

# Improving Influenza Vaccination Rates Among Adolescents in a School-Based Health Clinic: A Quality Improvement Project

Daisy Mailhot, DNP, APRN, FNP-C

## PROBLEM STATEMENT

- Influenza is unpredictable and dangerous; however, it is **preventable**.
- Despite the severity and unpredictability of the influenza virus, **vaccine rates remain significantly low** among adolescents.
- School-based health clinics (SBHC) are a **powerful** tool for achieving **health equity** among children and adolescents<sup>1</sup>.
- SBHCs are critical in meeting the unmet physical and mental health needs of our underserved populations<sup>2</sup>.
- In recent years, influenza vaccine administration at the target SBHC has **averaged less than 1% annually**.
- Attempts in previous influenza seasons to raise awareness and distribute education materials among the target population have been minimal.

## PROJECT PURPOSE

- Purpose:** To determine if employing multiple strategies to enhance awareness and education among both parents and adolescents would increase the rates of the seasonal influenza vaccine.
- Aim:** To increase influenza vaccination rates among this population to improve health and healthy behaviors and reduce the impact of illness within communities.
- Clinical question:** Will the use of an awareness campaign increase the number of students receiving the influenza vaccine by 50% from the previous year in the target SBHC between October 2020 and February 2021?

## NURSING MODEL

- Focus**
  - Generated a list of problems, selected one problem, verified and defined the problem, and applied nursing/QI model to guide project.
- Analyze**
  - Decided needs to be known
  - Collected baseline knowledge about the problem
  - Determined influential factors
- Develop**
  - Generated promising solutions
  - Selected a solution
- Execute**
  - Gained commitment
  - Executed plan
  - Monitored and recorded impact

## METHODS

### Subjects (Participants)

- All enrolled students, ages 13 to 19, from a large public suburban high school, with just over 1,700 enrolled students
- Inclusion criteria: all students enrolled within the target high school
- Exclusion criteria: those with contraindications to receiving the influenza vaccine, those without written parental consent, students who have received the current seasonal influenza vaccine at another site or location, and adolescents who are not enrolled at target high school.

