

# QI Project: A School Nurse-Led Educational Initiative to Improve Parent’s Understanding of COVID-19 Exposure and Quarantine Guidelines

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## Description of the Problem

In January of 2021:

- Texas reported 127,334 individuals hospitalized with COVID-19.

- 28,553 of those individuals were in the ICU.
- Georgetown Independent School district saw the highest number of COVID positive cases among students January of 2020.
- Parents were sending students back to school too early or not quarantining when required due to a lack of understanding of the exposure and quarantine guidelines.

### Purpose Statement

The purpose of this quality improvement project was to improve parental understanding of the COVID-19 exposure and quarantine guidelines and stop student exposed to COVID from returning to school prior to guideline recommendations.

### Aim 1

- At least 90% of parents receiving the exposure and quarantine education will report improved understanding of guidelines following the educational initiative when compared to pre-education.

### Aim 2

- No students would return to campus before the 14-day exposure and quarantine period outlined in the guidelines.



## Synthesis of Evidence

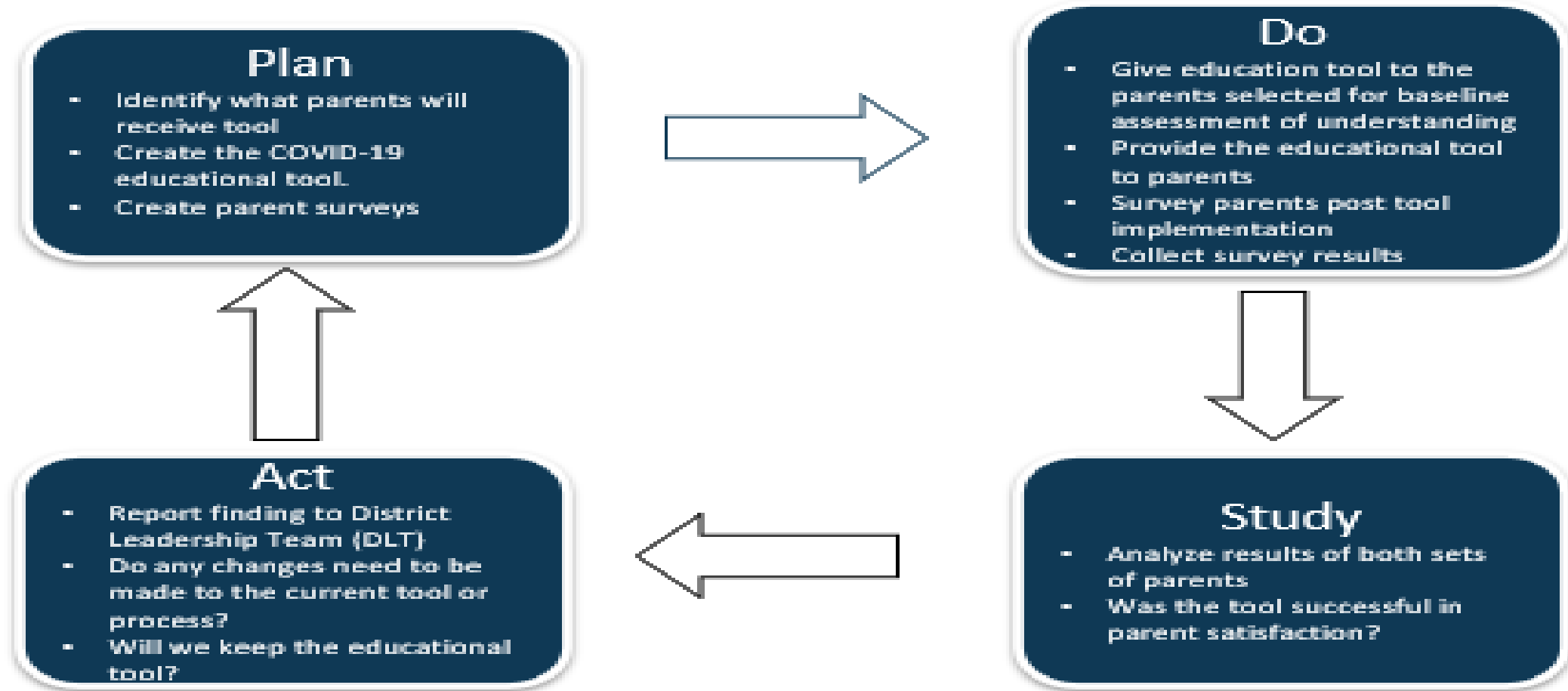
- State leaders and Governor Abbott gave individual school districts authority to make school reopening plans even if they did not follow public health guidance which divided many communities (Martinez, 2021).
- The role of the school nurse is diverse. Public health educational resources are needed to help educate families and students (Hoekstra et al., 2016).
- A systematic review of literature showed improved outcomes such as improved asthma management, fewer ER visits, hospitalization, and unscheduled doctors’ visits for students with asthma when school nurses provided school-based asthma education (Isik et al., 2019).
- An educational initiative on suicide prevention and the role of the school nurse yielded the conclusion that school nurses being involved in family and student education give a better understanding of suicide prevention to both students and parents (Roberts et al., 2018).

