

# Will a Documentation Tool with Clear Visual Cues Improve Consistency, Accessibility, and Clarity in Nursing Neurological Documentation in Ischemic Stroke Patients who are Treated with Alteplase?

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## Purpose/Background:

During a Stroke Certification evaluation, the Joint Commission (TJC) identified neurological assessment documentation as an issue to be addressed.

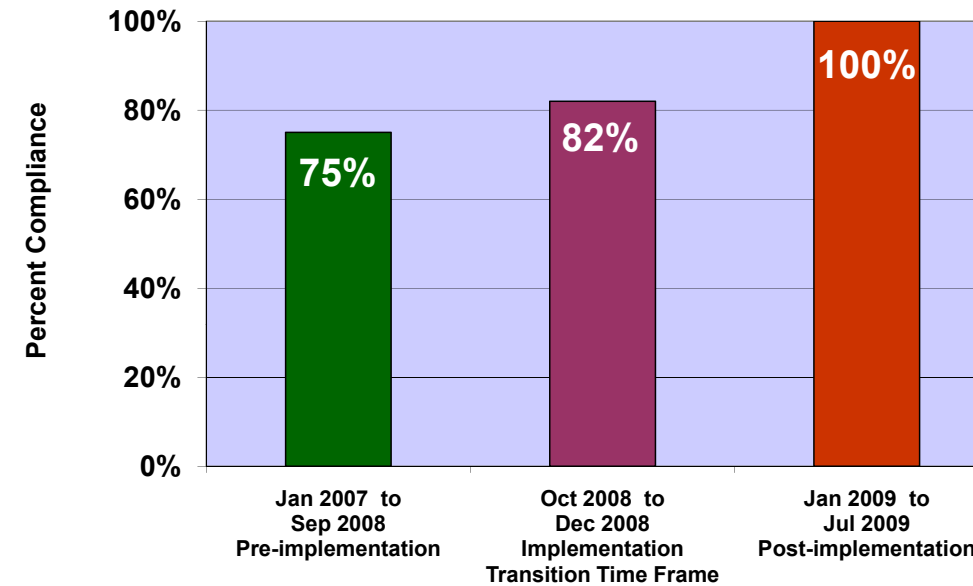
The purpose of this prospective study was to identify issues with inconsistency, accessibility, and clarity of frequent neurological assessment nursing documentation in patients with an ischemic stroke who receive Alteplase, and implement a documentation tool for Emergency Department (ED) and Intensive Care Unit (ICU) nurses to address those issues. An intervention in the form of a color coded documentation tool was developed and implemented.

## Objective

To improve the consistency, location, compliance, and access to neurological nursing assessment documentation in the ischemic stroke patient receiving an Alteplase infusion.

**Conclusion:** Visual cues and consistency of documentation location facilitate compliance with assessment protocol, access to patient information, and rapid identification of neurological deterioration.

## Documentation Compliance of Neurological Assessment with Alteplase Infusion for Ischemic Stroke Using a Color-coded Documentation Tool



**TPA ALTEPLASE DOCUMENTATION TOOL FOR ACUTE ISCHEMIC STROKE**  
COMPLETE DOCUMENTATION IS REQUIRED FOR JOINT COMMISSION PRIMARY STROKE CENTERS

\*\*\*If systolic BP greater than 180 mmHg or diastolic BP greater than 105 mmHg increase the frequency of the vital signs to every 15 minutes during and 2 hours post Alteplase infusion. Administer antihypertensive medications to maintain BP below these levels per protocol

## Design Method:

The stroke patient's hybrid (paper and electronic) medical record had numerous areas available for both electronic and paper nursing documentation options making them time consuming and confusing.

A paper documentation tool was created utilizing a color coded form indicating the timing and frequency of the neurological assessment following hospital Alteplase protocol for the first 24 hours post Alteplase infusion timeframe. The top time border is color coded red for every 15 minute neurological assessment, purple for every 30 minute assessments, and blue for hourly documentation up to the 24 hours post infusion period.

## Results:

Thirty patients were evaluated in this study from January 2007 to July 2009. Fourteen patients from January 2007 to September 2008 were monitored for consistencies and compliance with our hospital's neurological assessment protocol. Compliance with documentation time interval protocols was found to be 75%.

First and second drafts of the documentation tool were implemented from October 2008 to December 2008 in four ischemic stroke patients treated with Alteplase. Documentation improved to 82% compliance using the color coded documentation tool. From January 2009 to present, the color coded documentation tool was fully implemented. Twelve patients were treated from January to July 2009. Documentation compliance improved to 100%.