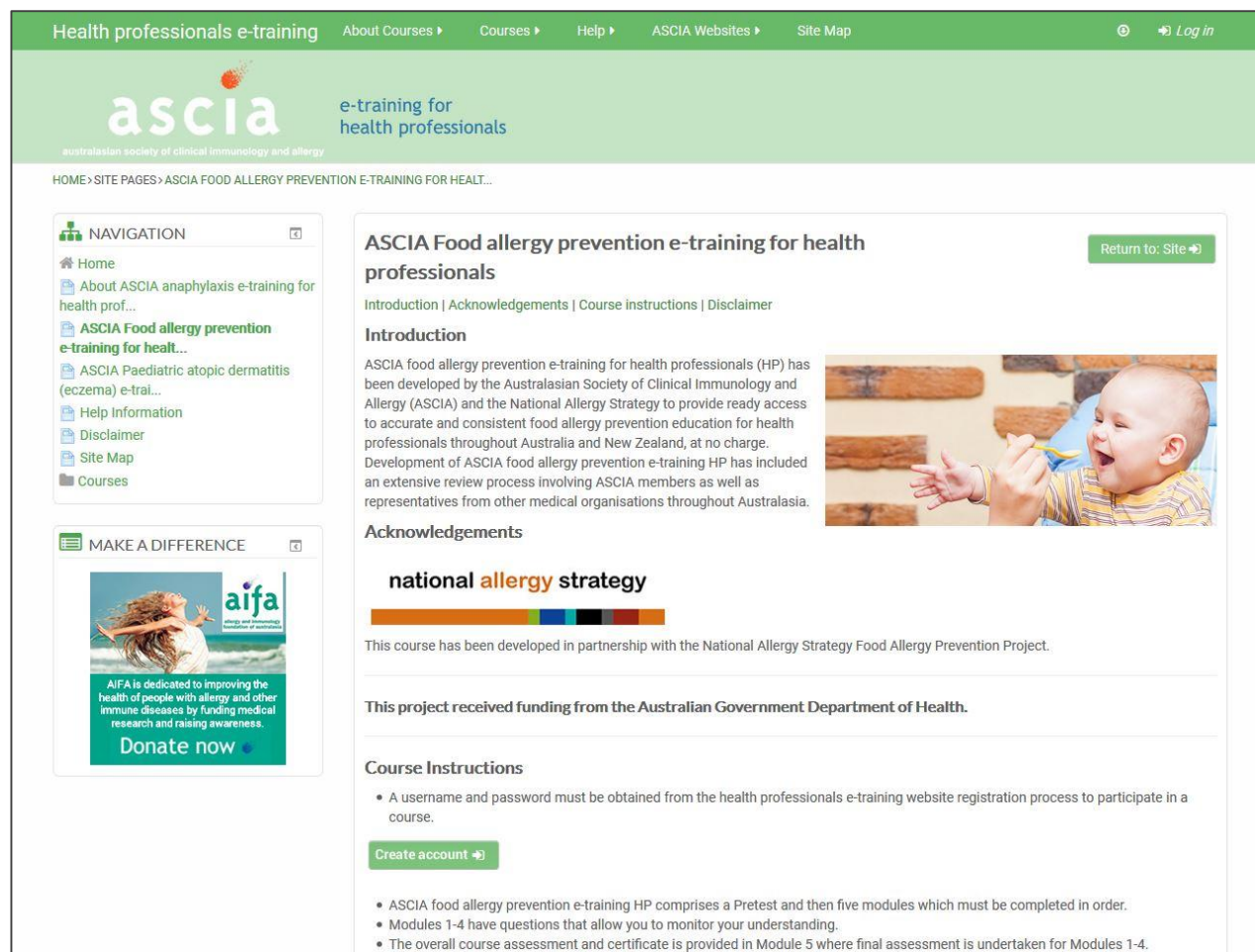
Images developed to provide guidance on how to position an infant experiencing anaphylaxis