### Setting

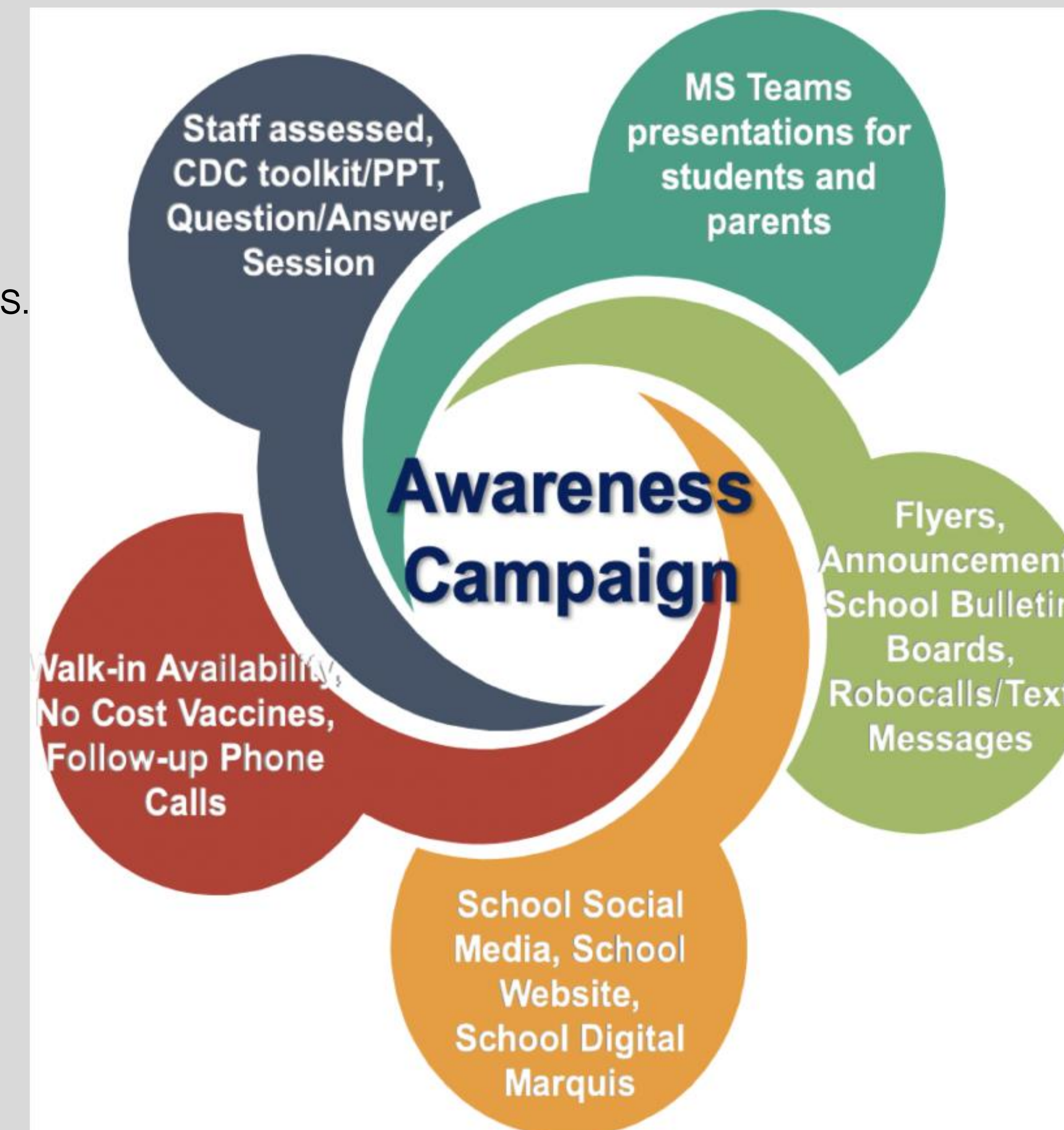
- A large suburban public high school located in the Southeast region of the U.S.
- School-based health clinic located within the target high school

### Instruments/Tools

- Microsoft excel spreadsheet created on the DOH database, password secured, maintained by clinic APRN and LPN
- Measured: Number of students who received current influenza vaccine from SBHC
- Retrospective review of electronic student records from previous years who received the influenza vaccine within the target SBHC for comparison.

