The Primary & Emergency Care Innovation Project at the University of Cumbria

A process evaluation of education and skills programmes addressing current issues in primary and emergency care across the North West



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1 Introduction

1.1 Background

In October 2014, Health Education North West (HENW) invited Higher Education Institutes (HEIs) across the North West to propose and develop innovative education and skills proposals that could directly address the current issues facing primary and emergency care across the North West. Recognising the expertise of HEIs in developing innovative education programmes to support workforce development, the funding aimed to galvanise and integrate the expertise of those organisations to test potential new education solutions.

Through this 'Innovation Funding', the University of Cumbria, along with partner institutions, were commissioned from 2015 to develop a series of education and skills programmes that aim to address the 'intense, growing and unsustainable pressure' pressure facing emergency care services, such as tackling workforce shortages and reducing admissions to emergency departments through management of care closer to home.¹ These programmes are focused on three areas of primary and emergency practice: Paramedic practice, Non-medical prescribing and Mental health awareness, with 5 strands overall. The project's aims for each of the strands, as stated on HENW progress reports, are summarised briefly below, and are listed in full along with associated success criteria in each of the relevant sections of the report.

1.1.1 Paramedic practice

- To support the development of an Advanced Community Paramedic role through
 provision of a range of learning modules embedded within existing Higher Education
 Institution Continuing Professional Development frameworks. This has the goal of
 integrating ambulance services into primary care by embedding highly trained paramedic
 practitioners within communities.
- To support the professional development of Emergency Medical Technicians (EMTs) through provision of a Certificate in Higher Education. This will enable EMTs to APL (Accreditation of Prior Learning) the award into a paramedic programme of training, with the goal of sustaining the numbers of paramedics within the Ambulance Service.

1.1.2 Non-medical prescribing

- To support the development of an Extended Community Pharmacist role through provision of learning modules. The goal is for community pharmacists to advise and treat patients with minor ailments within the community.
- To form a Joint Board for Emergency Department and Urgent Care Pharmacy to ensure coherence between HEI education provision and student outcomes.

¹ See NHS England (2016) Commissioning for Quality and Innovation Guidance for 2017-2019. Publications Gateway Reference 06023. Available at https://www.england.nhs.uk/wp-content/uploads/2016/11/cquin-2017-19-guidance.pdf

1.1.3 Mental Health Awareness

To conduct a scoping exercise to establish employer (emergency department)
requirements in the North West region in terms of mental health training for staff.
Thereafter, to provide flexible and innovative training to support the professional
development, education and training of emergency department staff in mental health.
This has the goal of improving services for people who present to A&E with mental health
issues, therefore reducing future attendances.

1.2 Context of the Innovation Fund

Preliminary meetings were held in April/May 2017 with programme leads and the Business Development and Enterprise Manager to gather contextual information and current status of the project streams.

1.2.1 Partnership with HEIs

The project initially envisaged partnership work with 3 key universities (Alongside UoC, the University of Central Lancashire (UCLan) and Edge Hill), due to the geographical area that the North-West Ambulance Service (NWAS) covers and the need, therefore, to involve several HEIs in order to achieve the reach necessary. The EMT and pharmacist strands were initially intended to be developed and delivered in partnership by UoC and UCLan. However, it was agreed at an early stage that these strands would be delivered separately, as UoC have existing resources for clinical training.

1.2.2 Funding

The Business Development and Enterprise Manager at UoC reported that this project is unique to others due to the way that funding was provided and managed. Extra funding was requested from HEFCE and provided for 2 aspects of the project for backfill purposes. Permission was also sought from Health Education England (HEE) for a degree of flexibility with the budget, for example to vire funding to fund places for the EMT Paramedic Practice training. This has required project/financial management skills to ensure the available funds are used optimally.

