

Personal profile, not neighborhood factors, determines who calls EMS for stroke

September 18 2015

Neighborhood factors do not influence the use of emergency medical services (EMS) for stroke as strongly as individual factors do, despite earlier indications that socio-demographic characteristics of the neighborhood explain low rates of EMS activation for this life-threatening emergency. A study published online yesterday in *Annals of Emergency Medicine* found that neighborhood characteristics like poverty, the number of older adults living in the area and violent crime matter much less than stroke severity when it comes to seeking prompt treatment for stroke.

"Using an ambulance to get to the hospital really greases the wheels of the process and can lead to better outcomes but many patients still do not understand the importance of early intervention with [stroke](#)," said lead study author William Meurer, MD, MS of the Departments of Emergency Medicine and Neurology at the University of Michigan, Ann Arbor, Mich. "The proportion of neighborhood stroke cases arriving by EMS varied widely: from 17 percent in one neighborhood to 81 percent in another, but no single factor accounted for that disparity. The worrisome finding is that fewer than one-third (31.7 percent) of patients overall arrived at the ER within 3 hours of the onset of stroke."

Patients treated within 3 hours of the onset of [stroke symptoms](#) have the best chance of making the fullest recovery.

Overall, fewer than half of all [stroke patients](#) studied arrived by EMS (47.6 percent). Individual factors associated with decreased odds of

