

# Approach to Food Allergy Visits in Pediatric Primary Care

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## Introduction

The understanding of food allergy underwent major changes since publication of the LEAP study. This has influenced the approach to food allergy management. Primary care physicians are first line healthcare providers in this regard.

- This project aims to:
- Understand the approach to food allergy visits in primary care settings in terms of diagnosis, management, and providing anticipatory guidance
  - Evaluate consistency of epinephrine auto-injector prescription updates

## Methods

Cleveland Clinic Children's primary care providers participated in an anonymous and voluntary survey on epinephrine auto-injector prescribing practices, diagnostic practices (ex. in vitro testing), and approach to anticipatory guidance. In addition, 558 pediatric primary care encounters were retrospectively reviewed to better understand diagnostic and treatment practices. After analysis of provider survey results, the FARE Food Allergy & Anaphylaxis Emergency Care Plan was distributed at pediatric resident clinic sites. Resident and staff physicians were encouraged to include the action plan in the after visit handout of all patients who have an epinephrine auto-injector for food allergy.

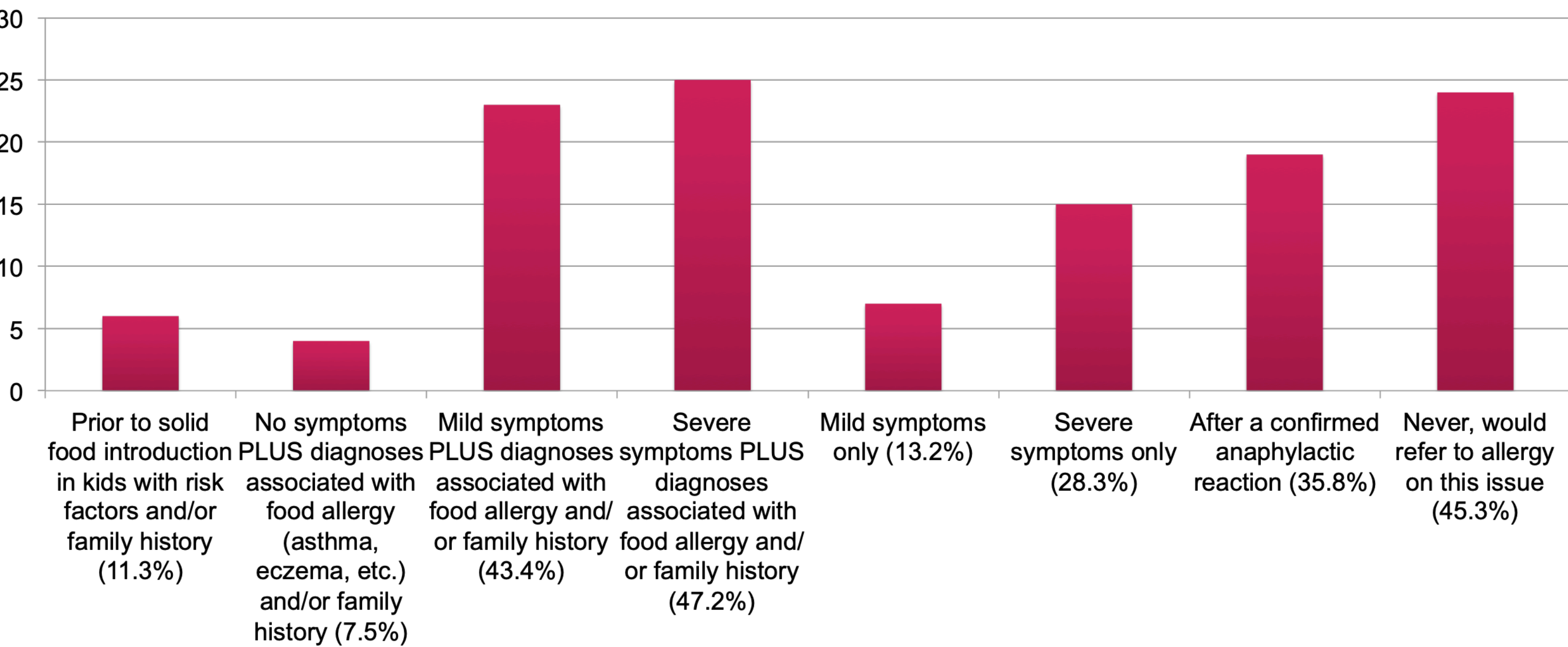
## Results

53 out of 142 (37%) primary practice providers completed the provider survey. Participants included attending physicians, advanced practice providers and resident physicians.

