

The logo for ASCIA, featuring a stylized orange and red splatter above the lowercase letters 'ascia' in a bold, blue, sans-serif font.

ascia

australasian society of clinical immunology and allergy

**anaphylaxis e-training
for health professionals**

2022 REPORT



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INTRODUCTION

ASCIA's purpose is to advance the science and practice of allergy and clinical immunology.

ASCIA achieves this by promoting the highest standard of medical practice, training, education, and research to improve the quality of life and health of people with immune system disorders. These include allergies, immunodeficiencies and other immune diseases

An integral component of this is the provision of high-quality allergy and immunology education resources, including e-training courses for health professionals.

ASCIA e-training courses for health professionals have been developed by the ASCIA to provide ready access to reliable health professional education throughout Australia and New Zealand. ASCIA collaborates with its member committees and working parties to review, update and develop the e-training courses resulting in world leading, accessible, consistent, and evidence-based resources. To facilitate access, ASCIA e-training courses are available at no charge to the user.



Anaphylaxis is the most severe type of allergic reaction and should always be treated as a medical emergency. Anaphylaxis requires immediate treatment with adrenaline (epinephrine), which is injected into the outer mid-thigh muscle. If treatment with adrenaline is delayed, this can result in fatal anaphylaxis.

From December 2021 to December 2022, ASCIA incorporated a post-training survey into both *ASCIA anaphylaxis e-training for health professionals* course and *ASCIA anaphylaxis refresher e-training for health professionals* course. Each survey comprised of five scaled response questions, and one invitation for open text feedback. It was not compulsory for the user to complete the survey.

Responses to the surveys were as follows:

- 1000 responses for *ASCIA anaphylaxis e-training for health professionals*.
- 176 responses for *ASCIA anaphylaxis refresher e-training for health professionals*.

Responses from both surveys were then analysed in 2023, providing the following valuable insights.

- How well the learning needs were met in relation to key areas of anaphylaxis management.
- How relevant the training was to current practice.
- Whether review and/or modification of practice-based systems and/or processes in relation to anaphylaxis management would be undertaken following the course.

ANALYSIS

Both quantitative and qualitative analyses of the responses was undertaken by an ASCIA Project Officer who had no prior involvement in the development or delivery of the survey.

For each of the five scaled response questions, respondents were asked to rate how well their learning outcomes were met. This was facilitated through the use of a 3-point Likert scale giving the option of “Not met”, “Partially met” and “Entirely met”.

Analysis of the open-text feedback responses to “[Please outline how you might review and/or modify practice-based systems and/or processes relevant to this activity](#)” proved challenging to analyse. There was no text limit with some respondents entering up to 650 characters allowing for substantial detail in each response. This subsequently resulted in responses of varying length, some of which back to the statement and many more that did not.

Due to its subjective nature, responses were frequently lacking in context and in some cases, no response was given at all. Despite this, analysis of the responses revealed three main themes:

- To review and maintain own practice and/or local policies.
- Check and update first aid kits, equipment, and emergency procedures.
- Encourage others to complete training.

Analysis of these open text responses proved challenging. There was no text limit with some respondents entering up to 650 characters allowing for considerable detail in each response, the result of which were responses of varying length and context.

Open-text responses that either lacked in context or could not be grouped into either of the above themes, were reviewed but did not add any measurable value to the survey. ASCIA used this opportunity to review the unsolicited feedback as it was acknowledged that these responses offered important insight into the user experience that would otherwise not have been received.

FINDINGS

Overall, both *ASCIA anaphylaxis e-training for health professionals* and *ASCIA anaphylaxis refresher e-training for health professionals* courses meet the needs of health professionals in terms of achieving learning outcomes and degree of relevancy to current practice.

ASCIA anaphylaxis e-training for health professionals

- **94%** of health professionals indicated that the course had entirely meeting their learning needs and was entirely relevant to their current practice.
- **6%** of health professionals felt that their learning needs were only partially met and that the course was only partially relevant to their current practice.

ASCIA anaphylaxis refresher e-training for health professionals

- **95%** of health professionals indicated that the course had entirely meeting their learning needs and was entirely relevant to their current practice.
- **4%** of health professionals felt that their learning needs were only partially met and that the course was only partially relevant to their current practice.
- **1%** of health professionals felt that their learning needs were not met and that the course was not relevant to their current practice.