## Project Description

### Conceptual Framework

#### Plan-Do-Study-Act

- Model discussed four different stages to solve a problem.
- Created by Dr. William Edwards Deming
- Often used to improve a process or assist to implement a needed change.



### Design

- Quality improvement, educational initiative with a before and after design
- Parents level of understanding was measured prior to educational initiative via survey as a baseline, and then after the educational tool was provided via survey.

### Setting and Participants

- All parents (N=25) from a middle school in Georgetown, Texas , who had a student that was identified as a close contact to COVID-19 were asked to in the project.
  - Inclusion Criteria:
    - Participant needed to be a legal parent of student who tested positive for COVID-19 or has a known exposure to a COVID-19 case
    - English or Spanish speaking
    - Parents that were interested and agree to participate in the project.

### Implementation and Timeline

Step 1	Step 2	Step3	Step4	Step 5
Student is identified as a close contact and brought to clinic	Parents called and notified of close contact status and asked to come pick their student up	Parents arrive at clinic and baseline survey given	Education initiative implemented using the COVID-19 Guideline Tool	Parents are given a post-education survey

### Data Collection and Measurement Tools

- Surveys: Pre-Education and Post-Education
  - Please rate your baseline level of understanding of the COVID-19 Quarantine Guidelines.
  - Please rate your level of understanding of the COVID-19 Quarantine Guidelines after being provided the educational tool and information regarding the guidelines
  - Likert Scale used: 1 (Very Poor), 2 (Poor), 3 (Satisfactory), 4 (Good), 5 (Very Good).
- Data collection was used in Google Sheets.
- The same educational tool was used in each case to increase consistency.
- Attendance reports were run for each participating student.