Infant anaphylaxis information sheet for health professionals



Health professional education

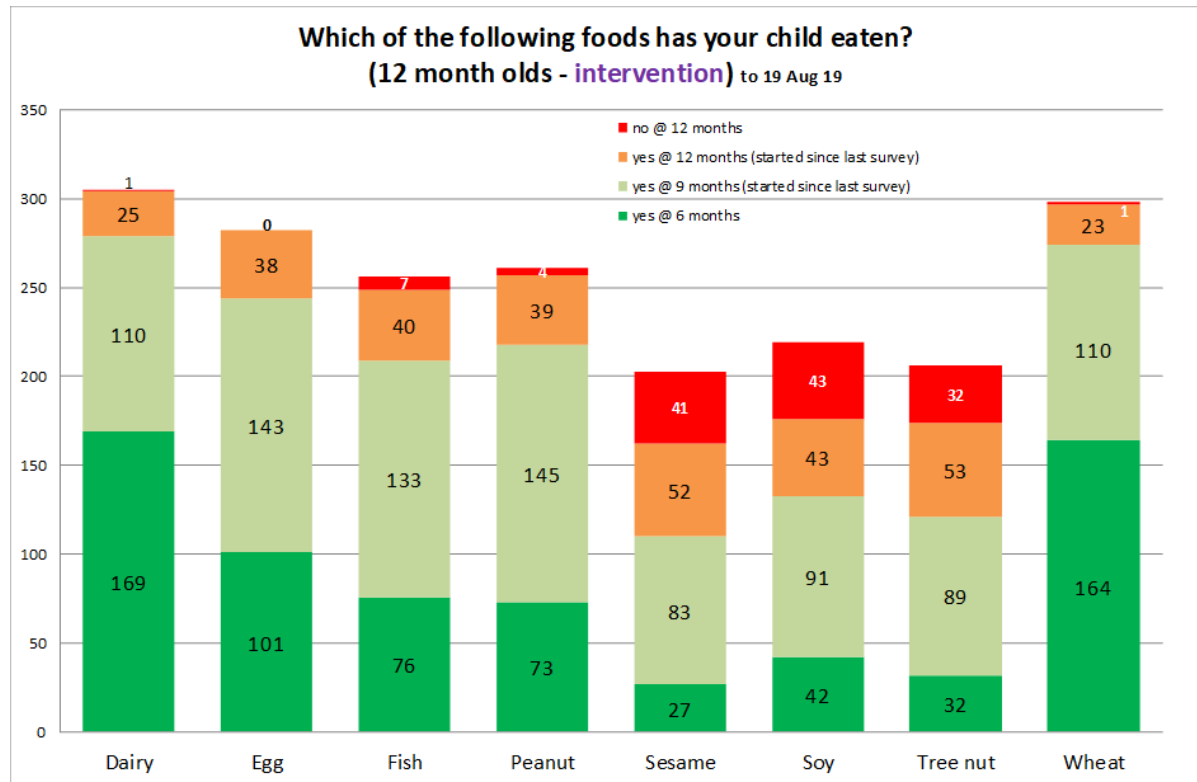


Food allergy prevention e-training for health professionals was developed and includes a pre-post quiz to measure change in knowledge

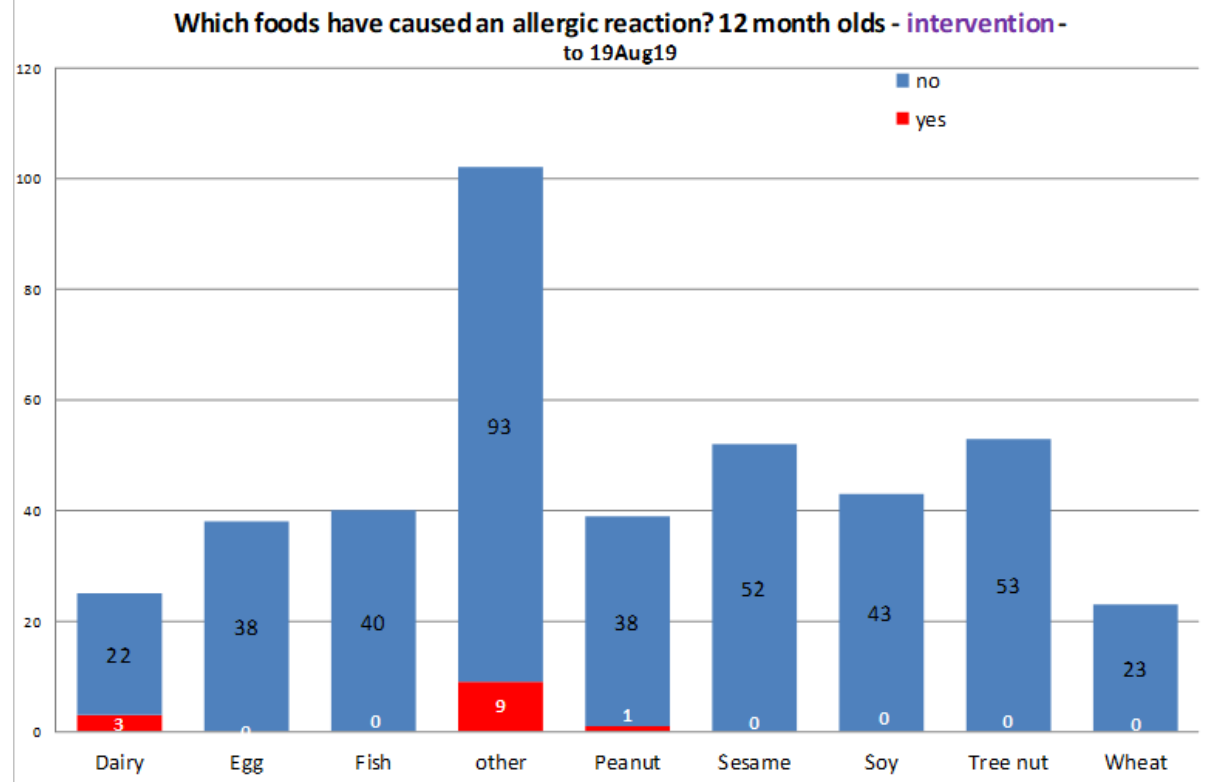
1. The University of Western Australia, Perth, Australia
2. National Allergy Strategy, Sydney, Australia
3. Australasian Society of Clinical Immunology and Allergy (ASCIA), Sydney, Australia
4. The Children’s Hospital at Westmead, Sydney, Australia
5. University of Adelaide, Adelaide, Australia
6. Women and Kids Theme SAHMRI, Adelaide, Australia
7. Allergy & Anaphylaxis Australia, Sydney, Australia
8. Perth Children’s Hospital, Perth, Australia

