

# Implementation of A Protocol to Refer Patients with Asthma to A Community Program That Provides Home Visits

Phuong Bradford, DNP, APRN, FNP-BC

## PROBLEM STATEMENT

- The Community Preventative Services Task Force (CPSTF) recommends the use of home-based multi-trigger, multicomponent interventions with an environmental focus for persons with asthma to reduce exposure to various indoor asthma triggers.
- Home-based multi-trigger, multicomponent interventions improve asthma control, improve healthcare use, and improve environmental trigger reduction with a positive return on investment.
- Healthcare providers have knowledge of community resources that provide home-based multi-trigger, multicomponent interventions.
- A referral and the passage of information about these community programs to patients with asthma can greatly improve their management of asthma.

## PROJECT PURPOSE

- The purpose of this project was to implement a protocol to increase referrals to an asthma community resource program and improve quality of life and asthma control.
- Clinical question: For patients (age eight and older) with asthma, will the implementation of a protocol for a referral to a community resource for a home visit result in better asthma control based on the Asthma Control Test (ACT)?

## MODEL/NURSING THEORY

- The QI project utilized the Plan-Do-Study Act (PDSA) model to plan for change, implement the plan, analyze the results, and take action based on results.
- Health Belief Theory was utilized to help understand health behaviors, guide health promotion and prevention, and predict individual changes in health behaviors.

## METHODS

### Subjects (Participants)

Patients aged 8 and older with a diagnosis of asthma. (N=13)

### Setting

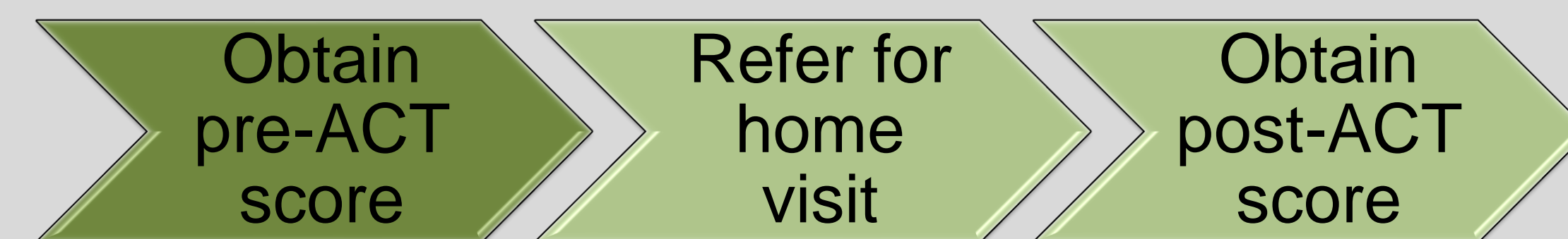
A private practice located in central Florida that provides specialized care for patients with asthma, allergy, and immune diseases.

### Instruments/Tools

The Asthma Control Test (ACT) is a standardized and validated questionnaire that assesses the level of asthma control and classifies the level of asthma control within the last four weeks.

The total score will range from 5, which indicates poor asthma control, to 25, which indicates excellent asthma control