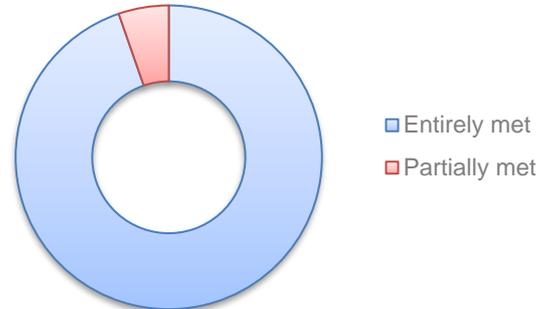
ASCIA anaphylaxis e-training for health professionals

“To what degree were your learning needs met in terms of being able to differentiate between a mild to moderate allergic reaction and anaphylaxis?”

Learning objectives - Health professionals can differentiate between the signs of a mild to moderate allergic reaction and the signs of anaphylaxis.

947 respondents (94.7%) indicated “Entirely met”

53 respondents (5.3%) indicated “Partially met”



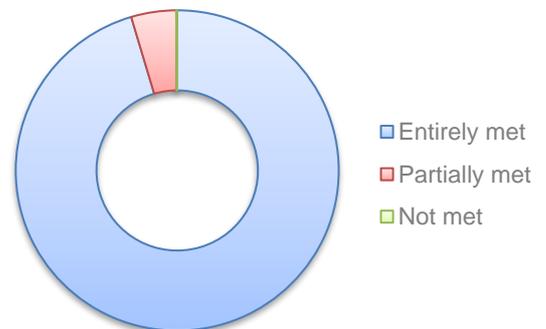
“To what degree were your learning needs met in terms of being able to review a diagnosis of allergy and the risk of anaphylaxis?”

Learning objectives - Health professionals can review the diagnosis of allergy diagnosis and assess the risk of anaphylaxis for patients with allergic disease.

954 respondents (95.4%) indicated “Entirely met”

45 respondents (4.5%) indicated “Partially met”

1 respondent (0.1%) indicated “Not met”

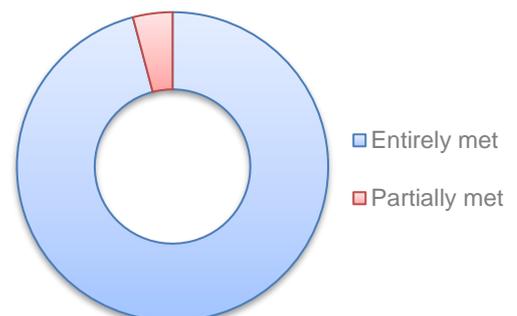


“To what degree were your learning needs met in terms of being able to outline acute management for mild or moderate allergic reactions and anaphylaxis?”

Learning objectives – Health professionals can manage both an episode of mild to moderate allergic reaction, and an episode of anaphylaxis.

959 respondents (95.9%) indicated “Entirely met”

41 respondents (4.1%) indicated “Partially met”.

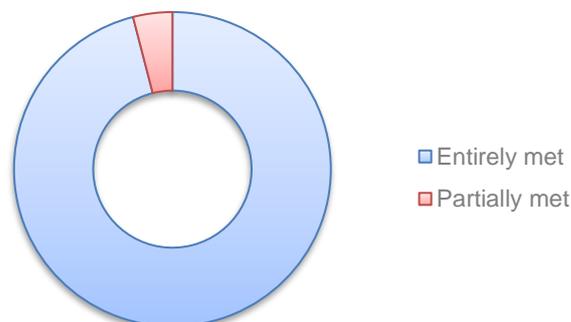


“To what degree your learning needs were met?”

This question is representative of all learning outcomes identified in the *Anaphylaxis e-training for health professionals* course.

960 respondents (96.0%) indicated “Entirely met”

40 respondents (4.0%) indicated “Partially met”.



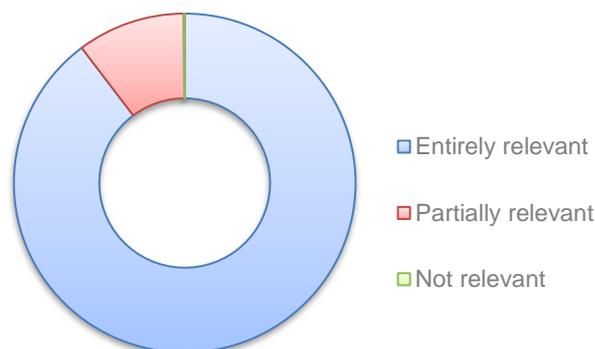
“To what degree was this activity relevant to your practice?”