SmartStartAllergy

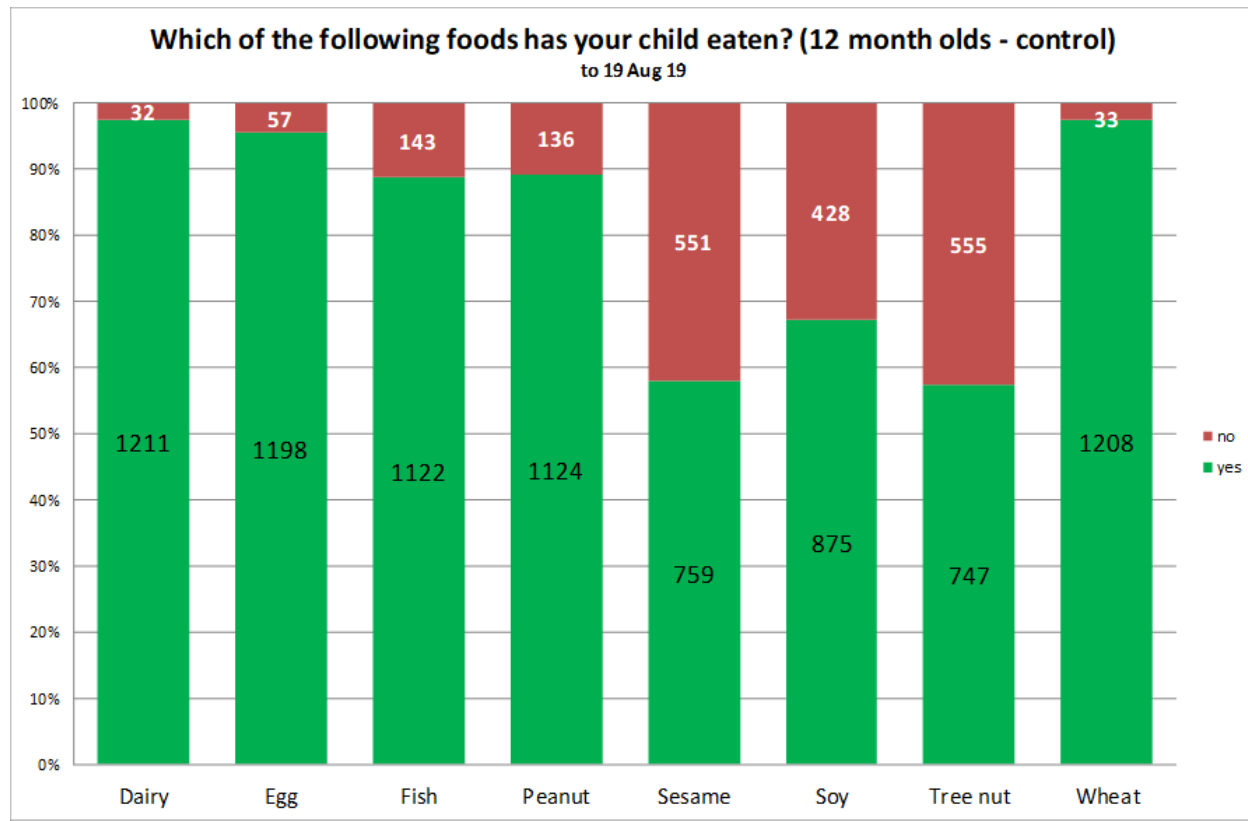
Preliminary data indicates that a significantly higher proportion of infants in the Intervention group had been fed peanut by 12 months of age (257/261=98.5%) compared to the Control group (2468/2836=87.0%)



