

# Identifying and Addressing Knowledge Gaps in Influenza Management with Targeted Continuing Medical Education

Katie Robinson, PhD; Jennifer Frederick, PharmD; Kevin Lester; Robert A. Esgro

Vindico Medical Education, Thorofare, NJ

## 1 Defining the Need for Education

- Influenza represents a year-round disease burden.
- Despite CDC recommendations, providers do not effectively **test** or **treat** influenza.
- These practice gaps have been observed among the following audiences:



Primary Care



Emergency Medicine



Infectious Disease



Pulmonology

## 2 Overview of the CME Programs

Between July 2018 and June 2020, Vindico provided the following continuing medical education (CME) programs for various audiences



20 web programs



14 live programs



2 print programs

The activities reached the following numbers of learners with each of the target audiences

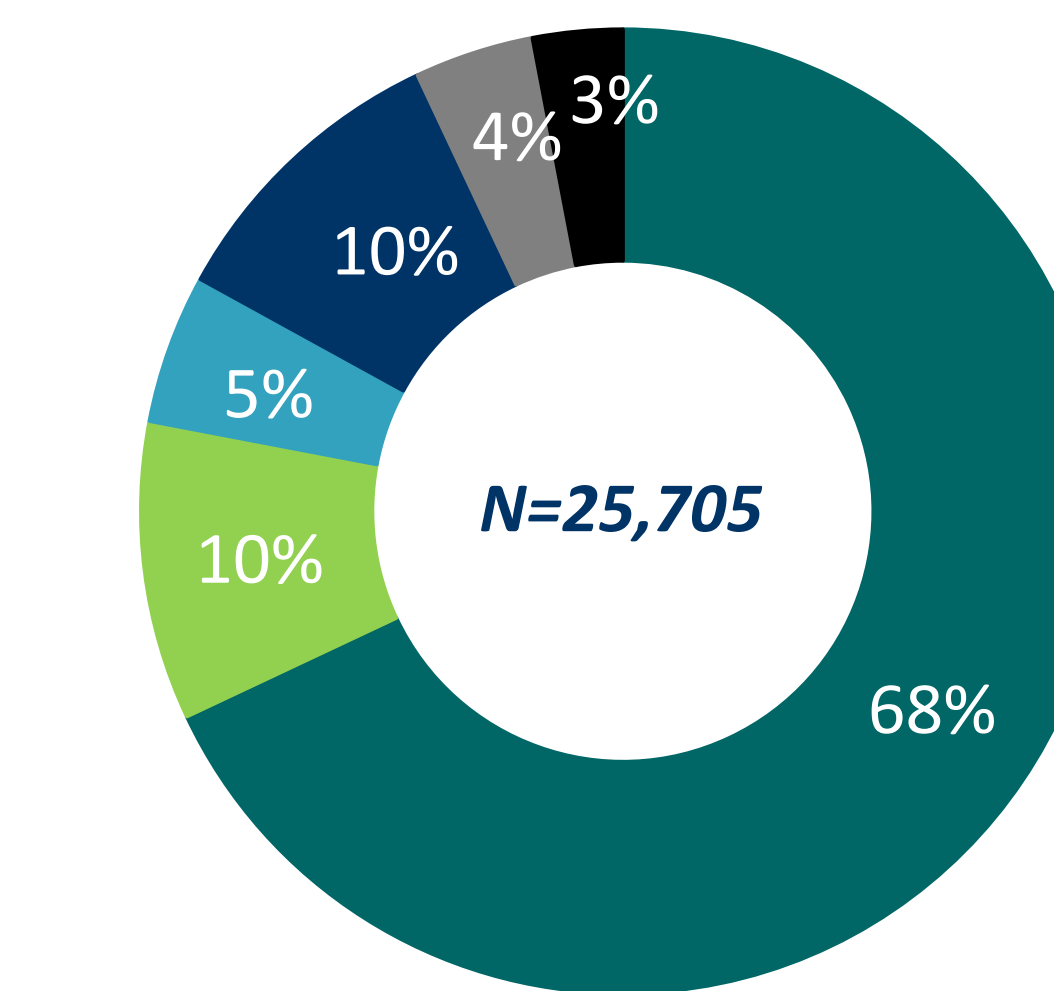
	Live	Web	Print
Primary Care	3,210	21,854	890
Emergency Medicine	196	2,472	
Infectious Disease	460	9,529	383
Pulmonology	62	597	