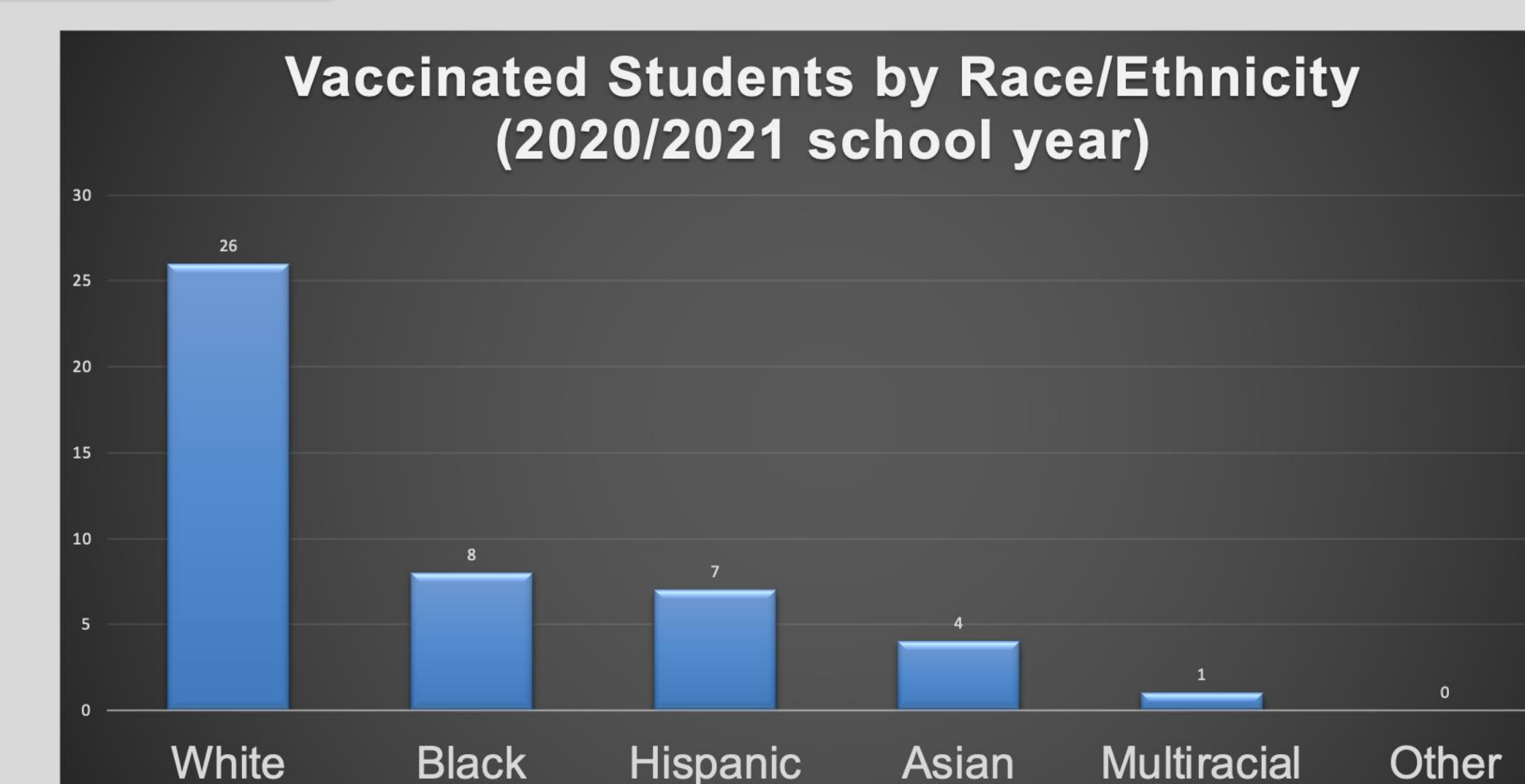
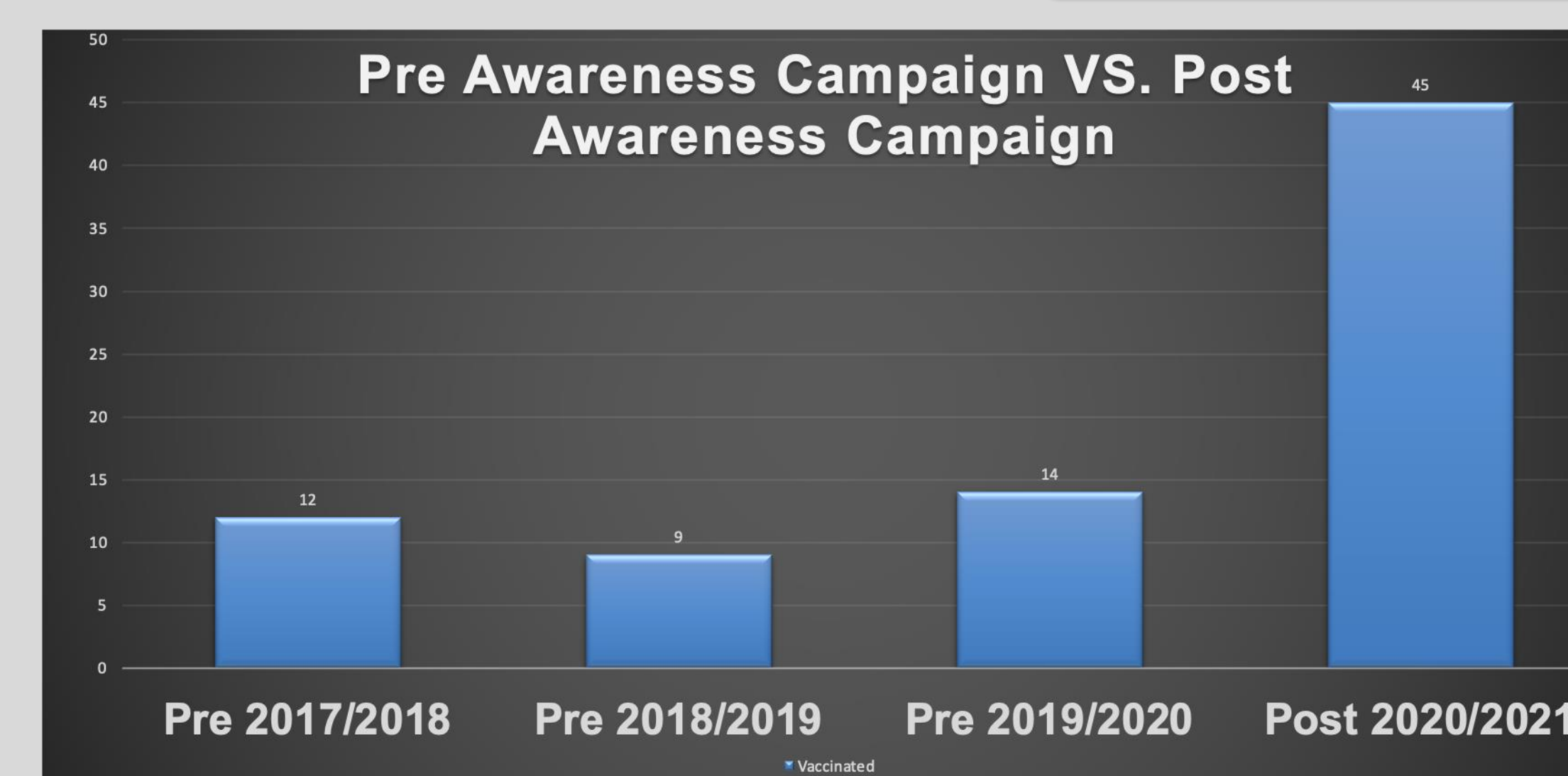


