

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:<https://orca.cardiff.ac.uk/id/eprint/174700/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Driscoll, Timothy, Gomes, Barbara, Bell, Steve, Fitzsimmons, Deborah, Jones, Jenna, Jones, Mari, Joseph-Williams, Natalie, Khanom, Ashra, Kingston, Mark, Lloyd, Adam, McFadzean, Isobel, Pillin, Hillary, Pocock, Helen, Price, Delyth, Rosser, Andy, Wright, Lynne, Watkins, Alan, Carson-Stevens, Andrew and Snooks, Helen 2024. PP35 Does mean ambulance handover time at emergency departments correlate with number of handovers per month? *Emergency Medicine Journal* 41 (3), A15-A16. 10.1136/emered-2024-999.35

Publishers page: <https://doi.org/10.1136/emered-2024-999.35>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Does mean ambulance handover time at Emergency Departments correlate with number of handovers per month?

Timothy Driscoll¹, Barbara Gomes¹, Steve Bell², Martina Brown³, Deborah Fitzsimmons¹, Jenna Jones¹, Mari Jones¹, Natalie Joseph-Williams⁴, Ashra Khanom¹, Mark Kingston¹, Adam Lloyd⁵, Joy McFadzean⁴, Hilary Pillin⁶, Helen Pocock⁷, Delyth Price,⁴ Andy Rosser⁸, Lynne Wright⁹, Alan Watkins¹, Andrew Carson-Stevens⁴, Helen Snooks¹,

¹Swansea University, UK; ²North West Ambulance Service NHS Trust, UK; ³South Central Ambulance Service NHS Foundation Trust, UK; ⁴Cardiff University, UK; ⁵Scottish Ambulance Service, UK; ⁶Association of Ambulance Chief Executives, UK; ⁷South Central Ambulance Service NHS Foundation Trust, UK; ⁸West Midlands Ambulance Service University NHS Foundation Trust, UK ⁹Patient and Public Contributor, UK

Background: Busy periods, such as “winter pressures” months, can create challenges for Emergency Departments (EDs) managing patient flow. This may increase risks throughout the healthcare system. ED patients may receive suboptimal care, some patients may remain in ambulances, sometimes for hours, whilst queued ambulances cannot attend other patients.

In some EDs, ambulance queueing is relatively rare; in others, it is more common. As part of the STALLED study, we investigated any association between mean ambulance handover time and the number of monthly handovers.

Methods: We analysed publicly available ambulance collection data for English NHS Trusts between October 2023 and March 2024 from NHS England. We included all Type 1 Acute Trusts, excluding children’s hospitals, those with fewer than 100 handovers per month, and clear outliers.

Results: 105 Trusts were included (10 to 18 per English region). The number of handovers recorded per month varied between 716 and 8,404 with a mean of 3,090. Monthly mean handover time varied between 8 minutes, 45 seconds and 129 minutes, 6 seconds. Figure 1 shows a weak relation between mean handover time and mean monthly handovers.

Conclusion: Mean ambulance handover time is not obviously correlated with mean monthly number of handovers. Therefore, we propose the existence of deeper-rooted obstacles/challenges which warrant further exploration. It also remains to assess temporal patterns in more detail.

While queueing is a problem everywhere to some extent, there is variation in how EDs manage it. Understanding these variations may lead to improvements in patient safety, health outcomes, experience, and costs.

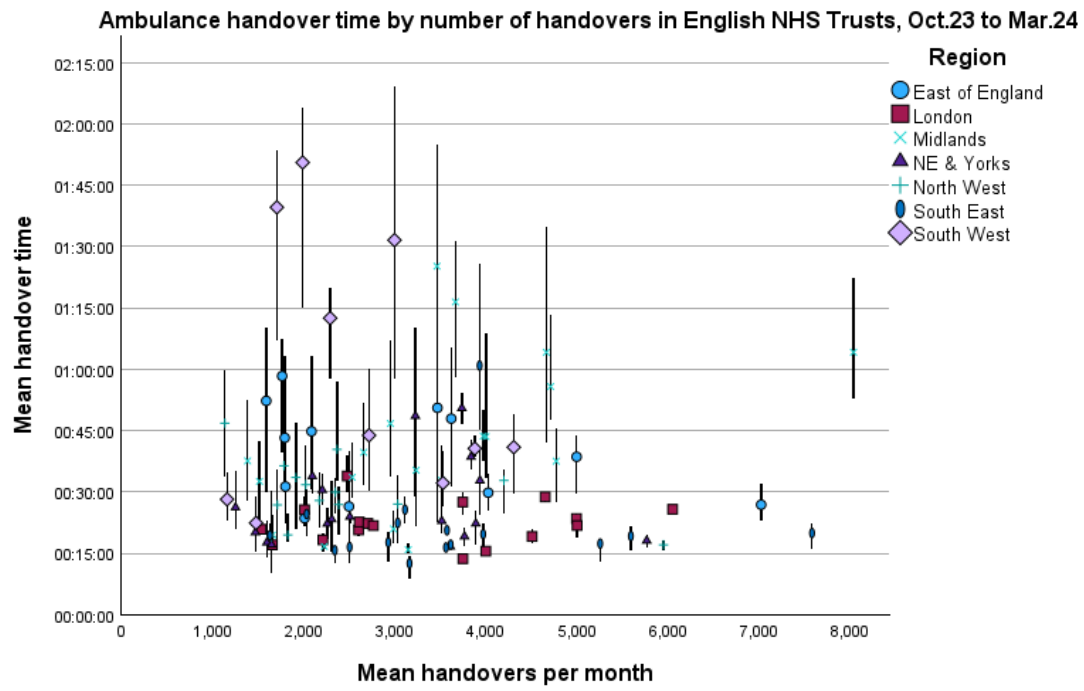


Figure 1: Ambulance handover time y number of handovers in English NHS Trusts, October 2023 to March 2024