



## **The Association of Intra-Arrest Transport and Outcomes for Cardiac Arrest: Challenges in Time-Dependent Biases**

**Dr. Brian Grunau, MD, M.HSc.**

Scientist, CHÉOS

Emergency Physician, St. Paul's Hospital

Assistant Professor, Department of Emergency Medicine, UBC

Resuscitation Innovation Lead, Emergency Medicine Network

Paramedics follow established guidelines for the treatment of out-of-hospital cardiac arrest. However, decision making about if and when patients who are unable to be resuscitated (i.e., achieve a pulse) with initial on-scene efforts are transported to the hospital varies considerably by agency and region. Previous data show wide variability in rates of transport during cardiac arrest, with some EMS agencies transporting nearly all patients regardless of response to resuscitation, while this practice is uncommon in other agencies if a pulse is not achieved.

Observational research examining optimal strategies for out-of-hospital cardiac arrest management is limited by several time-dependent biases. Of these, indication bias plays a critical role: cases who are unable to be resuscitated by initial efforts, which have poor prognosis, are treated with additional interventions which are thus also statistically associated with unfavourable outcomes despite actually being potentially beneficial.

Using data from the North American Resuscitation Outcomes Consortium research network, we sought to address the impact of time-dependent biases while estimating the association of intra-arrest transport, in comparison to continued on-scene resuscitation, for out-of-hospital cardiac arrest.

**Online event (registration required)**

**February 10, 2021**

**12:00-1:00 PM PST**



**For more information and to register:**  
[bit.ly/BrianGrunau](https://bit.ly/BrianGrunau)