# Abstract submission for ESOC 2018

# Socioeconomic disparities in prehospital stroke care in Sweden?

***Background:*** Recent studies have shown socioeconomic disparities in stroke outcomes. Here, we investigated whether the prehospital stroke care differs with respect to socioeconomic status (SES).

***Methods:*** Consecutive stroke and TIA patients (n=3006) admitted to Stroke Units at the Sahlgrenska University Hospital, Gothenburg, Sweden, November 1, 2014 to July 31, 2016 were included. Data on prehospital care was obtained from a local stroke register. Socioeconomic status was classified according to the average level of income and education within each patient’s neighborhood (postcode area).

***Results:*** The median delay from calling the emergency medical communication center (EMCC) to brain computer tomography was performed at hospital arrival was 3 h 49 min

(95% confidence interval (CI) 3 h 10 min to 4 h 35 min) for patients within the lowest SES tertile and 3 h 24 min (95% CI 2 h 48 min to 4 h 8 min) for the highest tertile (p<0.05). Patients with lower SES were less likely to receive the highest priority in the ambulance (p<0.05), were more often down-prioritized in the ambulance compared to the EMCC-priority (p<0.05), and had lower rates of prehospital recognition of stroke/TIA (p<0.05) than those with high SES. No inequities were found concerning EMCC-prioritization, the probability of ambulance transport or in the ambulance nurses’ performance of stroke specific actions once stroke/TIA was recognized.

***Conclusions:*** We found socioeconomic inequities in prehospital stroke care which could affect the efficacy of acute stroke treatments. The ambulance nurses’ limited ability to recognize stroke/TIA may partly explain the observed inequities.