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# Implementation of the National Institutes of Stroke Scale (NIHSS) in a Cardiovascular Intensive Care for Post Carotid Intervention Patients



Lisa Morgan MSN, RN, CNRN, AGCNS-BC

## Problem/Significance

### Problem:

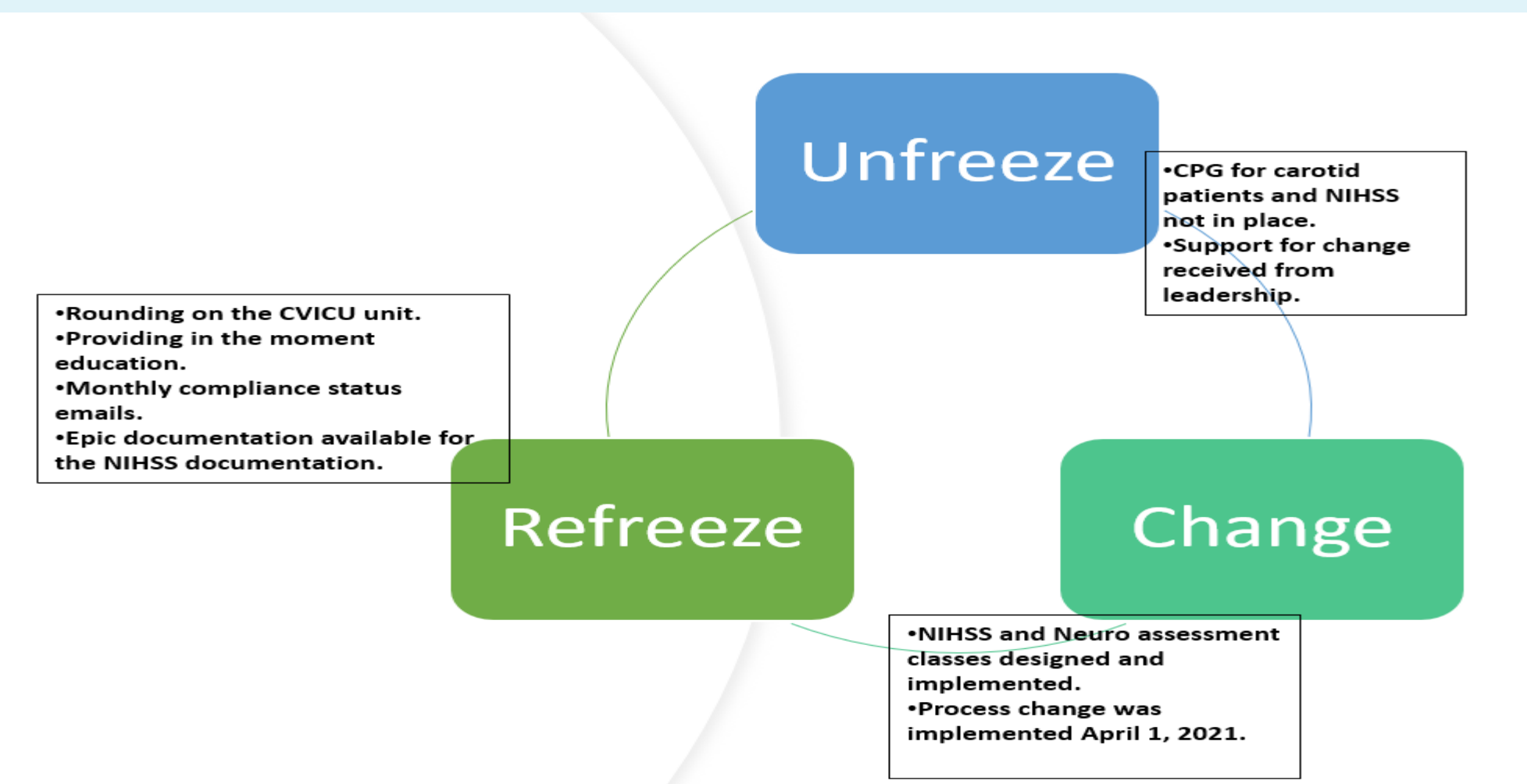
- Post carotid intervention patients in the Cardiovascular Intensive Care Unit (CVICU) were not routinely assessed with the NIHSS.

