

Parkview Health

## Parkview Health Research Repository

---

Nursing Publications

Nursing Research

---

11-9-2022

### Creating the Stroke Compliance Report for System Wide Use

Staci Howard BSN, RN

Samantha Baker BSN, RN

Follow this and additional works at: <https://researchrepository.parkviewhealth.org/nursing-articles>



Part of the [Nursing Commons](#)

---

# Creating the Stroke Compliance Report for System Wide Use

Staci Howard, BSN, RN  
Samantha Baker, BSN, RN  
Parkview Health



## Objectives

- Understand the importance of stroke core measure compliance
- Identify core measure completion on stroke patients

## Introduction

- Stroke core measures are set forth by American Heart and Stroke Association
- To maintain accreditation as a comprehensive stroke center, adherence and completion of guidelines is expected
- Nurse leaders (charge nurses) complete audits every shift utilizing specific core measure check list

## Purpose/Aim

- The aim of this project was to create an all-encompassing stroke core measure report in one easy to access location which would decrease time spent completing audits

## Problem

- Feedback regarding audit tool determined it to be cumbersome and tedious
- Each audit required nurse leader to enter each patient record to search for the information
- Completion of the audit took a considerable amount of time which removed the nurse leader from the bedside and patient care

## Methods

- Collaboration with Inpatient Neurology Nurse Leads, Stroke Team Coordinators, Information Services, and Epic analyst
- Reviewing the provided guidelines from American Heart and Stroke Association, the accredited governing body, and the current stroke audit tool used to ensure all requirements for inpatient stroke patients were captured in report
- A stroke compliance report was developed in the EMR

Stroke/TIA Inpatient Nursing Audit Checklist	
All checklist items pertain to ischemic strokes	
* these checklist items pertain to hemorrhagic strokes too (SAH/ICH)	
<b>VITAL SIGNS/NEURO CHECKS &amp; STANDARDS OF CARE:</b> * ICU: Complete per ICU standards of care (if post by telephone, use Post-IV Alteplase VS/Neuro Check Planning & Hand-Off Tool) * Non-ICU: Vitals Q4 hrs and Neuro Checks Q4 hrs per MD order Ensure Order for Tele-monitor is placed and monitor placed on patient	
<b>Items completed during Admission</b>	<b>Items completed at Discharge</b>
1. <b>ADMISSION/BASELINE NIHSS</b> * <b>YALE SWALLOW SCREEN:</b> Must be completed here at PRMC * Completed prior to ANY oral intake including medication * <input type="checkbox"/> pass <input type="checkbox"/> fail * Document results in "Yale Swallow Protocol" flowchart	1. <b>DISCHARGE NEWS</b> * <b>DISCHARGE ON ANTIPLATELET</b> (e.g. aspirin, clopidogrel) or * <input type="checkbox"/> contraindications documented by MD/NP
2. <b>LYE PROPHYLAXIS:</b> Pharmacological or Mechanical Initiate by end of hospital day two * Pharmacologic Prophylaxis and/or * Mechanical Prophylaxis (e.g. SCDS) or * <input type="checkbox"/> contraindications documented by MD/NP	2. <b>DISCHARGE ON STATIN</b> or * <input type="checkbox"/> contraindications documented by MD/NP
3. <b>ANTIPLATELET THERAPY:</b> (e.g. aspirin, clopidogrel) Initiate by end of hospital day two or * <input type="checkbox"/> contraindications documented by MD/NP * <b>Must wait 24 hours after alteplase administration to initiate antiplatelet</b>	3. <b>HISTORY OF OR DOCUMENTED A FIB/FLUTTER DURING ADMISSION:</b> <input type="checkbox"/> yes <input type="checkbox"/> no * If no, contact MD; pt may require 30 day home monitoring or LINC
4. <b>ANTICOAGULATION THERAPY:</b> (e.g. heparin, warfarin, apixaban, etc.) Initiate by end of hospital day two * For history or evidence of A-fib/A-Flutter or * <input type="checkbox"/> contraindications documented by MD/NP	4. <b>DISCHARGE STROKE SPECIFIC EDUCATION:</b> * Documented in EPIC that stroke education with "teach back" completed with pt/family (utilize Stroke Manual) including: * How to activate EMS * Follow-up after discharge * Discharge meds * Individualized Stroke Risk Factors and * Signs and Symptoms of Stroke (B.E.F.A.S.T.)
5. <b>REHAB SERVICES:</b> * Assessed by therapy services: <input type="checkbox"/> OT <input type="checkbox"/> PT <input type="checkbox"/> ST * Post-Acute Care Screen (Rehab/CCC) <input type="checkbox"/> completed * Pre-morbid mRS on admission <input type="checkbox"/> completed	5. <b>REHAB SERVICES:</b> * discharge mRS on <input type="checkbox"/> completed
6. <b>Hgb A1c drawn:</b> Must be drawn within 48 HRS of admission * MD notified of elevated LDL * <input type="checkbox"/> Contraindication documented by MD/NP * <b>LIPID PROFILE NOT REQUIRED</b> if lipid profile drawn within the last 30 days.	6. <b>STROKE CARE PLAN:</b> Must be initiated w/in 24 hours of admission and document daily
7. <b>LIPID PROFILE:</b> Must be drawn within 48 HRS of admission * MD notified of elevated LDL * <input type="checkbox"/> Contraindication documented by MD/NP * <b>LIPID PROFILE NOT REQUIRED</b> if lipid profile drawn within the last 30 days.	7. <b>STROKE SPECIFIC EDUCATION:</b> * Documented in EPIC that stroke education with "teach back" completed with pt/family (utilize Stroke Manual) including: 1) How to activate EMS 2) Follow-up after discharge 3) Discharge needs 4) Individualized Stroke Risk Factors and 5) Signs and Symptoms of Stroke (B.E.F.A.S.T.)
8. <b>STATIN:</b> * <input type="checkbox"/> 70 must initiate statin or * <input type="checkbox"/> Contraindication documented by MD/NP	8. <b>STROKE CARE PLAN:</b> Must be initiated w/in 24 hours of admission and document daily
9. <b>STROKE EDUCATION HANDBOOK:</b> * Given to patient, family and documented	9. <b>STROKE SPECIFIC EDUCATION:</b> * Documented in EPIC that stroke education with "teach back" completed with pt/family (utilize Stroke Manual) including: 1) How to activate EMS 2) Follow-up after discharge 3) Discharge needs 4) Individualized Stroke Risk Factors and 5) Signs and Symptoms of Stroke (B.E.F.A.S.T.)
10. <b>STROKE CARE PLAN:</b> Must be initiated w/in 24 hours of admission and document daily	10. <b>STROKE SPECIFIC EDUCATION:</b> * Documented in EPIC that stroke education with "teach back" completed with pt/family (utilize Stroke Manual) including: 1) How to activate EMS 2) Follow-up after discharge 3) Discharge needs 4) Individualized Stroke Risk Factors and 5) Signs and Symptoms of Stroke (B.E.F.A.S.T.)
11. <b>STROKE SPECIFIC EDUCATION:</b> * Documented in EPIC that stroke education with "teach back" completed with pt/family (utilize Stroke Manual) including: 1) How to activate EMS 2) Follow-up after discharge 3) Discharge needs 4) Individualized Stroke Risk Factors and 5) Signs and Symptoms of Stroke (B.E.F.A.S.T.)	11. <b>Patient Sticker Here</b>