This question asked health professionals whether the learning outcomes achieved in the *Anaphylaxis e-training for health professionals* course are relevant to their current practice.

897 respondents (89.7%) indicated “Entirely relevant”

102 respondents (10.2%) indicated “Partially relevant”

1 respondent (0.1%) indicated “Not relevant”



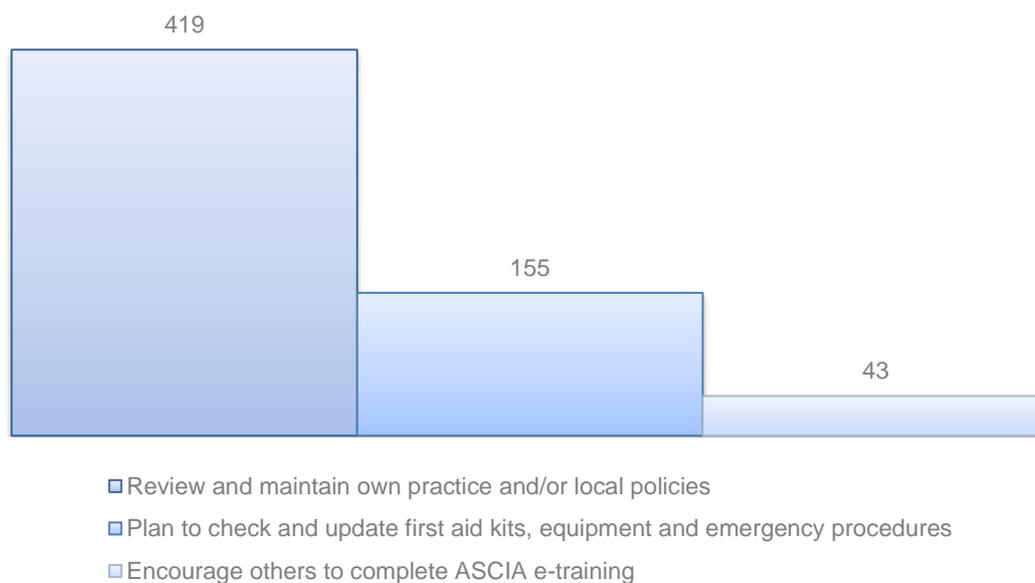
“Please outline how you might review and/or modify practice-based systems and/or processes relevant to this activity.”

Of the 1000 responses, **202** of these were immediately deemed null and void due to lack of any discernible text in the required field. Responses such as “Nil”, N/A” or “none” are examples of these types of responses that were excluded from any further analysis.

The remaining **798** responses (79.8%) were individually reviewed and analysed for relevancy and the recurrence of themes, of which, three were identified:

- **Review and maintain own practice and/or local policies.**
- **Check and update first aid kits, equipment, and emergency procedures.**
- **Encourage others to complete training.**

Results in the proceeding tables are a count of the number of times one of the above themes was identified within all open text responses. It was noted that in some instances, more than one theme was identified.



1. Review and maintain own practice and/or local policies (n = 419)

This theme appeared most frequently in responses, with health professionals acknowledging the:

- Need for the individual to review their own practice with regards to anaphylaxis management.
- Value of completing regular training in relation to maintaining their current practice.
- Importance of revising current policies and procedures relating to anaphylaxis management at their place of work.

“Put patients into wheelchair instead of allowing them to ambulate into triage and then to their ED bed.”

“I would modify my practice base by making sure patients remain seated or lying and that IM adrenaline is paramount in early anaphylaxis for recovery and subsequent doses may be required.”

“If patient is known to have asthma, and if in doubt give IM adrenaline first then Asthma management should be done.”

“Regular refresh of information and practice with practice devices to ensure competency and up to date knowledge.”

“Will ensure that all Allergy/Anaphylaxis practices are reviewed including review of Action plans, storage/demonstrations of Trainer and Emergency Auto Injectors etc.”

“It has prompted me to ensure that we have the most up to date information in our surgery.”

“I will ensure the correct equipment as outlined in this course is readily available to all doctors at the practice.”

2. Check and update first aid kits, equipment, and emergency procedures (n = 155)

Health professionals have recognised the importance of updating equipment and procedures for emergency management of anaphylaxis following completion of the course.