### Assessment of Impact

- A series of pre-, intra-, and post-activity questions related to the overall program content were asked in each program
- Data was analyzed in aggregate by activity as well as by specialty cohort as appropriate

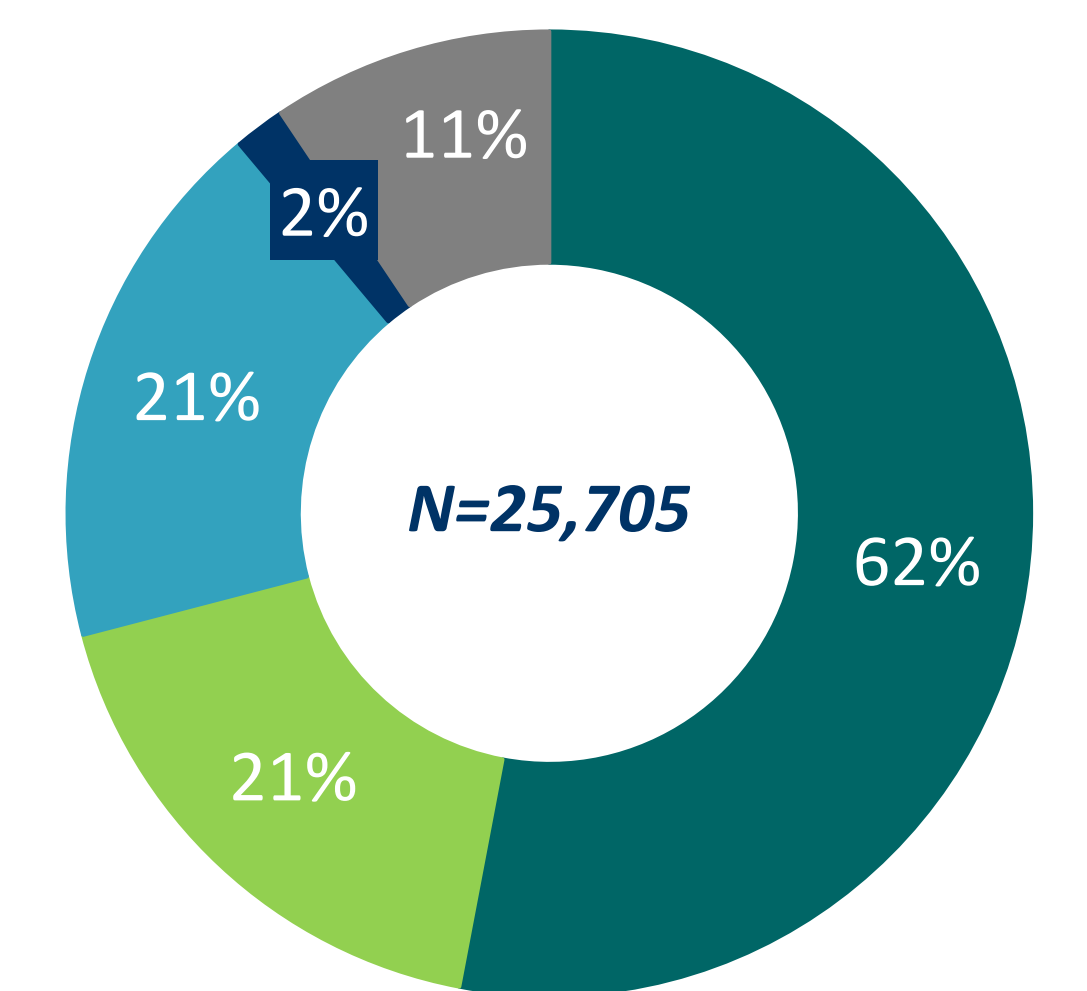
## 3 Overall Demographics of Participants

