Introduction:
We aim to find out the outcomes of patients brought in by EMS who had ROSC following non-traumatic OHCA and started on TH at 34oC.

Methods:
This is retrospective case record review. Inclusion criteria were all patients who had non-traumatic OHCA conveyed by emergency medical services to our Emergency Department, who had ROSC and started TH in ED for the period 1st Aug 2012 to 31st Aug 2014. Exclusion criteria were traumatic OHCA and all patients declared dead at scene.

Data collection followed Ustein template. EMS data were from National Cardiac Arrest registry. Data of patients admitted were from ED and inpatient electronic case records. Patient were followed up for 30 days. All OHCA were conveyed by EMS to EDs for continued care. Paramedic are trained in advanced life support. All airway was managed with supraglottic airway device, placed on mechanical compression device and intravenous adrenaline were administered. Our targeted temperature for TH was 34oC and followed a 24hrs cooling protocol in the intensive care unit (ICU).

Results:
There was 888 nontraumatic OHCA. 225 had ROSC in ED but only 23 received TH.
Of 23 who received TH, 5 died in ED, 18 were admitted. 12 subsequently died in hospital while 4 were alive at 30-days. 2 had cerebral performance category (CPC) 4, 1 had CPC 3 and 1 had CPC 1.
Among patients who received TH, 10 were witnessed arrest by family, 4 by EMS provider, 1 by healthcare provider and 8 were unwitnessed. 15 did not received bystander CPR. 2 had bystander AED applied. The initial rhythm by EMS were 13 asystole, 7 PEA, 2 VF and 1 unknown. 2 had field ROSC.

Conclusion:
10% of patients who had ROSC in ED had TH. Patients who received TH did not have good outcomes, although 65% had a witnessed arrest, most did not have VF as initial rhythm.