### Interventions and Data Collection



**Data collected:** Number of students who received the influenza vaccine, including their grade, age, race/ethnicity and insurance status (information was deidentified), collected and transcribed in MS Excel spreadsheet. Results from the interventions were then compared and measured.

## RESULTS



## DISCUSSION

- Several factors assisted in the success of the awareness campaign for the QI project, such as:
  - Trusting relationships with stakeholders
  - Excellent teamwork
  - Health educator, new role for the clinic

### Limitations

- Small sample size
- Due to COVID-19 pandemic, more students (especially those with chronic conditions) opted in remote learning, decreasing school population
- Mandated mask and social distancing, decreasing viral illnesses and perceived need for vaccination against the flu.

## IMPLICATIONS FOR ADVANCE PRACTICE NURSING

- This QI initiative has shown great promise in increasing influenza vaccination rates among adolescents with implementation of an awareness campaign.
- Should be utilized throughout schools in the U.S. to achieve equitable care and healthier communities.
- May be beneficial for larger studies within SBHC's across the nation.
- Evidence supports need for increased health related awareness and education, increased accessibility to healthcare and vaccinations, and increased need to address and focus on solutions to end racial/ethnic disparities that exists within our schools and communities.

## SUSTAINABILITY

- Easy to implement, requiring minimal supplies/funding
- A positive relationship was established between school staff/administration and clinic staff, resulting in better communication and willingness to work on improving the health and wellness of the student population.
- The awareness campaign could be introduced to other schools in the area/county

## REFERENCES

Please scan QR code for complete reference list.



*The utilization of awareness campaigns within SBHC's assist in improving influenza vaccination rates among adolescents.*