### Significance:

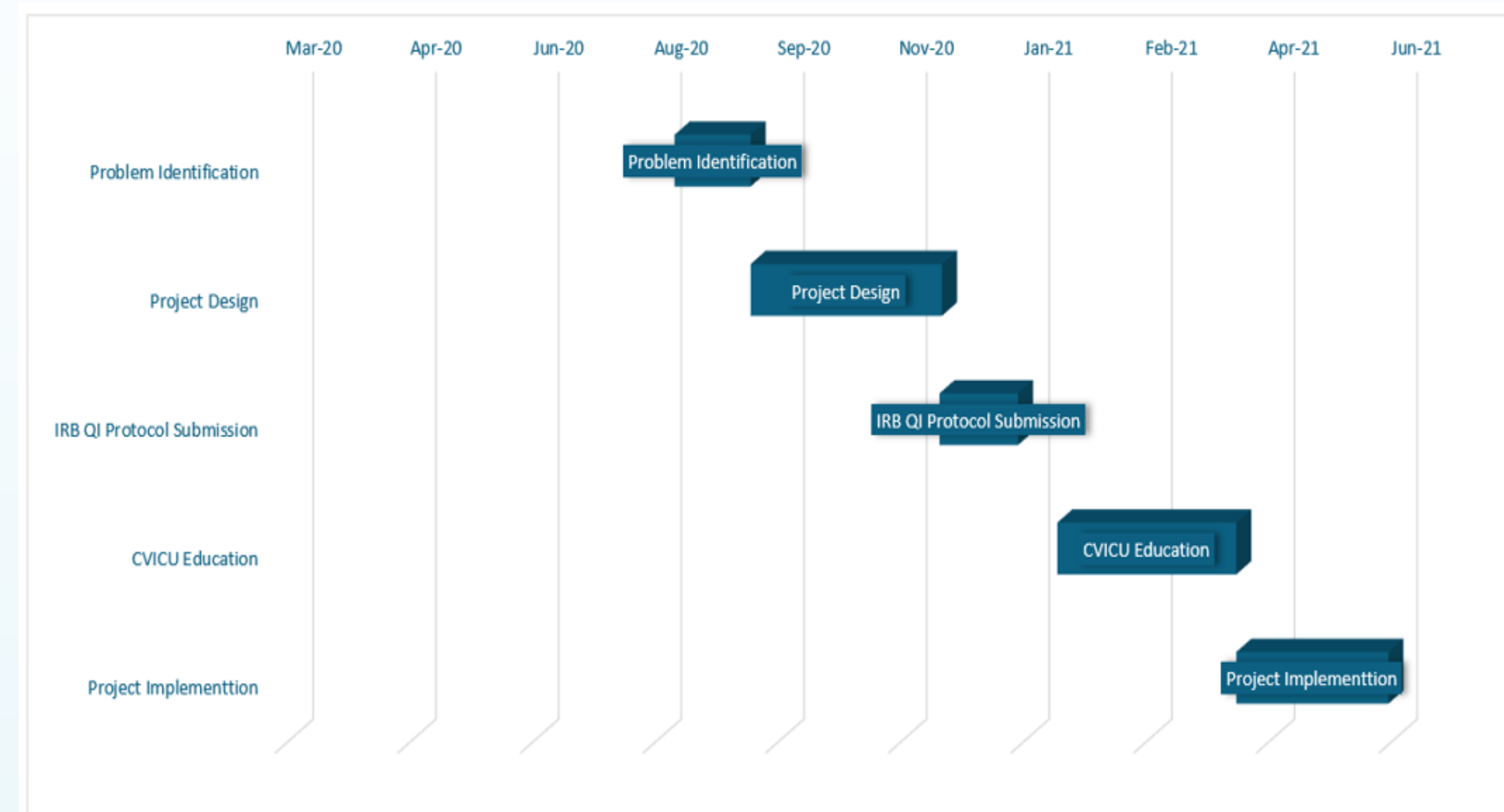
- Early identification and recognition of stroke improves patient outcomes.
- The National Institutes of Health Stroke Scale (NIHSS) is a valid and reliable tool that assesses for stroke-related deficit.
- Carotid intervention/procedures increase the risk for stroke.
- Clinical practice guidelines recommend the NIHSS to assess carotid intervention/procedural patients.
- The American Heart Association and the American Stroke Association recommends the NIHSS assessment tool.

## Theoretical Basis

### Lewin's Change Management Model



## Timeline



## Intervention

### NIHSS and Neuro Skills Class:

- All CVICU nurses (ICU & Progressive) attended the NIHSS and Neuro Skills Class.

### Process Change:

- Prior to process change
- IRB quality improvement protocol was submitted and approved by the Parkview IRB.
- Included all carotid procedural/intervention patients.