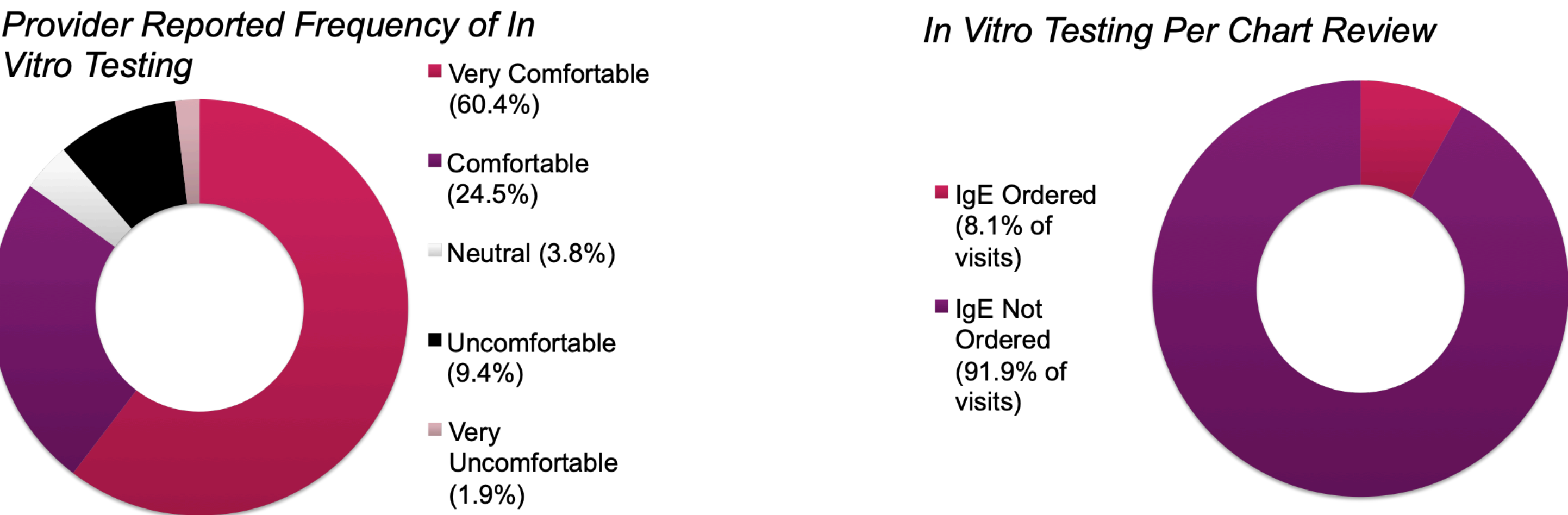
- Key findings include:
- 54.7% of providers reported that they would order serum specific IgE levels, while in practice, in vitro testing was ordered during 8.1% of encounters
  - 11.3% of providers reported being "uncomfortable" or "very uncomfortable" with adjusting epinephrine according to patient weight while in retrospective chart review, only 5.7% (32 of 558) of epinephrine auto-injectors were under dosed compared to patient weight
  - 66% of providers indicated interest in more guidance on diagnosis
  - 71.7% desired more information regarding food allergy management
  - 13.2% of providers reported being "neutral" to "very uncomfortable" with providing anticipatory guidance on adverse food reactions

## Results

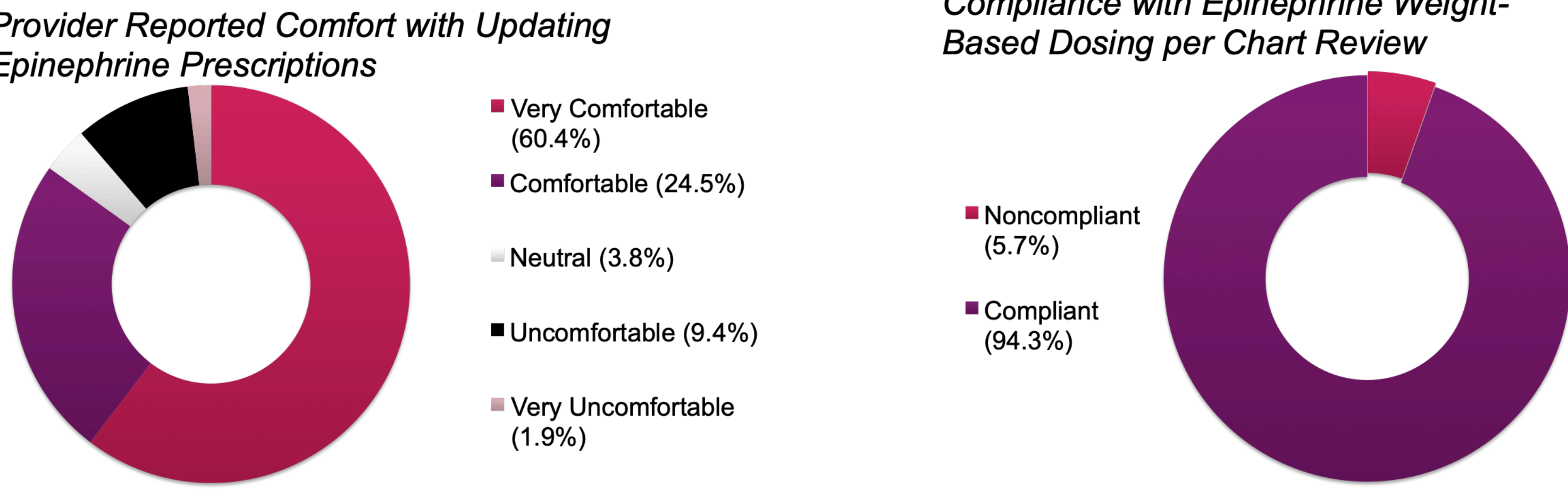
**Figure 1: Provider Questionnaire**  
Q.8 - When do you order IgE levels for patients? (Select all that apply)