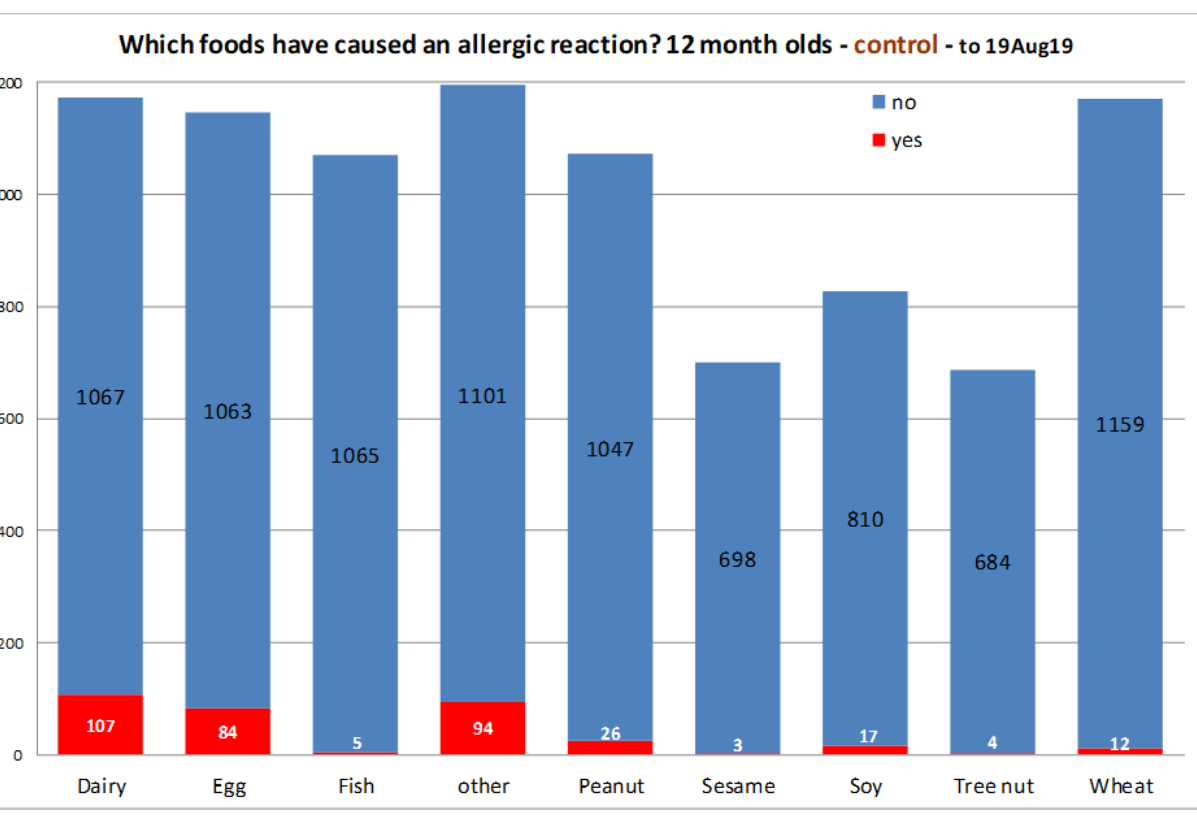
In the Intervention group, by 12 months: 100% had introduced egg; 99.7% had introduced dairy and wheat; 98.5% had introduced peanut