- NIHSS assessment completed on all carotid patients at set intervals.

- Pre-procedural/surgical
- 2 hours s post-procedural/surgery
- At discharge

Interventions were established per the recommendation of the Vascular Nurses Association Clinical Practice Guidelines for carotid procedural/surgical patients.

## Evaluation

- Updates were emailed to CVICU leadership and nursing
- 20 patients total included in the 3-month evaluation.
- Expected symptoms of carotid surgical intervention were distinguishable from stroke signs and symptoms.
  - Patients did not require added interventions or extended length of stay.

### Chart audits:

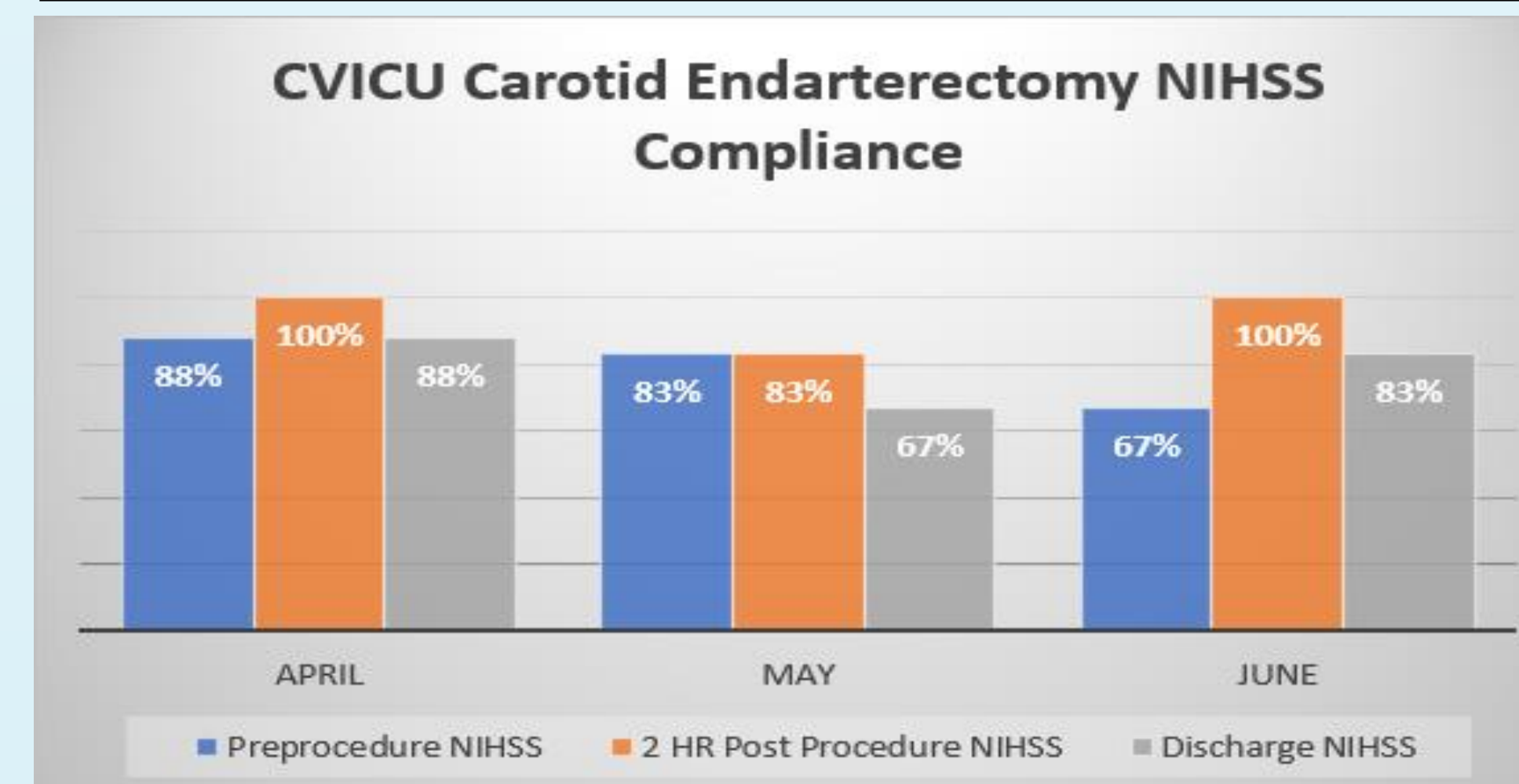
- All carotid patient's charts were audited using a data collection tool.
- Audits were completed April 1, 2021 – June 30, 2021.
- Data collected for completion of the NIHSS at the set intervals.