### Degree



MD/DO  
NP  
PA  
RN/BSN/MSN  
Other HCP  
Other

### Specialty



Primary Care  
Infectious Disease  
Emergency Medicine  
Pulmonology  
Other

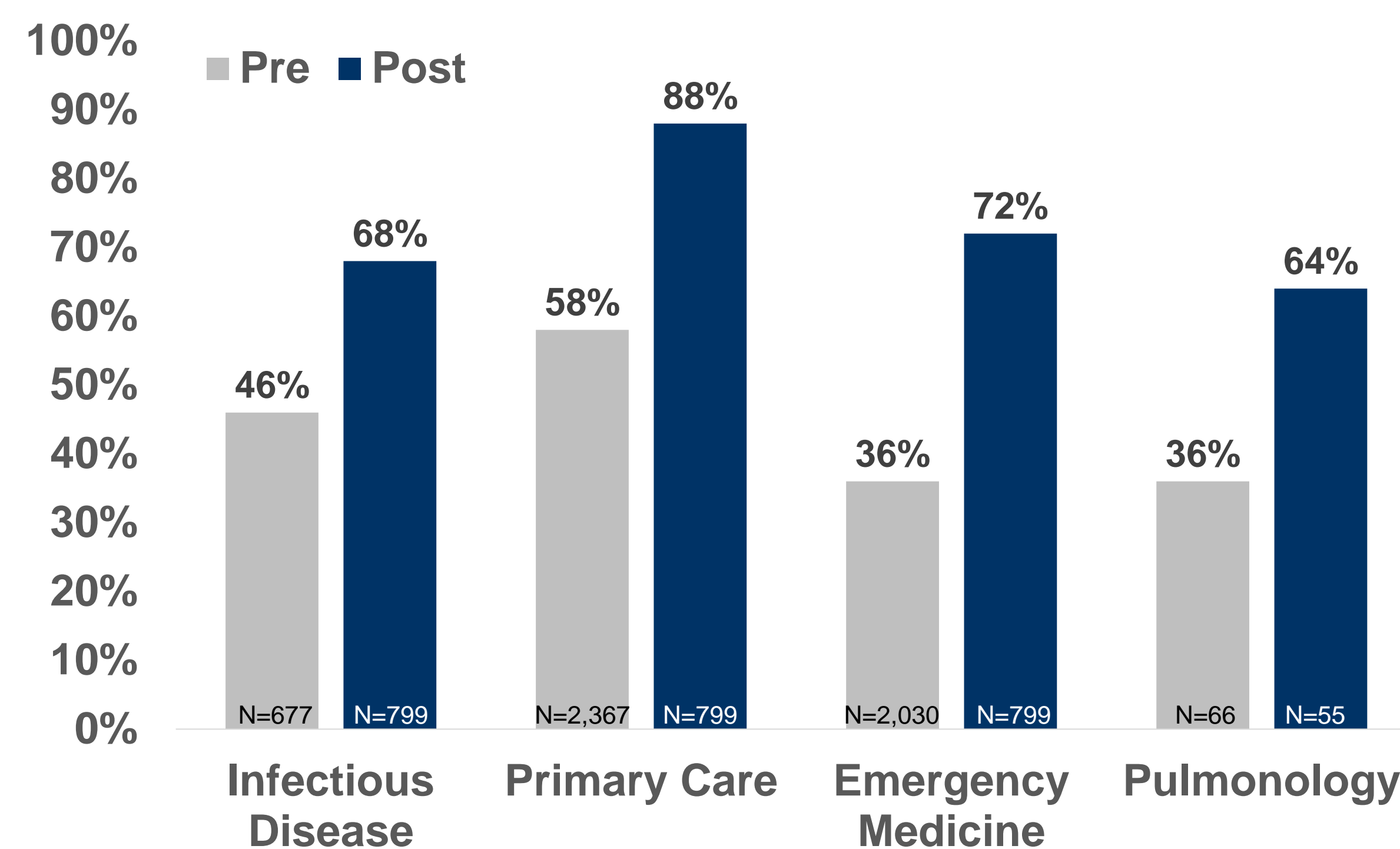