1.2.3 Fluidity of the project

In normal circumstances, new projects are implemented within a year. The Innovation Fund project has been different, developed instead over a number of years with adaptations being made in response to changes to policy contexts and service needs. There have been a number of contextual factors affecting delivery across both Universities and stakeholders, outside of the immediate control of the project, which have contributed to this. Except where directly relevant to the findings of the data, these are not discussed in detail within this report.

1.3 Evaluation aim and objectives

The evaluation aimed to examine this multi-tiered programme. Whereas this would ordinarily be an outcome/impact evaluation, the challenges that the programme has faced in its delivery mean that a meaningful evaluation requires a more detailed approach which worked from a number of different data sets, connecting together for an overview of the outcomes of the funding.

This means that there are a number of 'moving parts' in the programme, which the evaluation needs to identify, articulate and configure in a meaningful way. In this way, the evaluation is not asking simply whether the training sessions were effective, but also wider-reaching questions around how 'effectiveness' is constituted, and how it can be best evidenced.

Aim

The aim of the evaluation was to explore the impact of the Higher Education Innovation Fund (HEIF) on the development of educational and workforce outcomes within 3 areas of primary/emergency care: paramedic practice, non-medical prescribing and mental health awareness.

Objectives

- 1. To **describe** the overall programme and the assumptions about how it will work to address problems in emergency and primary care. Specifically:
 - a. What are the issues/problems in emergency/primary care that require addressing?
 - b. What is the rationale for the development of the roles of Advanced Community Paramedic (ACP), Emergency Medical Technician (EMT), Emergency Department Pharmacist, and Extended Community Pharmacist?
 - c. What is the rationale for the development of the specific educational programmes relating to these roles and the mental health awareness training for emergency department staff?
- 2. To explore the **context** within which these programmes/roles are being developed and implemented, in particular but not limited to:
 - a. Timescale adjustment
 - b. Difficulties in recruitment
 - c. Delivery of some training by partner universities.
- 3. To examine how the programme is being **implemented**. Specifically:
 - a. How is training delivery achieved (including content, timescales, resources)?
 - b. What training is delivered? (Fidelity was it delivered as intended, Dose numbers registering/completing training, number of planned/delivered cohorts, Adaptations problems faced and overcome, Reach who is trained in relation to original plan)
- 4. To examine **mechanisms of impact** (how the programme produces change). Specifically:
 - a. Acceptability (value) of the programme in developing the role and/or
 - b. Acceptability (value) of the role [upskilled workforce] in addressing problems in primary/emergency care
 - c. Enablers and barriers to implementing the training/role
 - d. Impact of the training in working practice challenges and successes

| e. Unexpected pathways and consequences of the | training |
|--|----------|
|--|----------|

- f. For Mental Health Awareness training and Pharmacist training: knowledge, self-efficacy, goal setting for practice change
- 5. To explore **outcomes** of the programme in relation to contextual factors, implementation and mechanisms of impact.

2 Methodology

2.1 Design

A mixed methods design was used to assess process and change at various stages of the study. The study was to some extent iterative, in that it is designed to allow for extra data collection in response to emerging findings.

Before designing the evaluation, a review of the literature was carried out in order to identify the methodologies and frameworks which have been used in other studies evaluating education programmes in emergency care settings. This helped to ensure that the most appropriate evaluation model was being applied to what was, as described above, an often fluid programme of delivery.²

Complex educational intervention studies with similarities to the current project aims were reviewed and are summarised in Appendix 1 below. Of these, several utilised process evaluation frameworks which captured contextual factors, details about the intervention implementation and outcomes (such as a Steckler and Linnan's Process Evaluation Framework³, an adapted version used by Ellard et al.⁴, or Pawson and Tilley's Realistic Evaluation⁵, used by Erikson et al.⁶). Mixed methods designs were used by all studies. Where possible, pre- and post- training assessments were conducted to assess knowledge and self-efficacy¹: interviews were used to gather data from trainees, providers and staff about, e.g. training content and delivery, how trainees were supported and impact of the training.

