

STROKE ALERT NOTIFICATION BY EMERGENCY MEDICAL DISPATCH: ZERO MINUTE STROKE PREDICTABILITY. L Frederiksen, C Gibson, J Harris, M Nugent, K Hodges, R Swift.

Introduction: MEDIC EMS, headquartered in Davenport, IA, is a non-profit emergency medical services (EMS) corporation. MEDIC EMS serves a population base of approximately 175,000 people, and its primary 911 ambulance coverage area is approximately 375 (82%) of Scott County's 456 total square miles. All MEDIC EMS System Status Controllers are Certified Emergency Medical Dispatchers (EMDs) through the International Academies of Emergency Dispatch (IAED). The aim of this study, conducted by MEDIC EMS, is to expedite treatment for patients transported by ambulance to Primary Stroke Centers in Scott County, Iowa through early stroke identification and hospital notification by MEDIC EMS EMDs.

Methods: Beginning in 2010, IAED introduced the Stroke Diagnostic Tool as part of the MPDS (version 12.1). The tool was provided as a resource to assist EMDs in gathering the information necessary to determine stroke alert. A primary goal of the new Stroke Diagnostic Tool involves the ability to identify, study, and achieve "zero minute" stroke predictability at the dispatch level, enabling immediate notification of Primary Stroke Centers in an effort to expedite treatment for stroke patients. For this study, MEDIC staff reviewed data from stroke alerts called in by field responders for 32 patients complaining of stroke-like symptoms between January 2012 and June 2013 to determine whether EMDs could have made the same alerts using the diagnostic tool and, if so, how much time would have been saved.

Results: MEDIC EMS found that if the reviewed alerts had been called at the dispatch point instead, an average of 18 minutes and 51 seconds would have been saved, with a range of 44 minutes at maximum and 6 minutes at minimum.

Conclusion: Based on the findings, MEDIC EMS developed an EMD stroke alert protocol adapted from the Stroke Diagnostic Tool and MPDS v12.2 Protocol 28 for local use. MEDIC EMS has received commitment from administrators at their receiving Primary Stroke Centers to respond to stroke alerts called by MEDIC EMS EMD. This new protocol was implemented in September, 2013, and new data will be collected to review its success.