

Increasing Pre-Notification for Presumed Stroke Patients to Reduce ED Door to Thrombolytic Time

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Background/ Problem

- Emergency Medical Services (EMS) hospital prenotification is associated with improved evaluation, timelier stroke treatment, and more eligible patients treated with thrombolytics.
- Delays in door to thrombolytics for patients with ischemic stroke are associated with worse clinical outcomes.
- Pre-notification by EMS and mobilization of the hospitals stroke team will increase the probability of the appropriately screened acute stroke patient receiving thrombolytic therapy.

Problem: Not meeting the goal for prehospital notification for acute stroke?

CLINICAL QUESTION

Will increasing EMS prenotification compliance decrease door to thrombolytics time in the acute stroke patients?

METHODOLOGY

- Collaboration with EMS and the Emergency Department and presentation to the ED Nursing Service Line Council
- Evidence-based Literature Review
- EMS updated their prehospital stroke scale
- ED developed a pre notification tool (triage worksheet)
- Set up an electronic mailbox to receive the prehospital care reports
- Registrar documentation of the EMS Agency in the Electronic Medical Record
- Created a feedback form (completed by the Stroke team and Provided to EMS)
- Interdisciplinary Education plan developed
- Initiated quarterly meetings with the EMS Provider Liaison

RESULTS

EMS Pre notification Project Goal:
50%

Results:

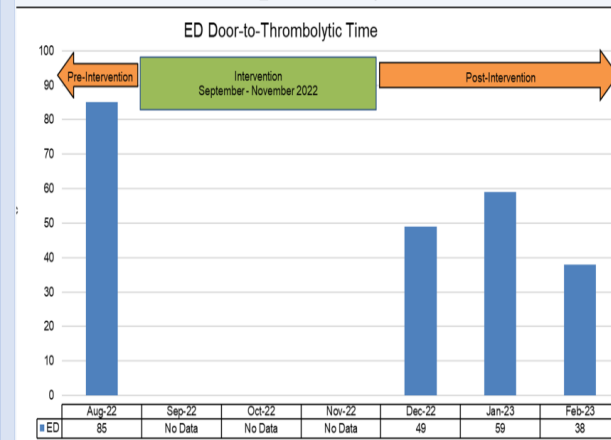
Improved EMS Pre notification from 13% to 67%

Goal for Door to needle time:

Less than 60 minutes

Results:

Improved Door to needle time decreased from 85 minutes to 49, 59, 38 minutes respectively



IMPLICATIONS

- Interdisciplinary collaboration, evaluation, and continual monitoring of data metrics is essential to continued success
- This work is replicable in other organizations seeking to improve patient outcomes in the acute stroke patient

CONCLUSIONS

The new EMS pre-notification tool, enhanced workflows and interdisciplinary partnership and education resulted in earlier notification and improved ED readiness for the acute stroke patient; resulting in reduced door-to-thrombolytic time.

REFERENCES

Lin CB, Peterson ED, Smith EE, Saver JL, Liang L, Xian Y, Olson DM, Shah BR, Hernandez AF, Schwamm LH, Fonarow GC. *Emergency medical service hospital prenotification is associated with improved evaluation and treatment of acute ischemic stroke.* Circ Cardiovasc Qual Outcomes. 2012 Jul 1;5(4):514-22. doi: 10.1161/CIRCOUTCOMES.112.965210. Epub 2012 Jul 10. PMID: 22787065.