### Intervention and Data Collection



QI project took place between 5/2021-7/2021

1. In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work, school or at home?

2. During the past 4 weeks, how often have you had shortness of breath?

3. During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning?

4. During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as albuterol)?

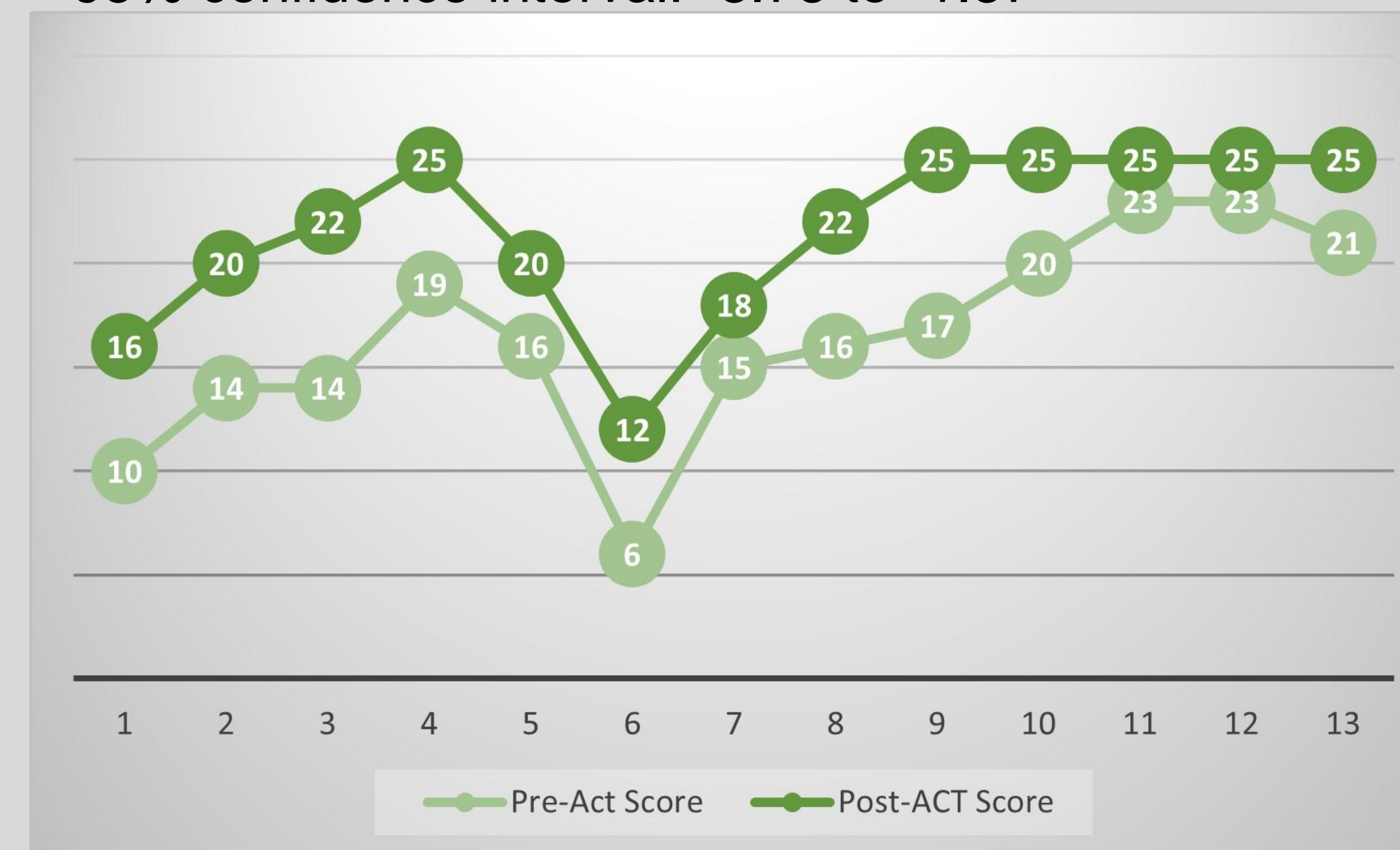
5. How would you rate your asthma control during the past 4 weeks?

AMERICAN LUNG ASSOCIATION logo and Wisconsin Asthma Coalition logo are visible at the bottom.

ACT Tool (12 years & older)

## RESULTS

- P=0.0093
- 95% confidence interval: -8.78 to -1.37



Name of person with asthma\* \_\_\_\_\_

Guardian (if person with asthma is under 18) \_\_\_\_\_

Email \_\_\_\_\_

Address\* \_\_\_\_\_

City\* \_\_\_\_\_ Zip Code\* \_\_\_\_\_

Age of person(s) with asthma \_\_\_\_\_

Phone number xxx-xxx-xxxx\* \_\_\_\_\_

Do you own or rent your home?\*

Own

Rent

Unknown

Referred by (name of provider or person who referred you) \_\_\_\_\_

When is the best time for a team member to call you? \_\_\_\_\_

Referral Tool

## DISCUSSION

- The results of the QI project showed successful implementation of the protocol and improvement of asthma control based on improvement of ACT scores.
- The independent t-test yielded p=0.0093, which shows statistical significance.
- Limitations include sample size due to reluctance to accept a referral for a home visit.

