

Risk Assessment Of Acute Stroke Patients Developing Symptoms Or Testing Positive For SARS-Cov-2 From Admission Up To 2-Weeks Following Discharge

INTRODUCTION

The SARS-CoV-2 (COVID-19) pandemic has effected communities and hospitals. On March 9th 2020 hospitals in Miami-Dade County began to implement safety protocols to combat the spread of COVID-19. Due to these measures, it is believed that communities are cautiously weighing the risks and benefits of being admitted to a hospital where COVID-19 patients are being treated, potentially affecting acute stroke care. We sought to estimate the risk of developing symptoms or testing positive to COVID-19 following in-hospital treatment for acute stroke at Baptist Hospital of Miami (BHM).

METHODS

A two phase study was conducted between December 2019 and April 2020. In phase I of the study, patient charts were reviewed for acute stroke treatment times pre & post implementation of COVID-19 preventive exposure measures. In phase II of the study, a telephone survey was conducted only of the post implementation group to assess the risk of patients developing symptoms or testing positive for COVID-19 from hospital admission up to two weeks post discharge. Here we present findings from phase II of the study.

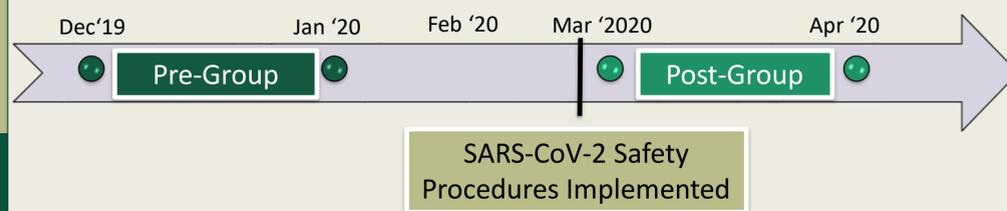


Figure 1. Time periods for data analysis

RESULTS

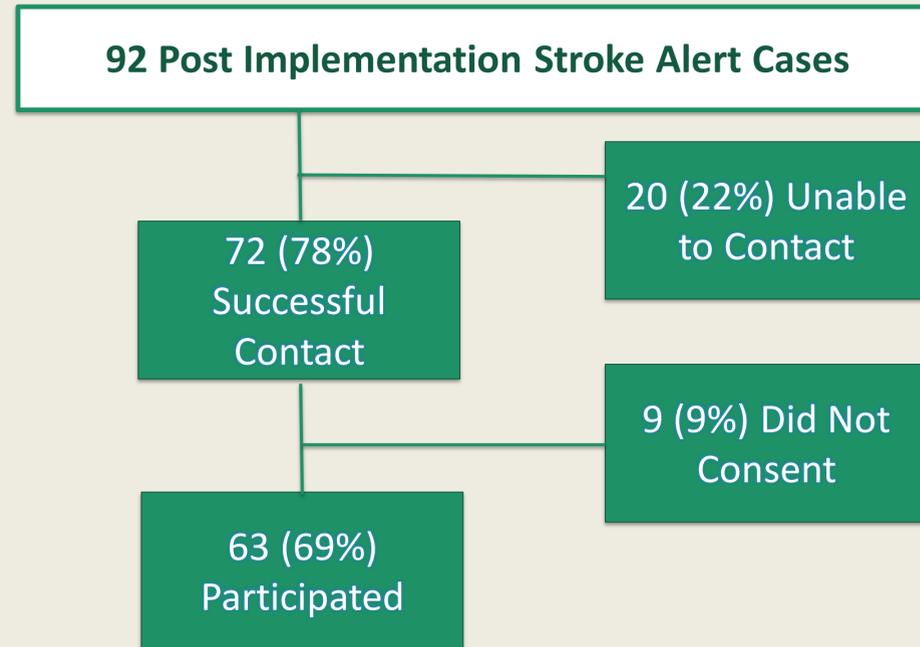


Figure 2. Stroke alert cases after implementation that participated in a COVID-19 phone survey

- Four participants (6%) knowingly delayed seeking medical treatment for their stroke symptoms.
- Of the participants who delayed care, 75% (n=3) expressed concerns about contracting COVID-19.
- Twenty-four participants (38%) were tested for COVID-19 during their hospital stay.
- Thirty-two participants (51%) were tested in the 2-week period following their index stroke event
- Six Participants (9%) reported testing positive for COVID-19 either during their hospital stay or in the 2-week period after being discharged.

RESULTS

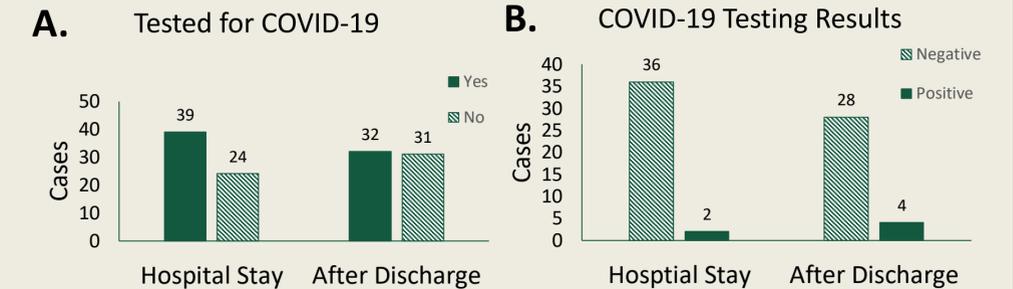


Figure 3. Participants surveyed who: (A) receiving testing for COVID-19 (B) Reported outcomes for COVID-19 testing.

- Only three participants (5%) reported experiencing COVID-19 related symptoms; all three tested positive

Participant	Shortness of Breath	Cough	Fever	Loss of Taste	Loss of Smell
Case 1	✓				
Case 2	✓	✓	✓	✓	✓
Case 3	✓		✓	✓	

Figure 3. Reported COVID-19 symptoms experienced by surveyed participants

CONCLUSIONS

The risk for testing positive or developing COVID-19 symptoms after treatment for acute stroke appears to be low. This may alleviate fear associated with seeking medical treatment from facilitates that treat COVID-19 patients as long as standard hospital preventative measures are implemented.