Conclusion The reference standard will form the basis of data analysis in Phase 2 of the project. The performance of the 3 differing tools will be tested in a dataset of routine ambulance service and TARN data. Following this, the most optimal triage tool will be assessed in clinical practice across 4 ambulance services.

PP33 | A SERVICE EVALUATION OF THE EXPERIENCES OF SPECIALIST PARAMEDICS WORKING IN ROTATIONAL ENVIRONMENTS USING A RETROSPECTIVE COHORT

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Background The number of ambulance service-employed paramedic practitioners moving to work in primary care is increasing. Several Health Education England-supported pilot rotational programmes are underway. This study aimed to evaluate the experiences of nine paramedic practitioners in one ambulance service their first year of working on a similar local commissioner-led rotational project (segment one GP home visiting [GPHV], segment two ambulance service solo response vehicle [SRV] and emergency operations control room [EOC] whose aim was to mitigate attrition rates for both the ambulance service and primary care.

Methods We conducted a retrospective cohort study, using electronic anonymous, self-completion, mixed methods questionnaires administered seven times – pre-project, at the end of each rotation, and at the end of the first year of the rotational project. Descriptive statistics of closed questions on challenges, influence over practice, skills used, satisfaction and likelihood of leaving were conducted, and thematic analysis of the open responses conducted.

Results The survey response rate was 100% pre-project, 62.2% (n=28/45) over five rotations (n=15 after GPHV and n=13 after SRV/EOC] and 100% at end year one. Reported challenges included inappropriate utilisation of skills (33% GPHV, 55% SRV/EOC) and poor work life balance (27% GPHV), while opportunities were identified as clinical autonomy, collaboration with other healthcare professionals and clinical development (67%, 60%, 33% GPHV; 54%, 69%, 62% SRV/EOC, respectively). Satisfaction was 67% at year one, attributed to support and development from peers, GPs and immediate managers. Likelihood of leaving was reported to be decreased.

Conclusion Although small in scale, in one locality and only quantitatively descriptive this study has identified that a rotational model contributes to clinically developing and retaining PPs, and offers PPs' views on why that is. Findings support the rotational model, though further research with a larger sample across regions and/or greater qualitative depth is required.

PP34 | COLLECTING EXPERIENCE-BASED EXPERTISE WHEN PLANNING PREHOSPITAL CARE RESEARCH: A STAKEHOLDER EVENT ABOUT EVALUATING PARAMEDICS WORKING IN CARE HOMES

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Background Due to medical advances, the population of care homes is becoming increasingly frail, often with co-morbidities. Recent innovations have seen paramedics take on non-emergency roles within or supporting care homes. This workforce innovation requires urgent evaluation, taking account of the multiple perspectives at stake. Research is more relevant, feasible and accountable if those who commission, deliver and use healthcare services are able to input their professional and personal insights.

Method We conducted a stakeholder event as part of research development work for paramedics working in care homes (PERCH: Preliminary Exploration of paramedic Roles in Care Homes). We invited representatives from care homes, including Enabling Research in Care Homes (ENRICH) network members, ambulance services, primary and secondary care, patient/resident and public members, and the research community. To inform discussion, we presented examples of paramedics working in care homes. We then facilitated small-group discussions about how to evaluate such innovations and recorded views on sticky notes and flipcharts.

Results 23 people attended the event. Clarity of roles and communication processes were considered important to implement the pilot project. Attendees agreed that research outcome measures should include changes in avoidable hospital admissions, emergency department attendances and 999 calls plus staff, patient and family satisfaction. They identified some potential benefits to ambulance services and general practice, such as time saved for other patients, but believed these could be difficult to measure.

Discussion Gaining the insights of a wide range of stakeholders prior to research being designed is an important, but under-utilised approach in research development. People who deliver and receive community-based care have insight derived from personal and professional experience which complements research expertise. Research in care home settings is challenging, and insights from stakeholders were significant in the development of a research proposal about the role of paramedics in care homes (PERCH study). We submitted this to the Health and Care Research Wales Research for Public and Patient Benefit funding scheme in 2019.

PP35 | EVALUATION OF A ROTATIONAL MODEL OF ADVANCED PARAMEDIC PRACTICE IN NORTH WALES: A LOGIC MODEL APPROACH TO DEMONSTRATE EFFECTIVENESS

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Background UK Ambulance Services are under pressure to retain paramedics as diverse career options become increasingly available throughout the NHS for this valuable group of staff. Rotational working is one means of providing a varied clinical portfolio with the aim of sustaining an ambulance service based career over a longer work-span. Prior to implementing a test of an Advanced Paramedic Practitioner (APP) focussed three-part model of rotation which included Primary Care, Clinical Contact Centre and Solo Responding, an effective evaluation framework was required.

Methods The aims of the project were refined during initial team planning and a project workshop which articulated the conditions for success. The theory of change was subsequently

developed through a team-based facilitated session culminating in the development of a driver diagram. Due to the predominantly linear nature of the project and design, a Logic Model approach was selected to then map and construct the detailed evaluations required for each of the key areas identified.

Results Seven individual elements for evaluation were identified through this design process. These comprised of four core areas including the impact of the rotation on Patients, Primary Care, The APPs and Welsh Ambulance Services NHS Trust which would be managed by the project team. In addition, the framework identified elements suitable for external evaluation which consisted of the economic evaluation, a deeper exploration of patient experiences and project effectiveness. External evaluation would test the validity of the overall approach to the project by the internal team and stakeholders. The derived Logic Models were designed to enable formative and summative evaluation throughout the opening phase of the rotation.

Conclusions Using this approach, the project team have constructed a robust, but testable model of evaluation, with the flexibility to map changes as the evaluation yields specific learning points about the project.

PP36 | **USING LINKED HEALTH DATA TO EXPLORE COMPLIANCE WITH AND APPROPRIATENESS OF AMBULANCE TELEPHONE ADVICE**

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Background In England, approximately 10% of patients who contact the ambulance service receive clinical telephone advice rather than a face-to-face ambulance response. This analysis identifies whether patients who receive ambulance telephone advice to attend ED comply with this advice and explores the appropriateness of subsequent ED attendances.

Methods Ambulance CAD, HES (A&E/inpatient) was linked for 2521 hear and treat callers as part of the PhOEBE study. For data linking reasons, the sample includes only patients who had other experiences of contacting the ambulance service. Additional information from the ambulance telephone advice call was linked to the PhOEBE data using the CAD ID and date/time of call. Appropriateness of ED attendances was determined using a method that assesses whether patients receive investigations/treatments in the ED and that appropriateness denotes care that is proportionate to need.

Results This analysis is based on 1892/2521 (75%) cases which have both ambulance telephone advice and ED attendance data, as some ambulance advice information was unavailable. 522 patients (28%) attended ED within 3 days of the ambulance call. Of these, 235 were advised by the ambulance service to attend ED. The remaining 287 patients were advised to seek other care, with most advised to seek GP care (n=180). 81.6% of ED attendances were assessed as appropriate. 129 patients were advised to attend ED and did not attend within 3 days.

Conclusions Ambulance telephone advice information was successfully linked to other health-service information. Patients included in this analysis are older and more likely to be sicker than the general hear and treat population, as all had other experiences of using the ambulance service. Most ED attendances were appropriate. Some patients did not comply with advice to attend ED. More research is required to investigate the factors around compliance with advice to attend ED and to find out what happens to these patients.