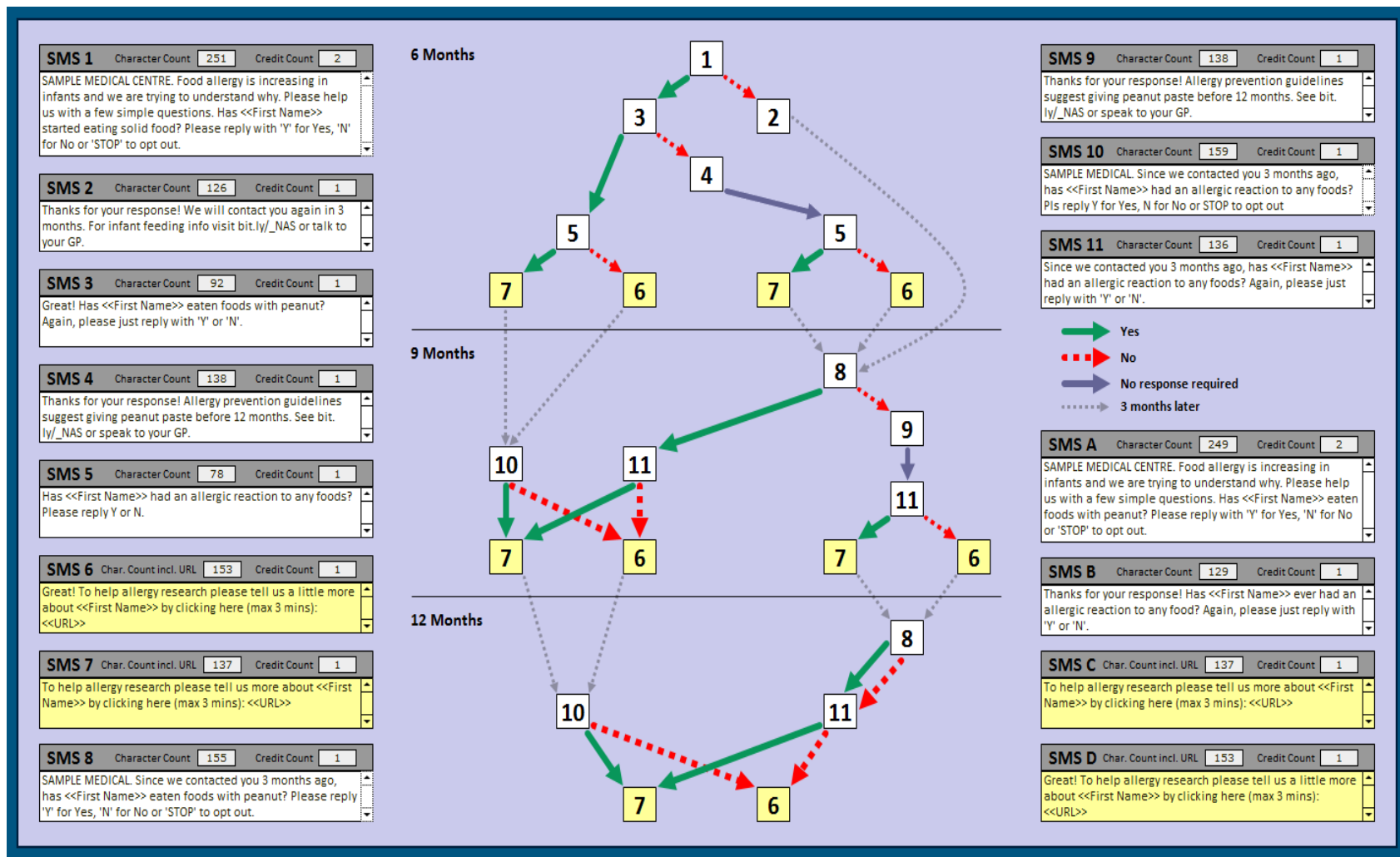
In the Intervention group, allergic reactions were reported for dairy (12%), peanut (2.6%) and other (8.8%)



In the Control group, by 12 months: 95.4% had introduced egg; 97.4% had introduced dairy; 97.3% had introduced wheat; 89.2% had introduced peanut



In the Control group, allergic reactions were most commonly reported for dairy (9.1%), egg (7.3%), peanut (2.4%), soy (2.1%) and other (7.9%)



This diagram illustrates the text messages sent at 6, 9 and 12 months of age to the Intervention group

The Control group receive SMS A, B and C or D at 12 months of age

	Oral antihistamine	Adrenaline (EpiPen)	Other treatment	All treatments
Dairy	19	1	6	26
Egg	18	1	9	28
Fish	3	0	0	3
Other food	15	1	4	20
Peanut	9	2	1	12
Sesame	2	1	1	4
Soy	2	0	0	2
Tree nut	3	1	0	4
Wheat	1	0	1	2
total	72	7	22	101

In the Control group (12 months of age), of those who experienced an allergic reaction, the majority were not administered adrenaline when medical assistance was sought

15 practices are in the Control group only; 9 practices are in the Intervention group only; 45 practices participate in both intervention and control