“Check our emergency trolley to ensure we have one ml syringes for drawing up and administering IM Adrenaline 1:1000.....Check our processes that promethazine is not given in patients experiencing anaphylaxis and discuss risks around this with pharmacy, specialists and clinical staff.... we need to practise and become more clear about anaphylaxis protocols.”

“Audit adrenaline kit and injectors.”

“Review emergency equipment on trolley, educate all surgery staff on anaphylaxis protocol, put up posters to assist during emergency.”

3. Encourage others to complete training (n = 43)

Pleasingly, the value of *ASCIA anaphylaxis e-training for health professionals* was acknowledged among a number of respondents.

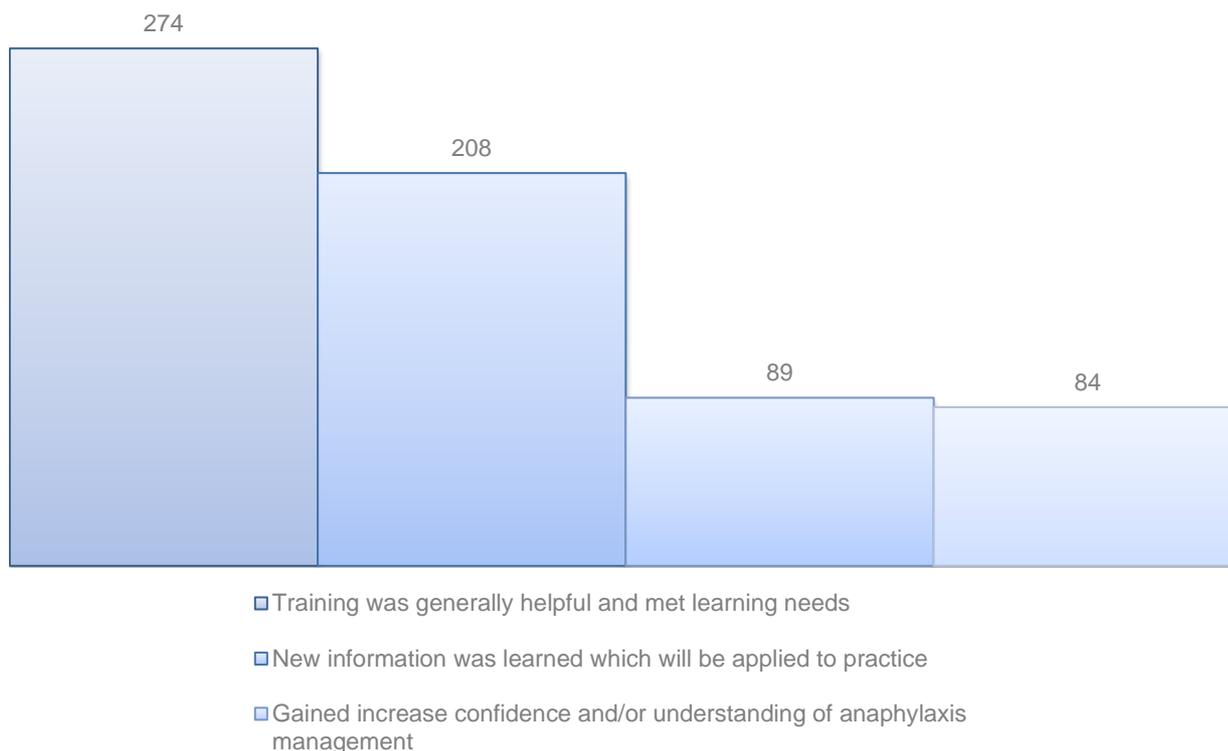
“As the clinical facilitator for anaesthesia technologists, I will add this module to our recommended CPD list.”

“I will encourage my colleague to complete the modules.”

“I have previously done this course and definitely recommend it. It is great to refresh and consolidate knowledge to stay up to date on relevant practices and treatment methods.”

In addition to responses that provided appropriate and relevant feedback, many lacked relatable content. These responses could not be linked to any of the above themes, however, they did offer valuable insight into the user experience of *ASCIA anaphylaxis e-training for health professionals*. Four recurring themes were identified:

- **Training was generally helpful and met learning needs.**
- **New information was learned which will be applied to practice.**
- **Gained increase confidence and/or understanding of anaphylaxis management.**
- **Suggestions for ASCIA regarding the training course**



1. . Training was generally helpful and met learning needs (n=274)

This theme appeared 274 times in the open text responses given by health professionals. Although no specific examples of how practice and/or processes relevant to the course may be reviewed or modified, many respondents acknowledged the overall benefit of having completed *ASCIA anaphylaxis e-training for health professionals*.

