

## The Publication Impact of London's Air Ambulance on the Field of Pre-Hospital Medicine and Its Application to Air Ambulances Internationally: A Bibliometric Analysis

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**Abstract :** Background: London's Air Ambulance (LAA) provides advanced pre-hospital trauma care across London, bringing specialist resources and expert trauma teams to patients. Since its inception 32 years ago, LAA has treated over 40,000 pre-hospital patients and significantly contributed to pre-hospital patient care in London. To the authors' best knowledge, this is the first analysis to quantify the magnitude of the publication impact of LAA on the international field of pre-hospital medicine. Method: We searched the Scopus, Web of Science, Google Scholar and PubMed databases to identify LAA focused articles. These were defined as articles on the topic of pre-hospital medicine which either utilised data from LAA, or focused on LAA patients, or were authored by LAA clinicians. A bibliometric analysis was conducted and the impact of each eligible article was classified as either: high (article directly influenced the change or creation of clinical guidelines); medium (the article was referenced in clinical guidelines or had >20 Google Scholar citations or >10 PubMed citations); or low impact (article had <20 Google Scholar citations or <10 PubMed citations). Results: The literature search yielded 1,120 articles in total. 198 articles met our inclusion criteria, and their full text was analysed to determine the level of impact. 19 articles were classified as high-impact, 76 as medium-impact, and 103 as low-impact. 20 of the 76 medium-impact articles were referenced in clinical guidelines but had not prompted changes to the guidelines. Conclusion: To our knowledge, this review is the first to quantify the significant publication impact of LAA within the field of pre-hospital medicine over the last 32 years. LAA publications have focused on and driven clinical innovations in trauma care, particularly in pre-hospital anaesthesia, haemorrhage control, and major incidents, with many impacting national and international guidelines. We recommend a greater emphasis on multidisciplinary pre-hospital collaboration in publications in future research and quality improvement projects across all pre-hospital services.

**Keywords :** air ambulance, pre-hospital medicine, London's Air Ambulance, London HEMS

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