68% were physicians

Multiple specialties were represented

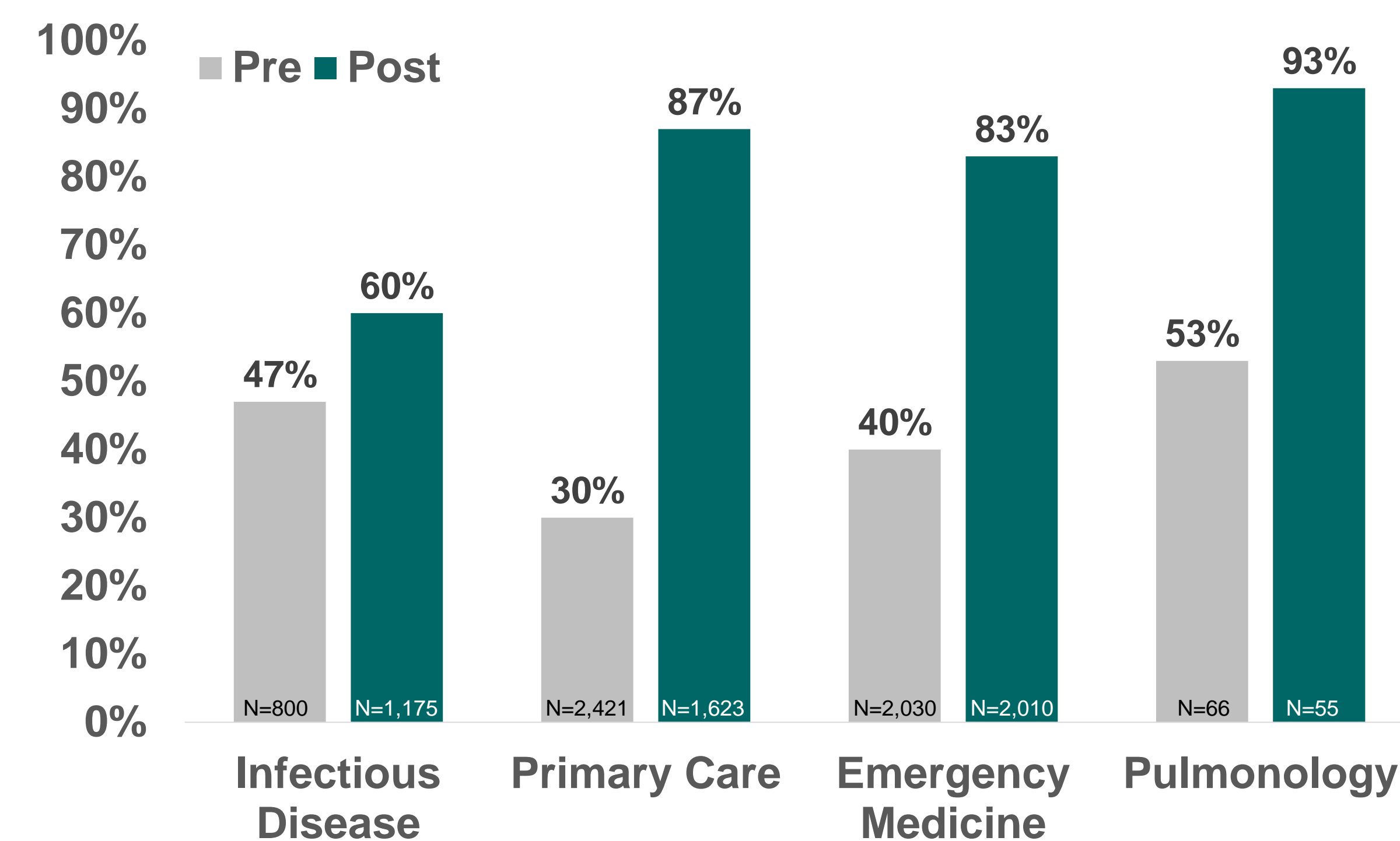
Providers see on average **14 patients with or at risk for influenza infection per month**

