

Title: COPD Readmission Prevention With Creation of a Registered Nurse Navigator (RNN) role.

Author: Melinda Rivera, DNP, AGNP-BC, FNP-BC

PROBLEM STATEMENT

- Chronic obstructive pulmonary disease patients (COPD) hospital readmission accounts for increased cost and increased mortality.
- Implementing a registered nurse navigator (RNN) ensures timely and informative follow-up and reduction of 30-day hospital readmission rates among COPD patients.
- Integrating the RNN can increase the likelihood of medication adherence for patients

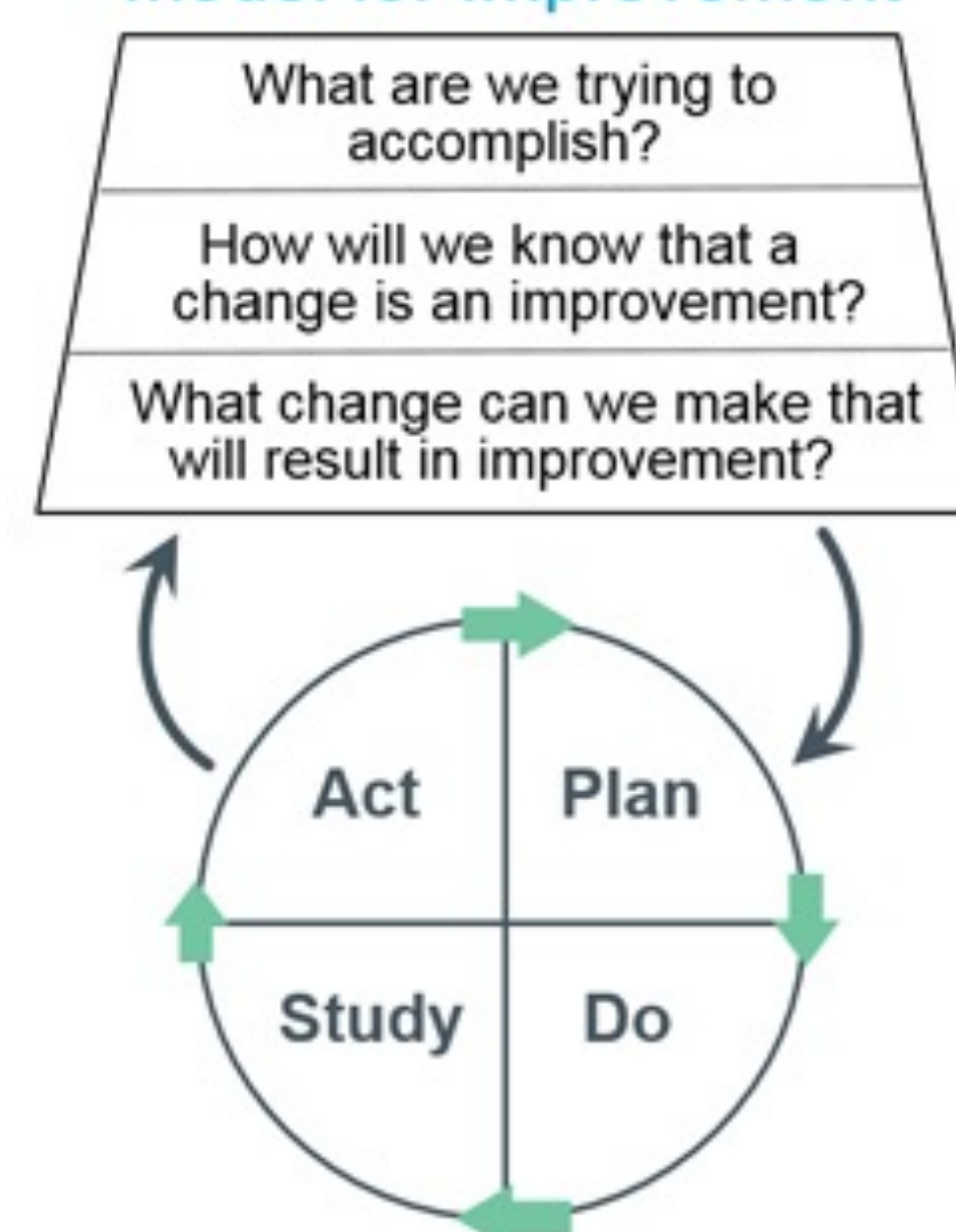
PROJECT PURPOSE

- Overall purpose was the creation of the RNN to supplement readmission prevention among COPD patients.
- The overarching aim was to reduce the risk of 30-day readmissions and other hospital acquired complications, compared with traditional monitoring programs, as well as monitor progress of the COPD participants regarding medication compliance, follow up appointment compliance and diagnosis knowledge.
- Clinical Question: Does the creation of an RNN role for COPD readmitted patients, reduce the risk of hospital readmissions compared with no RNN existing role?