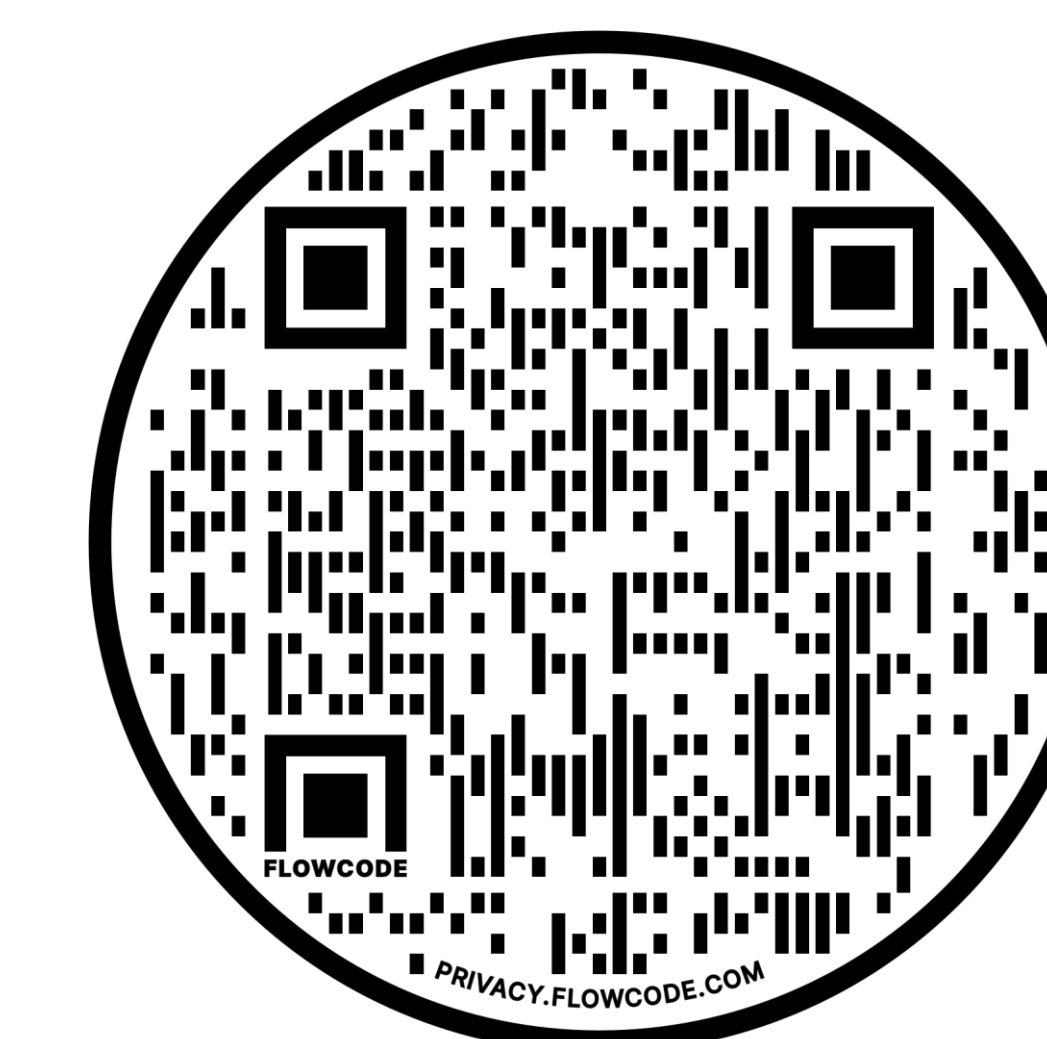
## IMPLICATIONS FOR ADVANCE PRACTICE NURSING

The project results can anticipate a difference in patient outcomes by decreasing primary care sick visits, emergency room visits and hospital admissions, as well as oral corticosteroid use with asthma exacerbations.

## SUSTAINABILITY

Can be easily utilized by all providers in the practice and in similar settings

## REFERENCES



Referrals for asthma home visits significantly improved asthma control based on ACT scores.