## 4 Impact of the Education on Knowledge and Practice

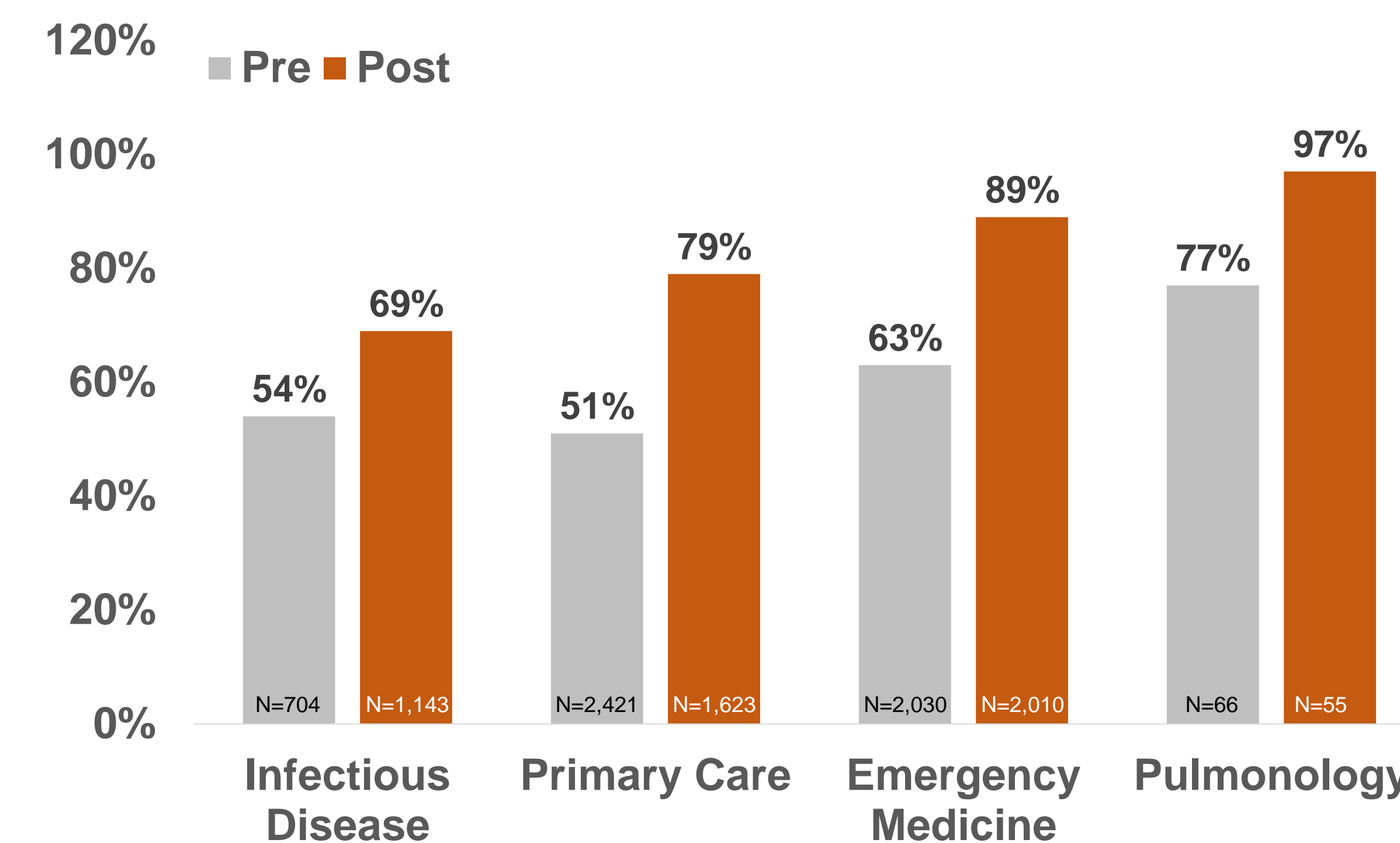
### Influenza Testing



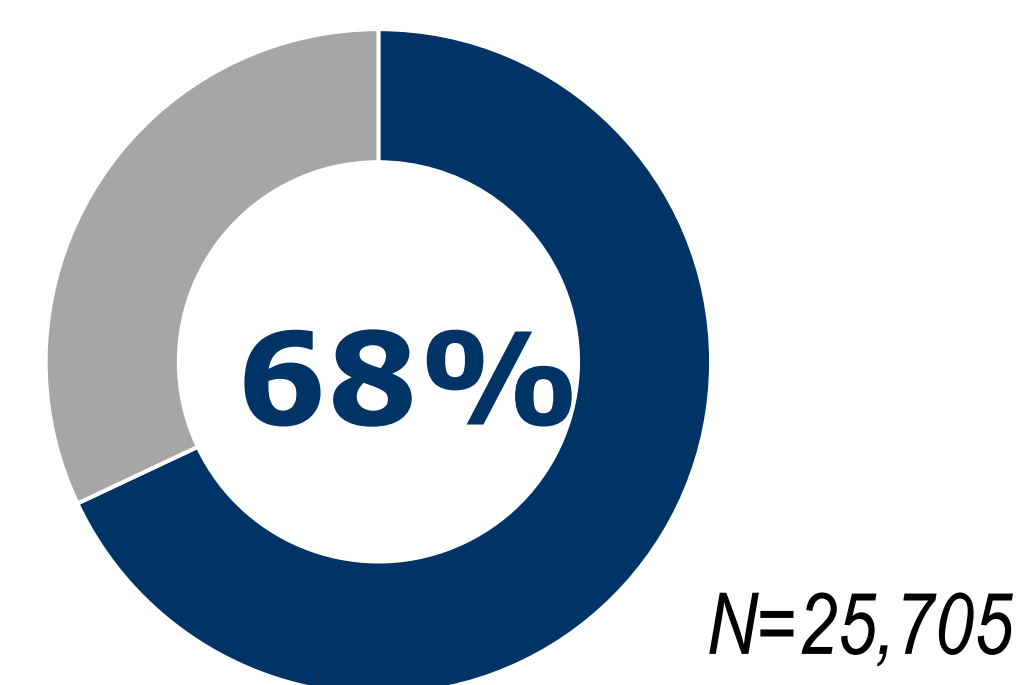
### Treatment Mechanisms of Action



### Influenza Treatment



### Practice Changes



Have reported practice improvements because of the education provided

**69%** Overall relative increase in knowledge across topics and specialties

### Potential Patient Impact



**>155K** Number of patients seen per month who are more likely to receive evidence-based care because of the education provided

### Persisting Knowledge Gaps

- What to do with a negative test?
- Differentiating influenza infection from COVID-19
- Management of high-risk patients
- Treatment of influenza in children
- Prophylactic influenza treatment

## 5 Insights & Opportunities

### Insights

- Knowledge gaps were greatest regarding testing and antiviral mechanisms
- Pre-test scores were lowest among emergency medicine and primary care providers
- Knowledge gains were largest among primary care providers
- Targeted influenza education is an effective method to identify and address knowledge gaps among various specialists

### Opportunities

- Ongoing educational programs aim to address identified new and persisting learning gaps
- Application of new knowledge into practice is the focus of new educational efforts
- Given that influenza can infect any individual, this educational approach can be expanded to other specialties