### Data Analysis

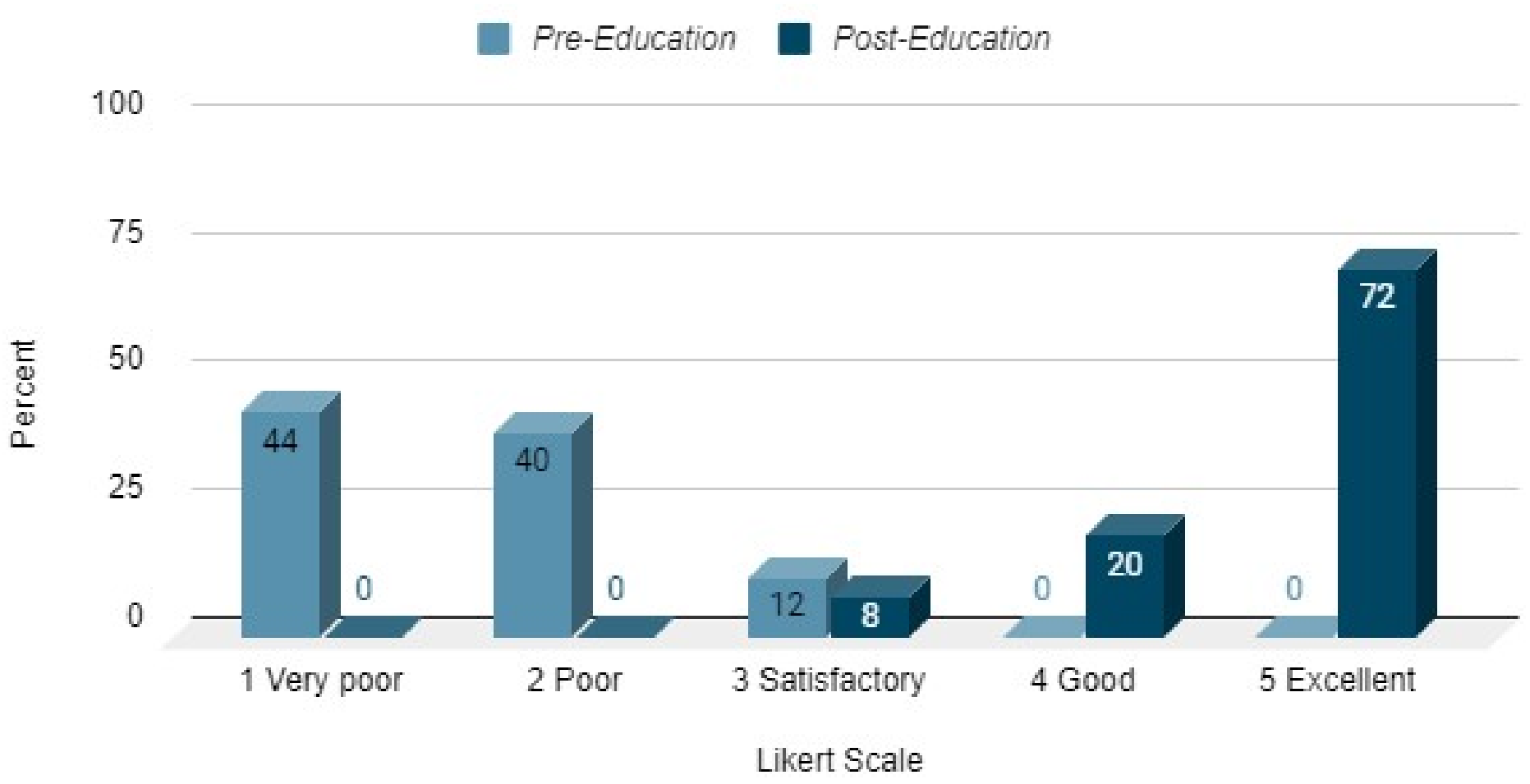
- Pre- and post-educational surveys were collected and compared.
- Attendance records for each participant and number of quarantine days were calculated.

## Results

### AIM 1

- Baseline survey results were as follows:
  - Pre-Education
    - 84% of parents reported a POOR understanding
    - 12% of parents reported SATISFACTORY understanding
    - 4% of parents reported a GOOD understanding
    - 0% reported and EXCELLENT understanding.
  - Post-Education
    - 72% of parents reported an EXCELLENT understanding
    - 20% of parents reported a GOOD understanding
    - 8% of parents reported a SATISFACTORY understanding
    - 0% of parents reported a POOR or VERY POOR understanding