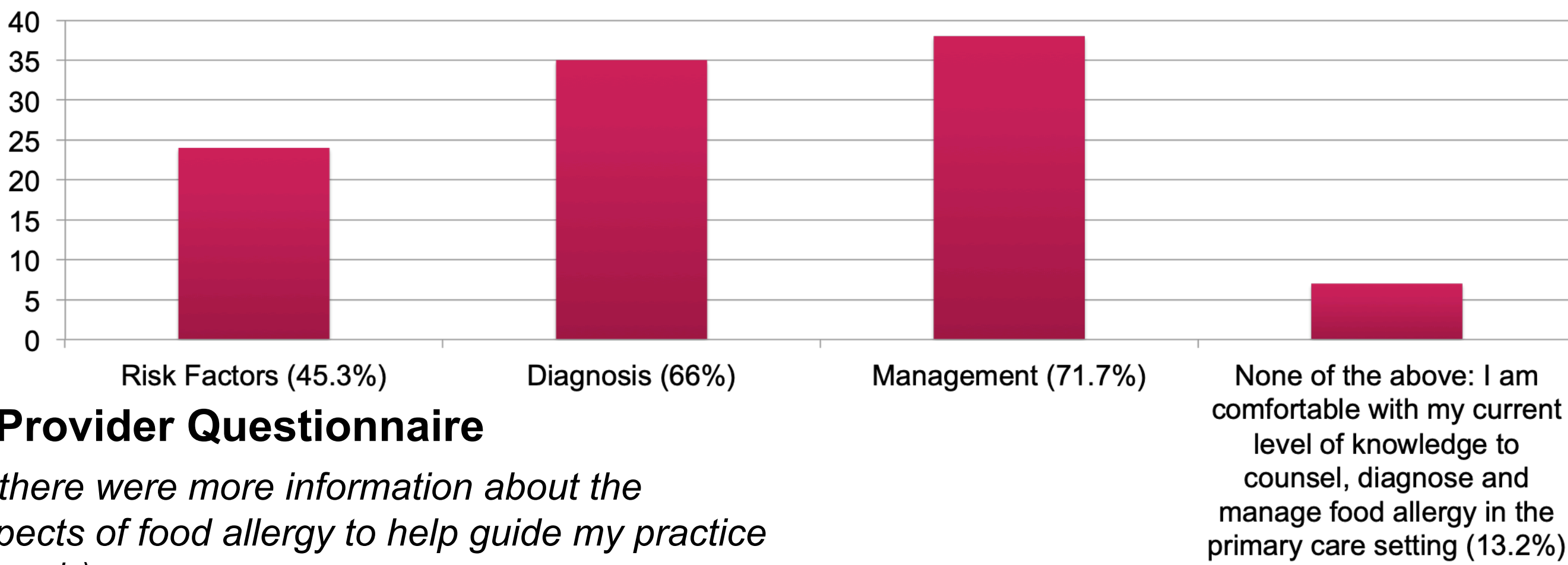
**Figure 2: In Vitro Testing Frequency – Provider Reported vs. per Chart Review**



**Figure 3: Compliance with Epinephrine Weight-Based Dosage Guidelines – Provider Reported vs. per Chart Review**



## Results



**Figure 4: Provider Questionnaire**  
Q.9 - I wish there were more information about the following aspects of food allergy to help guide my practice (Select all that apply)

## Discussion

Pediatric primary care providers are first line in diagnosing and managing food allergy. A majority of providers indicated desire for guidance on diagnosis and management. Based on the results from this study, areas of improvement include:

- Increasing provider confidence with providing anticipatory guidance on adverse food reactions
- Standardizing the diagnosis and management of food allergy
- Increasing support for timely update of epinephrine auto-injectors

This study also showed that practice patterns identified by chart review does correlate with providers' self reported practices.

In November 2019, the FARE Food Allergy & Anaphylaxis Emergency Care Plan was distributed in pediatric resident clinic sites to standardize the management of food allergy in pediatric primary care clinics. Currently, the rate of utilization of this intervention is being studied. Future directions of this project would include the distribution of a standardized anaphylaxis action plan throughout Cleveland Clinic Children's healthcare system and throughout local Cleveland school districts.

## References

1. Du Toit G, Roberts G, Sayre PH, et al. Randomized trial of peanut consumption in infants at risk for peanut allergy. N Engl J Med 2015;372:803-813