“This education has exceeded my expectations and will be very useful in our practice.”

“It has been really helpful and well-informed.”

“The course was good easy to navigate and very informative. Very good understanding of anaphylaxis and what to do in both workplace and community.”

2. New information was learned which will be applied to practice (n =208)

This theme included responses where health professionals identified that of the course found particularly helpful.

“Working in Perioperative Nursing I have found this course very useful in distinguishing between anaphylaxis and an allergic reaction especially with regards to the involvement of respiratory symptoms, SOB, nausea and abdominal pain.”

“With the added knowledge I have obtained doing this short course I would be able to be more resourceful and understanding of what is required of the processes if a patient was to have an allergic or anaphylactic reaction to a substance while a patient at the hospital where I work.”

“Good to learn about prioritising adrenaline administration, over bronchodilators if you’re questioning allergy vs respiratory distress.”

3. Gained increase confidence and/or understanding of anaphylaxis management (n=89)

Some of the responses identified that on completion of the course, health professionals had gained more confidence and understanding of how to manage anaphylaxis.

“I learned many things about anaphylaxis, and I feel now confident about treating any allergic reactions including any severe anaphylaxis reactions.”

“My knowledge of anaphylaxis treatment outside of cardiac resuscitation was limited. This course has given me greater understanding of the varying degrees of allergy and differing symptoms of anaphylaxis.”

“After recent contrast reactions within our department, this course has provided me with better understanding and knowledge of anaphylaxis training and management. Whilst I hope that I don't have to administer treatment, I feel confident in using an epipen or adrenaline injector and when to do so.”

4. Suggestions for ASCIA regarding the training course (n=84)

Some of the open text responses provided suggestions from the health professionals with regards to improving the user experience of the course itself.

Recommendations include adding more opportunities for interactive learning, further improvements to the case-based learning approach adopted by ASCIA, and more visual materials to compliment the large amount of written content.

“Add a simulation or interactive scenario where user needs to identify anaphylaxis and the steps they need to take in managing it within different settings e.g. clinical (ED) or in the community (e.g. on a plane).”

“Perhaps more visual education as learning from pictures is helpful.”

“I would include different scenarios or have longer cases to go through to make each module more engaging.”

“More activities other than the assessments.”

“Can have more scenario-based questions on treatment of anaphylaxis.”

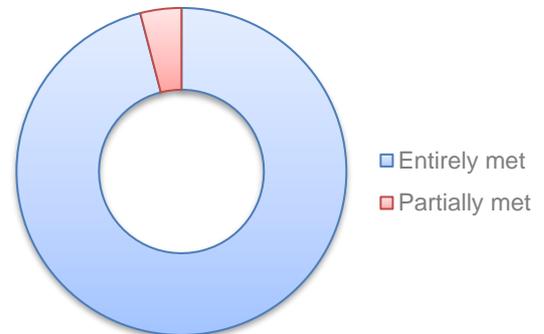
ASCIA anaphylaxis refresher e-training for health professionals

“To what degree were your learning needs met in terms of being able to differentiate between a mild to moderate allergic reaction and anaphylaxis?”

Learning objectives - Health professionals can differentiate between the signs of a mild to moderate allergic reaction and the signs of anaphylaxis.

167 respondents (95.98%) indicated “Entirely met”

7 respondents (4.02%) indicated “Partially met”

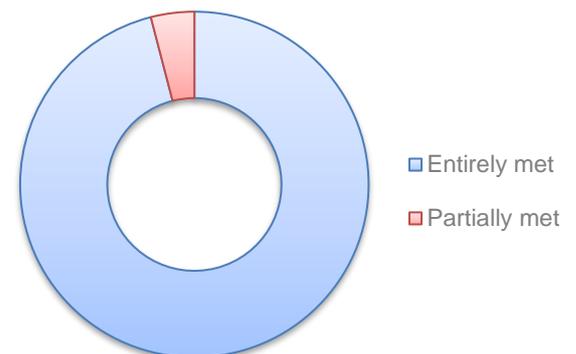


“To what degree were your learning needs met in terms of being able to review a diagnosis of allergy and the risk of anaphylaxis?”

Learning objectives - Health professionals can review the diagnosis of allergy diagnosis and assess the risk of anaphylaxis for patients with allergic disease.

