PP40 INVOLVING NEWLY-QUALIFIED PARAMEDICS IN PREHOSPITAL RANDOMISED CONTROLLED TRIALS: AN ANALYSIS OF TRAINING, ENROLMENT AND SAFETY DATA WITHIN THE PARAMEDIC ANALGESIA COMPARING KETAMINE AND MORPHINE IN TRAUMA (PACKMAN) STUDY

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Background Prehospital research may require ambulance clinicians to randomise patients in time-critical circumstances, while physically remote from senior support available in other clinical settings. In the PACKMAN randomised controlled trial of ketamine versus morphine, both participating ambulance services permitted newly-qualified paramedics (NQPs - within 2 years of registration) to enrol to the study after completing relevant training, as they would be expected to use the study intervention, were it brought into clinical practice. There is currently limited evidence around the NQP role and any possible link with research participant safety.

Methods We conducted an analysis of the NQP contribution to enrolment, to include review of protocol compliance and safety events, broken down by post-registration period of the paramedic: NQPs (<2 years) or experienced paramedics (>2 years). Both ambulance services provided the following data: trained paramedic numbers, enrolled participant numbers, adverse events and serious adverse events (SAEs), and protocol non-compliances.

Results 142/459 (31%) of study-trained paramedics were NQPs. 117/303 (38%) of participants were enrolled by NQPs (recruitment ongoing). Of participants enrolled by NQPs, 43.6% experienced an adverse event, versus 44.4% of participants enrolled by experienced paramedics (OR 0.96 [0.59 to 1.59]; p=0.893). 2.6% of all NQP-enrolled participants experienced an SAE, versus 2.2% of all those enrolled by experienced paramedics (OR 1.14 [0.16 to 6.9]; p=0.861). Protocol non-compliances were 4 (3.4%) in NQPs and 1 (0.6%) in experienced paramedics (OR 6.27 [0.61 to 310.21] p=0.063).

Conclusion Newly-qualified paramedics made an important contribution to this study, both in terms of patient enrolment, but also in improving the generalisability of study findings across the ambulance setting. We found similar levels of adverse events in NQP versus experienced paramedics. Both serious adverse events and protocol non-compliance were infrequent. We found no evidence of safety implications to including NQPs in this trial. Study training and participation were optional; different considerations may apply for research where participation is mandated.

PP41 AMRES STUDY: UNDERSTANDING AMBULANCE WORKFORCE RETENTION AND ITS IMPACT ON SAFETY

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Background Workforce retention is a critical issue for the ambulance service sector. 1 in 10 paramedics left their job in the 12 months to June 2022. Some 1 in 4 have said when surveyed that they would leave the role as soon as they could find another job. Working experiences of paramedics have been a longstanding concern. Compared to other staff groups, they have consistently lower levels of satisfaction, which have deteriorated further in the last year. In other healthcare sectors high staff turnover has been associated with reduced patient and staff safety. The study aims to understand workforce retention and its impact on safety.

Methods Retrospective routinely collected minimum dataset from the period of 1st January 2015 to 30 September 2022 will be extracted from different databases from three NHS Ambulance Trusts across England and Wales. The minimum dataset will include but not limited to contact, incident, and staff related data. A prespecified anonymisation process will be applied to the extracted datasets creating a unique identifier which will be used to align datasets from different sources. The study methodology will revolve around the application of explorative data analysis (EDA) to better shape knowledge driven decision making using readily available large datasets from the NHS Ambulance Trusts. The nature of EDA is such that relationships between various unexplored variables within large datasets can be explored simultaneously rather than specifying number of variables at a given time and usually in isolation.

Results and conclusion Exploring contributory factors for workforce retention and how this affects patient and staff outcomes using data readily available will provide benefit to patients, staff, and the NHS.

PP42 CALL ASSESSOR-INITIATED REFERRAL WITHOUT CLINICAL DISCUSSION TO MEDICAL SDEC (SAME DAY EMERGENCY CARE): A NEW PATHWAY FOR SUSPECTED PULMONARY EMBOLISM

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Background Same day emergency care (SDEC) aims to rapidly assess, diagnose and treat patients with relevant conditions without admitting them to hospital. Reducing clinical touchpoints during the referral to SDEC may reduce operational burden and improve patient experience. In June 2022, an English ambulance trust implemented a new pathway for call assessors reaching a specific NHS Pathways outcome of adults with suspected pulmonary embolism to refer directly to medical SDEC.

Methods We identified all call-assessor-handled 999 and 111 cases with a final outcome of NHS Pathways suspected pulmonary embolism during the period 1st June 2021 to 31st January 2023 for a single hospital. We reported whether the call assessor involved a clinician, and the receiving service, before and after the new pathway introduction. For the period 1st June 2022 to 1st September 2022 we reviewed attendance and diagnosis outcome for patients at the relevant SDEC.

Results Before the new pathway, 1st June 2021-31st May 2022, 233 patients with suspected pulmonary embolism were