## Disclosure Statement

Both contributing authors and presenters have no relevant conflicts of interests to disclose

Department	Ro/Na	Pal MF	Primary Problem	Primary Dx	Admit Date/Time
Prmc 2 South	2...	T... 7...	Stroke-like symptoms (Principal Hospital Problem)	Cerebrovascular accident (CVA), unspecified mechanism (CMS/HCC)	10/03/2022 2221
Length of Stay	First NIHSS Score	First Yale Swallow Screen	Last Yale Swallow Screen		
6d 10h 14	14 @ 10/3/2022 2235 by [redacted] RN	Fail- maintain patient NPO and obtain order for speech evaluation @ 10/3/2022 2255 by [redacted] RN	Fail- maintain patient NPO and obtain order for speech evaluation @ 10/3/2022 2255 by [redacted] RN		
Anticoag Meds Given	Antithrom Med Given	Assessed for Rehab?			
heparin, porcine injection 5,000 units/mL	aspirin suppository, aspirin EC tablet, heparin, porcine injection 5,000 units/mL	<input checked="" type="checkbox"/>			
Last HbA1c Value	Last HBA1C Date	Last LDL	Last LDL Dt	Statin Meds Given	Stroke Education?
9.8	10/04/2022	103	10/03/2022	atorvastatin (LIPITOR) tablet	Yes
Stroke Care Plan?	First mRS	Last mRS			
<input checked="" type="checkbox"/>	Moderate disability @ 10/4/2022 2000 by [redacted] RN	Moderate disability @ 10/4/2022 2000 by [redacted] RN			
PreMorbid mRS	Discharge mRS				
mRS pre-morbid: 0 @ 10/4/2022 1200 by [redacted] PT	mRS current: 4 @ 10/4/2022 1200 by [redacted] PT				