167 respondents (95.98%) indicated “Entirely met”

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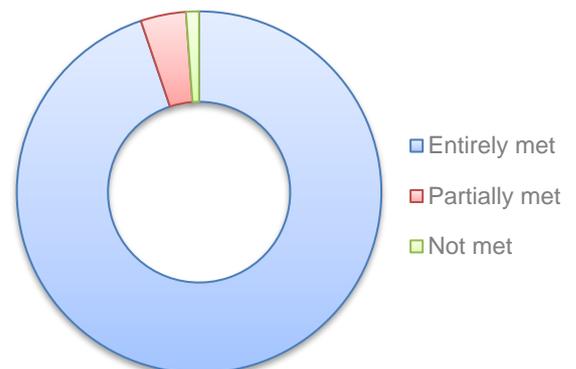
“To what degree were your learning needs met in terms of being able to outline acute management for mild or moderate allergic reactions and anaphylaxis”.

Learning objectives – Health professionals can manage both an episode of mild to moderate allergic reaction, and an episode of anaphylaxis.

165 respondents (94.83%) indicated “Entirely met”

7 respondents (4.02%) indicated “Partially met”.

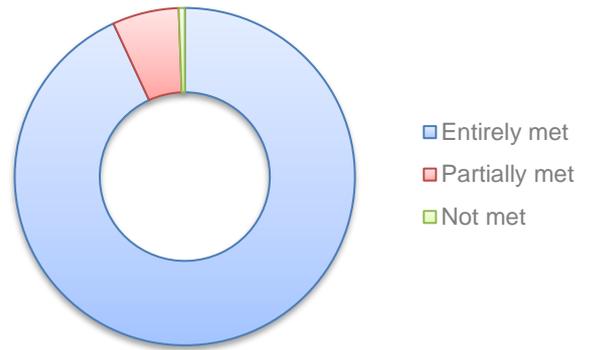
2 respondents (1.15%) indicated “Not met



“To what degree your learning needs were met?”

This question is representative of all learning outcomes identified in the *Anaphylaxis refresher e-training for health professionals* course.

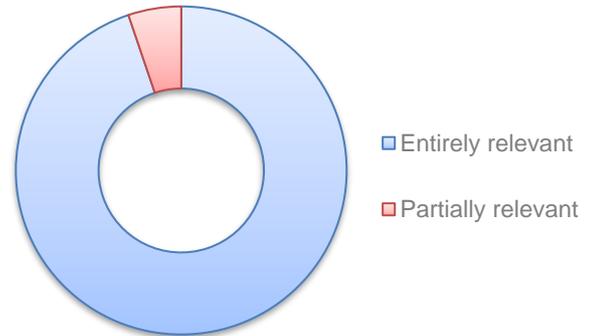
162 respondents (93.10%) indicated “Entirely met”
11 respondents (6.32%) indicated “Partially met”.
1 respondent (0.57%) indicated “Not met”.



“To what degree was this activity relevant to your practice?”

This question is asking health professionals whether the learning outcomes achieved in the *Anaphylaxis refresher e-training for health professionals* course are relevant to their current practice.

165 respondents (94.83%) indicated “Entirely relevant”
9 respondents (5.17%) indicated “Partially relevant”



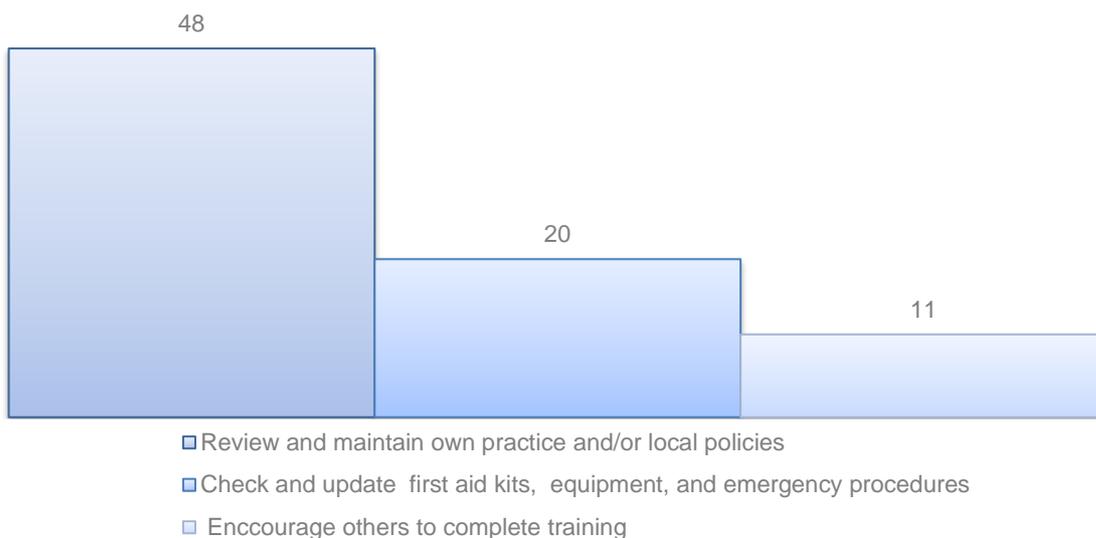
Please outline how you might review and/or modify practice-based systems and/or processes relevant to this activity.”