² Search criteria included any published study detailing the evaluation of a training or education package designed to upskill emergency healthcare staff. The University of Cumbria's OneSearch search platform, along with specific databases Pubmed, Scopus and Cochrane were searched using the following search terms: Urgent Care OR Emergency Care OR Emergency Department OR Emergency Medicine OR Care AND evaluation AND training OR education (OneSearch); Emergency medicine AND evaluat* AND improvement, Emergency Service, Hospital (MESH), Program Evaluation (MESH) (Cochrane).

³ Steckler, A. and Linnan, L. (2002) Process evaluation for public health interventions and research, San Francisco: Jossey-Bass.

⁴ Ellard, D.R., Chimwaza, W., Davies, D., et al. (2014) Can training in advanced clinical skills in obstetrics, neonatal care and leadership, of non-physician clinicians in Malawi impact on clinical services improvements (the ETATMBA project): a process evaluation, *BMJ Open*, 4:e005751. doi:10.1136/bmjopen-2014-005751; Ellard, D.R., Shemdoe, A., Mazuguni, F., et al. (2016) A qualitative process evaluation of training for nonphysician clinicians/associate clinicians (NPCs/ACs) in emergency maternal, neonatal care and clinical leadership, impact on clinical services improvements in rural Tanzania: the ETATMBA project. *BMJ Open*, 6:e009000. doi:10.1136/bmjopen-2015-009000

⁵ Pawson, R. and Tilley, N. (1997) Realistic evaluation, London: Sage.

⁶ Ericson, A., Löfgren, S., Bolinder, G., Reeves, S., Kitto, S.. & Masiello, I. (2017) Interprofessional education in a student-led emergency department: A realist evaluation. *Journal of Interprofessional Care*, 31 (2), 199-206.

⁷ Walker, D.M., Holme, F. & Zelek, S.T. (2015) A process evaluation of PRONTO simulation training for obstetric and neonatal emergency response teams in Guatemala. *BMC Medical Education*, 15:117. DOI: 10.1186/s12909-015-0401-7

In terms of evaluation framework, it is clear that the development of similar interventions focus on implementation (how delivery is achieved, and what is delivered), context (external factors that affect implementation or outcomes), and mechanisms (how intervention activities, and participants' interactions with them, trigger change) as well as simply outcomes. These are the key components of the Medical Research Council (MRC) guidance on process evaluation of complex interventions. As a result, it was decided that the MRC guidance⁸ was best to structure this evaluation (see Figure 1 below) and a modified version of Ellard's map of activities⁹ provided a clear representation of all the aspects of the evaluation (see Table 1 below).

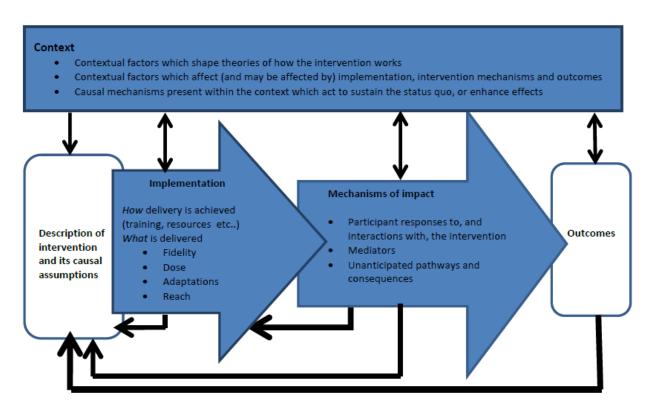


Figure 1 Key functions of process evaluation and relationships amongst them. Blue boxes represent components of process evaluation, which are informed by the causal assumptions of the intervention, and inform the interpretation of outcomes.

