Overview: To determine the viability of prehospital noninvasive ventilation (NIV) of conscious patients upon paramedic arrival who required ventilatory support (bag-valve-mask ventilation [BVM], NIV or endotracheal intubation) during transport or within 30 minutes of arrival at the emergency department (ED) as a prelude to a definitive clinical trial.

Conclusions: Prehospital treatment significantly improved patient vital signs although a large proportion of patients still required ventilatory support either prehospital or in their ED. Further research is indicated to determine if these patients would benefit from prehospital NIV.