Of the **174** responses, **47** of these were immediately deemed null and void due to lack of any discernible text in the required field. Responses such as “Nil”, N/A” or “none” are examples of these types of responses that were excluded from any further analysis.

The remaining **127** responses were individually reviewed and analysed for relevancy and the recurrence of themes, of which, three were identified.

- **Review and maintain own practice and/or local policies**
- **Check and update first aid kits, equipment, and emergency procedures**
- **Encourage others to complete training**

Results in the proceeding tables are a count of the number of times one of the above themes was identified within all open text responses. It was noted that in some instances, more than one theme was identified.



1. Review and maintain own practice and/or local policies (n = 48)

This theme appeared most frequently in the responses with health professionals acknowledging;

- the need for the individual to review their own practice with regards to anaphylaxis management.
- the value of completing regular training in relation to maintaining their current practice.
- the importance of revising current policies and procedures relating to anaphylaxis management at their place of work.

“Increase visibility in the clinical area of ASCIA guidelines. Continually address reluctance/hesitation in colleagues to use adrenaline when anaphylaxis suspected.”

“To repeat refresher regularly to stay up to date with any changes.”

“More patient/carer handouts needed to reinforce care of kids with allergies/anaphylaxis. Making a habit of asking parents/patients if they are carrying their epipen.”

“Plan to review anapen and epipen demonstration video every 6 months.”

“I will utilise the training to modify how I teach the importance of giving adrenaline injectors in first aid practice”

“Update policy folder and educate colleagues around same.”

2. Check and update first aid kits, equipment, and emergency procedures (n = 21)

Health professionals have recognised the importance of updating equipment and procedures for emergency management of anaphylaxis following completion of the course.

“Set up anaphylaxis kit for immunisation clinics a bit better”

“All emergency equipment to be checked daily”

“Print out coloured versions of the ASCIA Red, Orange and Green Anaphylaxis Action Plans and make them readily available in the practice. Take the EpiPens which are now in a locked cupboard and make them readily available to all staff in a non-locked area easily accessible...”

3. Encourage others to complete training (n = 11)

Pleasingly, the value of ASCIA’s *Anaphylaxis e-training for health professionals* course was acknowledged among a number of respondents.

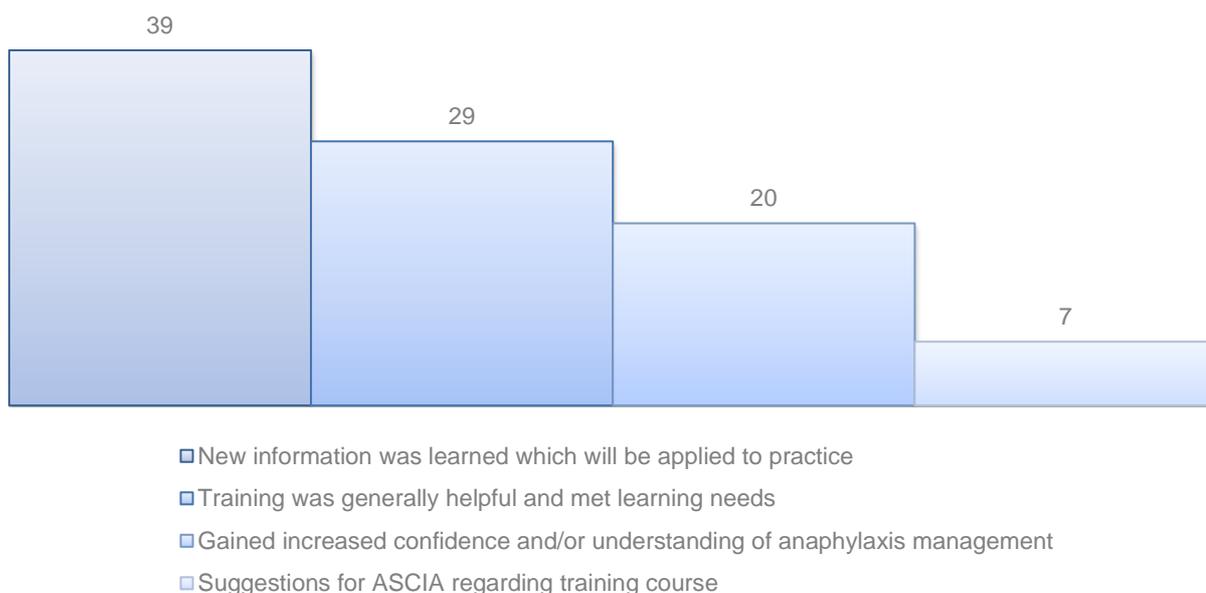
“Organise an in-service education session for all staff”