### Problems:

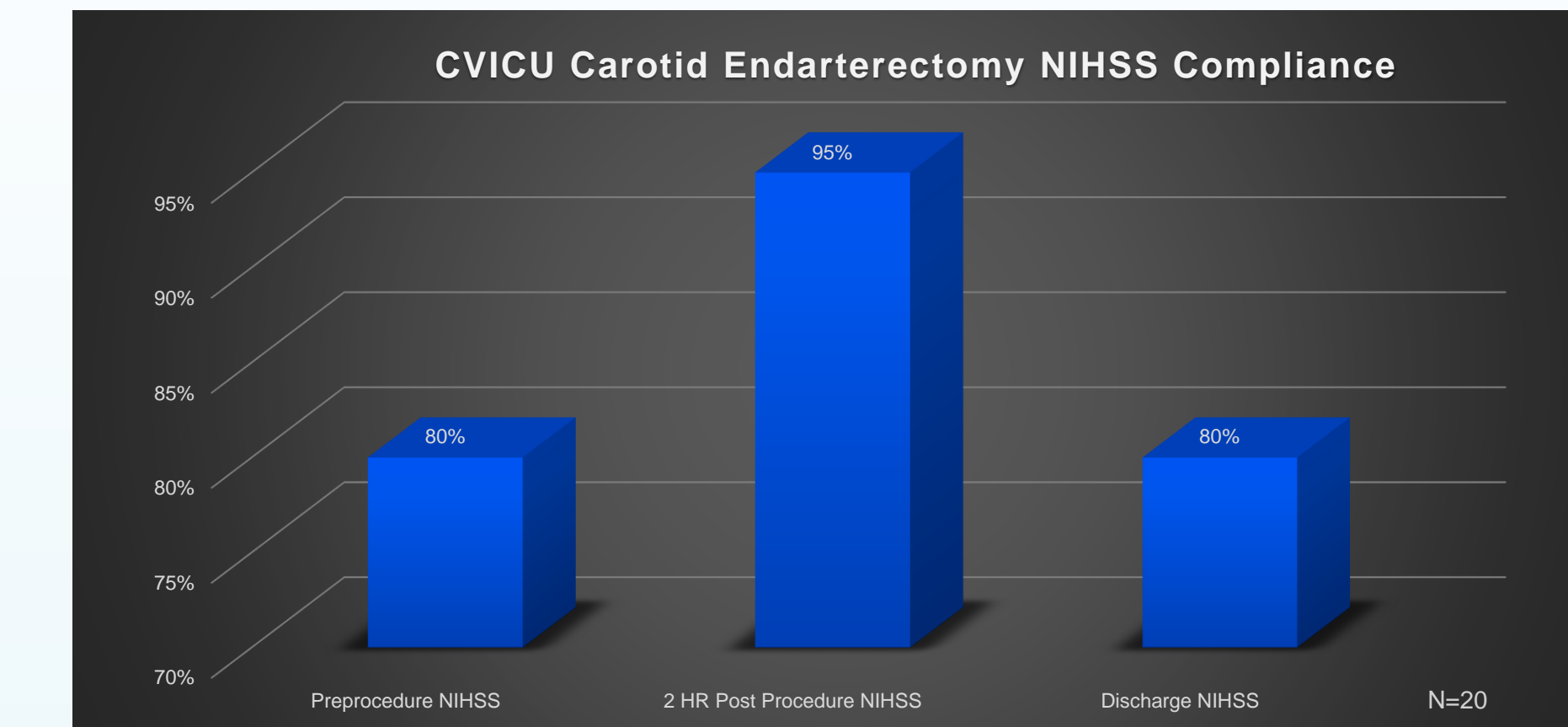
- Integrating change of practice in the CVICU.
- Buy-in from all CV surgeons.
- Completion of required NIHSS at all time intervals.

### Solutions:

- Communication via emails and rounding with leadership and nursing.
- Support gained from senior leadership.
- Epic documentation areas added for ease of documentation.



## Conclusion



- NIHSS process change has been successfully implemented into practice in the CVICU.
- Improved awareness of post carotid complications.
- This process change has been recognized as best practice and will be duplicated in all areas that recover carotid patients.

### APRN Implications:

- Improved collaboration between nursing and the medical team.

## References

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