Level of Understanding of the COVID -19 Exposure and Quarantine Guidelines

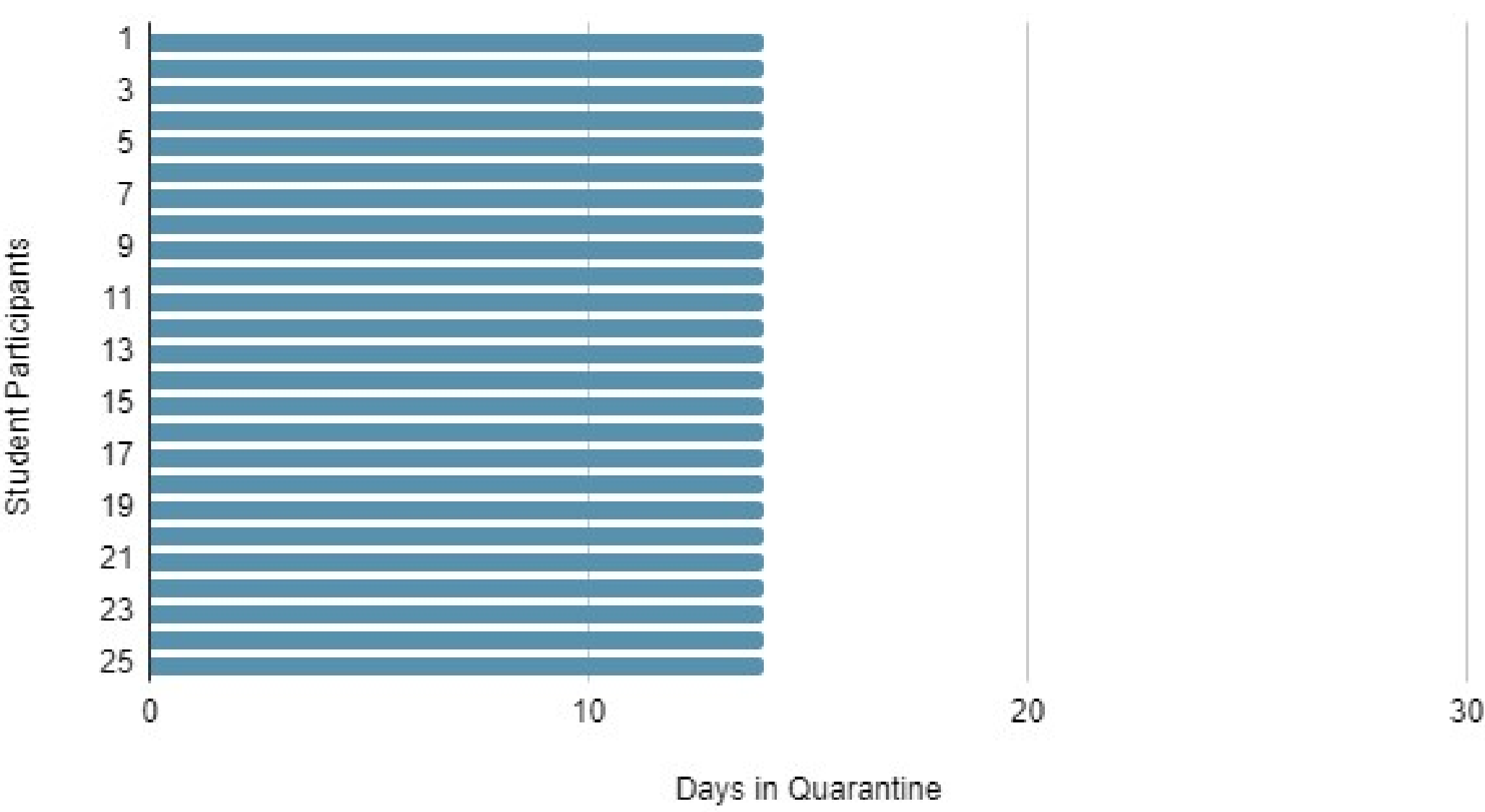


According to the data our Aim was met.

### AIM 2

- Baseline results revealed the following
  - Number of days in quarantine was 14
  - 0% of students returned prior to 14 days

Days in Quarantine vs. Student Participants



According to the data our Aim was met.

## Implications for Practice

This project finding demonstrated:

- School nurses in this school, delivered an educational initiative to parents that successfully increased parental understanding of guidelines.
- Students in this school did not return to campus before guidelines permitted and thereby decreasing the spread of COVID-19 on campus.
- Fewer parent complaints in this school after receiving the educational tool.
- Improved practices by these school nurses promoted healthy outcomes in these students.
- The benefits outweigh the costs.
- The project required minimal resources.
- The findings could be applicable in other similar school settings and if implemented we could possibly eliminate the spread of COVID-19 on all campuses.

## Takeaway Message

**School nurses provided an evidence-based educational initiative to parents during the height of the COVID-19 pandemic that resulted in improved parental understanding of quarantine guidelines and lessened risk of spread of the COVID-19 virus in this facility.**



## References

References are available upon request

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