“Ensure colleagues are aware of recent anaphylaxis management changes”

“Have this information displayed more easily accessible in our new vaccination setting. Conduct more frequent anaphylaxis scenarios when not short staffed”

In addition to responses that provided appropriate and relevant feedback, many lacked relatable content. These responses could not be linked to any of the above themes, however, they did offer valuable insight into the user experience of the *Anaphylaxis refresher e-training for health professionals* course. Four recurring themes were identified.

- **Training was generally helpful and met learning needs**
- **New information was learned which will be applied to practice**
- **Gained increased confidence and/or understanding of anaphylaxis management**
- **Suggestions for ASCIA regarding the training course**



1. New information was learned which will be applied to practice (n =39)

This theme included responses where health professionals identified that of the course found particularly helpful.

“Encourage more people to keep Anapens or Epipens with allergies who live remotely”

“Verbal check with patients prior to administration of any medications. Improved patient education and awareness of where to direct patients and family for further information.”

“I will utilise the training to modify how I teach the importance of giving adrenaline injectors in first aid practice”

2. Training was generally helpful and met learning needs (n=29)

“This education has exceeded my expectations and will be very useful in our practice”

“It has been really helpful and well-informed.”

“The course was good easy to navigate and very informative. very good understanding of anaphylaxis and what to do in both workplace and community”

3. Gained increased confidence and/or understanding of anaphylaxis management (n=20)

Some of the responses identified that on completion of the course, health professionals had gained more confidence and understanding of how to manage anaphylaxis.

“Much more comfortable in discussing ASCIA allergy plans with patients now and good knowledge of resources available”

“This has greatly improved my knowledge and readiness for providing adrenaline if needed in a life-threatening situation”

“This refresher has helped for my general scope of practice improving my confidence with symptoms of Anaphylaxis and instructions for use of both Epipen and Anapen.”

4. Suggestions for ASCIA regarding the training course (n=7)

A small number of responses in this survey contained suggestions on how ASCIA might improve the user experience/.

“More video content”

“Include photos in quiz about the injectors. I thought it was odd that I was asked to remember the colours of labels. I would have found it more useful if I had the photo of the injector and had to pick which labelled parts were correct, e.g. needle end, button, safety shield.”

“Need more reading resources first before completing the assessment”

Actions that ASCIA will take as a result of e-training surveys

ASCIA will:

- Review and update the *ASCIA anaphylaxis e-training for health professionals* course to improve the user experience.
- Mandate the *ASCIA anaphylaxis e-training for health professionals* course post-training survey.
- Include additional questions in the survey to ascertain the primary location, health sector and discipline of the individual completing the course.
- Review and update the wording of the existing open text feedback request to prompt more relevant responses.
- Include an additional open text feedback request inviting health professionals to offer specific improvements to the course content.
- Review survey results on a 6-12 monthly basis.

SURVEY QUESTIONS (2021 – 2022)

Evaluation form

[Insert activity name and number]

Name: _____

Date: _____ RACGP number: _____

Question	Answer		
	Not met	Partially met	Entirely met
Rate how well the learning outcomes were met:			
[insert learning outcome]			
Rate the degree to which your learning needs were met			
	Not relevant	Partially relevant	Entirely relevant
Rate the degree to which this is relevant to your practice			

How might this activity contribute to a systems-based patient safety outcome for your practice?

Comment if relevant: