

## **ALLERGY AND IMMUNOLOGY ADVANCED PRACTICE PROVIDER EDUCATION CURRICULUM**

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**Abstract Type:** Research on Professional Development

**Program:** Doctor of Nursing Practice

**Purpose/Aims:** To explore the learning needs of allergy and immunology advanced practice providers (APPs). Develop an educational curriculum specific to those needs so APPs may continue to advance the outstanding clinical care they provide to patients by remaining up to date on current best practices within the field.

**Rationale/Background:** The allergy and immunology section conducts formal didactic lectures and case reviews for its physicians and fellows; however, no such educational offerings are specifically geared toward the unique needs of APPs. An internal allergy section policy dictates that the APPs do not routinely see conditions deemed to be more complex. The screening process to route these patients to physicians, however, can fail. APPs expressed a desire to develop their own education program with their APP peers which would focus largely on the complex conditions which they see less frequently in the clinic. This curriculum would help APPs remain up to date on current practices of these conditions. Literature on the learning styles of APPs is sparse, although there has been extensive research on the learning styles of nurses. Researchers Mangold, et al and McCrow, et al found that most practicing nurses preferred learning styles are sensing and visual. Sensing learners are described as practical and fact oriented, and visual learners prefer presented materials with pictures and diagrams. Based on this information, it was decided that APPs would develop didactic lectures and case discussions with a physician mentor. Content would have an emphasis on the conditions APPs felt least comfortable managing with practical clinical pearls, treatment algorithms, and visual learning aids.

**Methods:** Seven allergy APPs were asked to complete a needs assessment on their comfort levels with the diagnosis and independent management of common allergic conditions via a numeric 5-point Likert scale. Conditions included chronic urticaria, angioedema, atopic dermatitis, asthma, drug allergy, insect allergy, unexplained/idiopathic anaphylaxis, food allergy, food protein induced enterocolitis syndrome (FPIES), food protein induced allergic proctocolitis (FPIAP), and eosinophilic esophagitis (EoE). Available responses ranged from extremely comfortable (1) to extremely uncomfortable (5). To improve knowledge and skill levels, formal monthly didactics and case-based learning discussions on the conditions APPs felt least comfortable managing will be held monthly. Educational presentations will be primarily developed and led by an allergy APP with a physician faculty mentor.

**Results:** Responses from the Likert scale were averaged. The needs assessment demonstrated that most APPs feel somewhat comfortable (on a scale from extremely comfortable to extremely uncomfortable) in the management of allergy patients. Conditions which APPs felt most comfortable managing included rhinitis which had a mean score of 1.29, atopic dermatitis, asthma and food allergy, all with individual mean scores of 1.57. Conditions with the greatest knowledge deficit included insect allergy and angioedema (mean individual scores of 2.57), unexplained/idiopathic anaphylaxis (mean 3.14), and EoE (mean 3.71).

**Implications for Nursing Practice:** The needs assessment identified areas of deficit to better inform curriculum development targeted at allergy and immunology APPs. Specialty clinics may consider developing similar needs assessments for their APP teams to determine which conditions APPs prefer to focus on when choosing topics for continuing education. We hypothesize that the APP curriculum will lead to improved comfort levels and competency in the management of routine patients. We also hypothesize that APPs will become more skillful and competent in the initial diagnostic evaluation and basic management of complex patients and non-routine diagnoses until they can be transitioned to the care of a physician.

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**References:**

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