MODEL/NURSING THEORY

- Model for Improvement (MFI) developed in 1996 utilizing the Plan, Do, Study and Act (PDSA) process

Model for Improvement



- Ernestine Weidenbach's Prescriptive Theory was used

METHODS

Convenience Sampling

- 100 Male and Female patients aged 50 years and over with a COPD hospitalization within the previous 30 days.

Demographics		
Pre-Intervention		Post-Intervention
Males (M) (n=67)		Males (n=60)
Females (F) (n=33)		Females (n=40)
Mean/Mode age of both M/F: 58/59		Mean/Mode 56/58

- Setting: designated outpatient holding area in a private faith-based acute-care facility.

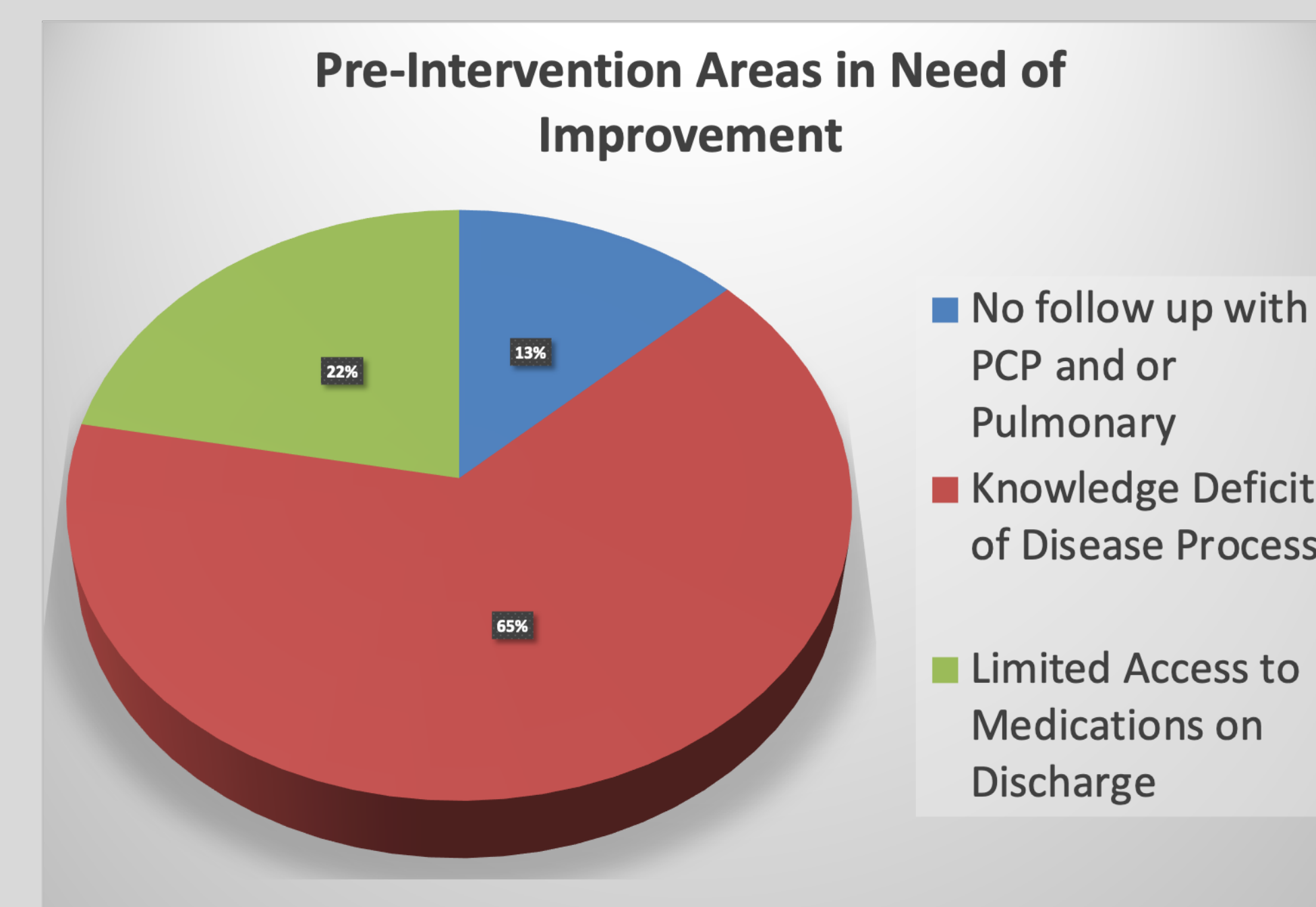
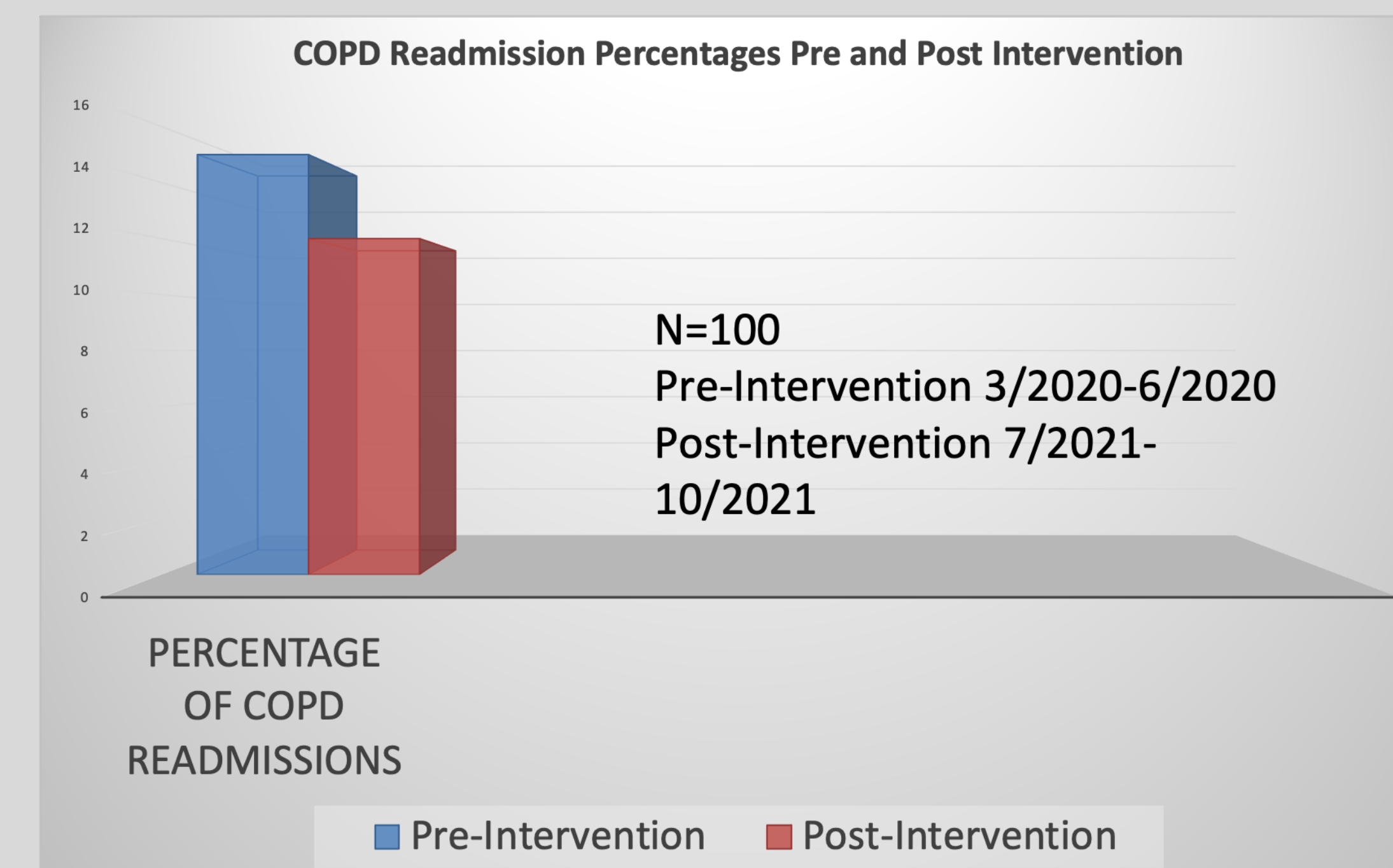
Instruments/Tools

- Statistical package for the social sciences (SPSS) Medication Adherence Rating Scale (MARS) was used as a predictor of medication compliance.
- Additional tools included facility created questions.

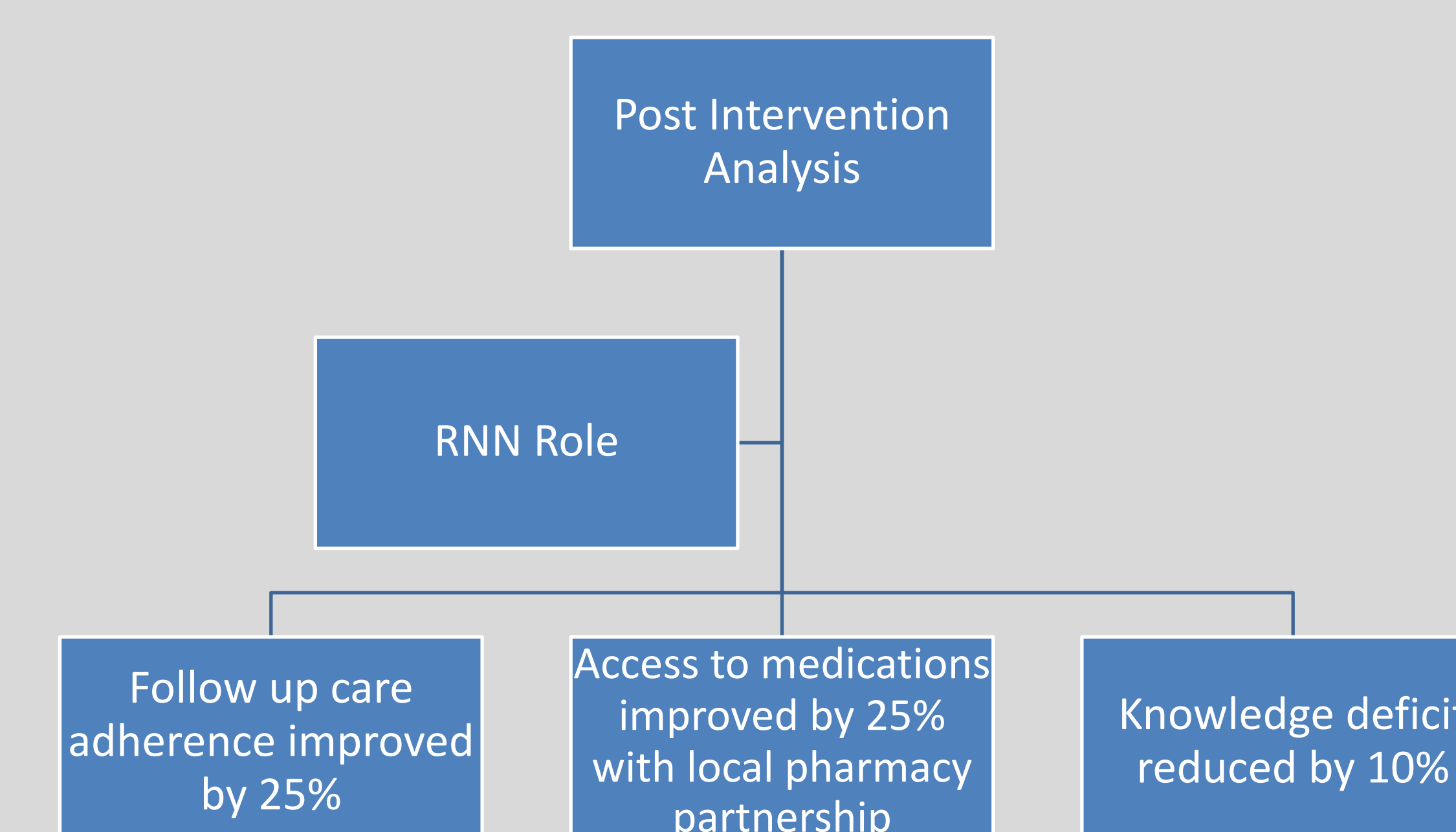
Intervention and Data Collection

- Patients are triaged and cleared utilizing the LACE index as participants in the prevention program.
- The RNN utilized the MARS form and facility questionnaire.
- The RNN informed the patient of the follow up plan as part of the program
- Average COPD readmission from the 3-month period prior to the intervention was compared to the readmission rate of COPD patients following the intervention
- Data was collected using hospital medical health record CERNER, SPSS and data transferred to Excel for analysis

RESULTS



Algorithm of implementation



DISCUSSION

- The P value in this project was $P=0.0648$ with a 11.03% to 26.95% of observed proportion
- The data shows clinical significance for intervention with a longer period of time and a higher n of patients
- The inclusion of an RNN role to a readmission prevention program can improve outcomes for patients, improve adherence to follow up regimens, reduce financial burdens for institutions and reduce mortality.
- The RNN implementation allows support for further study with a larger sample size across a longer period of time.

IMPLICATIONS FOR ADVANCE PRACTICE NURSING:

- Nurse practitioners are in a position to vastly improve outcomes for patients by leading readmission prevention programs
- Other core diagnosis can be implemented to readmission prevention for an even greater impact on

SUSTAINABILITY:

- Results support the reduction of readmissions with the implementation of an RNN role
- Facility support for the RNN role continues, with active discussion to incorporate the role to monitor other core diagnosis such as heart failure and pneumonia.

REFERENCES



Implementation of an RNN role to the discharge process of COPD readmitted patients lends support for reduction in readmissions and improved follow up care regimens.