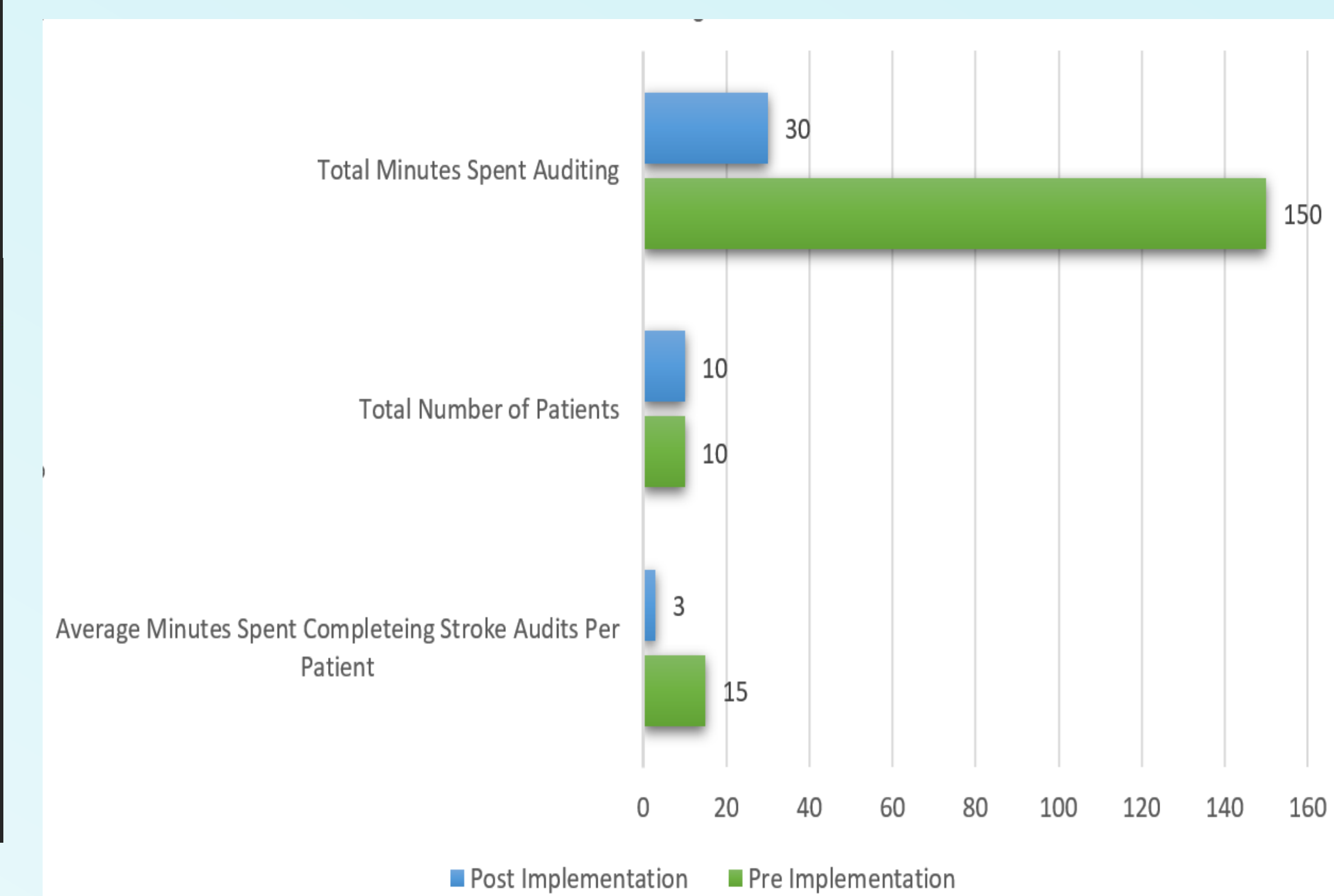
- Report was reviewed by other neuro nurse leads, bedside staff, and neuro manager to test over all useability
- Further collaboration with Information services to ensure report completed based on feedback

## References

- Haas K, Rücker V, Hermanek P, et al. Association between adherence to Quality Indicators and 7-day in-hospital mortality after acute ischemic stroke. *Stroke*. 2020;51(12):3664-3672. doi:10.1161/strokeaha.120.029968
- Kleindorfer DO, Towfighi A, Chaturvedi S, et al. 2021 guideline for the prevention of stroke in patients with stroke and transient ischemic attack: A guideline from the American Heart Association/American Stroke Association. *Stroke*. 2021;52(7):364-467. doi:10.1161/str.0000000000000383
- Wu DT, Vennemeyer S, Brown K, et al. Usability testing of an interactive dashboard for surgical quality improvement in a large congenital heart center. *Applied Clinical Informatics*. 2019;10(05):859-869. doi:10.1055/s-0039-1698466

## Results

- Completion and implementation in May 2021
- Pre-implementation audit completion duration of 150 minutes per shift
- Post-implementation audit completion duration of 30 minutes
- This is an 80% decrease in audit completion time



## Conclusion

- The creation and initiation of the Stroke Compliance Report has improved the timeliness and efficiency of audit completion
- Helps to verify all inpatient stroke core measures are met which ensures all stroke patients are receiving the evidence-based care they need and deserve
- The dashboard will now be available system wide