

Abstract WP217: EMS Quarterback Role Improves Stroke Alert Time Targets

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Abstract

Background: Process standardization is an effective tool to improve efficiency in acute stroke assessment and treatment. Pre-hospital providers use standardized assessment tools, stroke protocols, and communication guidelines but these can vary for squads directed by various Medical Controls. In May 2015, the University Hospitals- Cleveland Comprehensive Stroke Center initiated a Direct-to-CT policy for acute stroke patients but had difficulty adhering to the process because the staff and process of receiving the EMS calls and directing EMS on arrival varied.

Hypothesis: A dedicated EMS liaison position in the ED could have a significant impact on improving communication and engagement with pre-hospital EMS providers to improve assessment and treatment times for transported acute stroke patients.

Methods: In August 2016, a “Quarterback” (QB) position for an Advanced Stroke Life Support certified paramedic was developed to be stationed at the ED entrance, answer all incoming EMS calls, activate alerts for Stroke-Trauma-STEMI, direct incoming squads, expedite registration, and provide feedback on patient outcomes.

Results: The implementation of the EMS Quarterback role was associated with improved Stroke Alert processes from 1q 2016- pre-implementation of the EMS Quarterback role and 1q 2017, post-implementation: The percentage of Stroke Alerts called by EMS prior to arrival increased from 50% to 86%. The percentage of patients that went direct to CT increased from 23% to 92%. The average Door-to-CT times decreased from 21 minutes to 9.7 minutes overall, with 8 minutes for these stroke alerts called prior to arrival by EMS. The average Door-to-Needle times for IV-tPA decreased from 44 minutes to 34 minutes.

Conclusion: The innovative EMS Quarterback role in a busy, urban ED was associated with a significant improvement in assessment and treatment times for patients with acute stroke as well as improved communication and engagement with pre-hospital providers.

Footnotes

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