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⁸ Moore, G.F., Audrey, S., Barker, M., Bond, L., Bonnell, C., Hardeman, W., Moore, L., O'Cathain, A., Tinati, T., Wight, D. & Baird, J. (2015) Process evaluation of complex interventions: Medical Research Council guidance. *British Medical Journal*, 350:j1258. Doi:10.1136/bmj.h1258

⁹ Ellard, D.R., Chimwaza, W., Davies, D., et al. (2014) Can training in advanced clinical skills in obstetrics, neonatal care and leadership, of non-physician clinicians in Malawi impact on clinical services improvements (the ETATMBA project): a process evaluation, *BMJ Open*, 4:e005751. doi:10.1136/bmjopen-2014-005751

| MRC process evaluation framework | | | Description of framework item | Data source | Analysis | |
|--|----------------|-------------|---|---------------------------------------|----------------------------------|--|
| Description of intervention and its causal assumptions | | | Description of the issues in urgent/emergency care that need | | | |
| | | assumptions | addressing | papers, role-specific evaluation | | |
| | | | Description of the programme | papers, project documents | | |
| | | | Rationale for the role and training development | | Descriptive summary | |
| | | | Exploration of contextual factors including: | | | |
| Context | | | Timescale adjustment | Interviews – course leads, lecturers, | Thematic analysis of interview | |
| | | | Difficulties in recruitment | partner university leads, emergency | data | |
| | | | Delivery of some training by partner universities | care leads | | |
| | Process | How | Description of training content, timescales & resources needed | Course documentation | Examination of documents and | |
| mplementation | | delivery is | | Interviews with leads and lecturers | thematic analysis of interview | |
| | | achieved | | | data | |
| | Fidelity | | Delivered as intended? | Interviews with programme leads and | Thematic analysis of interview | |
| | · | | | lecturers | data | |
| | Dose delivered | What | Number of trainees registering/attending training | Course registers | Look at data for variations, e.g | |
| | and received | training is | Attrition | Speaking to course deliverers | non-attendance, non-delivery | |
| | | delivered | Number of planned/delivered cohorts | | · | |
| | Adaptations | | Problems faced and overcome | Interviews with programme leads and | Thematic analysis | |
| | | | | lecturers | | |
| | Reach | | Descriptions of the trainees and from where they were recruited, | Course documentation | Examination of documents and | |
| | | | in relation to original plan | Interviews with programme leads | thematic analysis of interview | |
| | | | | | data | |
| | | 1 | Acceptability (value) of the programme in developing the role | Interviews with trainees, programme | Thematic analysis of interview | |
| Mechanisms of How outcomes are achieved | | re achieved | Acceptability (value) of the role [upskilled workforce] in | staff, CCGs, NWAS, HENW | data | |
| mpact | | | addressing issues in emergency care | | | |
| | | | Enablers / barriers to the training programme and/or role | | | |
| | | | Impact of training in working practice – challenges and successes | | | |
| | | | Unexpected pathways/consequences | | | |
| | | | Quantitative mediators: | Questionnaires – Mental health | T-tests to check for strength of | |
| | | | Knowledge, skill, self efficacy, goal setting | training and NMP training | shifts in variables | |
| | 1 | | To what extent were the intended outcomes achieved, and how in | All of the above | Triangulation of data | |
| Outcomes | | | relation to context, implementation and mechanisms of impact | | | |

Table 1 Framework for evaluation, including sources of data and method of analysis

2.2 Participants

2.2.1 Researcher description

The sole Research Assistant who conducted this study was employed by the Health and Social Care Evaluation (HASCE) team at the University of Cumbria, which is independent from the projects it evaluates. Thus, although members within the team may have prior knowledge or understanding of ongoing University projects, their involvement within project teams is for evaluation purposes only. The researcher built up links with the key people involved in the programme (lecturers, course leads, and the administrator) throughout the evaluation timeframe in order to enhance cooperation with the evaluation, such as assistance with providing contextual and implementation information and recruitment of participants.

2.2.2 Participants

In order to gather relevant data, participants were recruited purposively, from those in specific roles within the programme (such as lecturers and course leads) and students who met the criteria for inclusion. Potential participants, and actual numbers taking part from the 3 streams of the programme are listed in Table 2 below.

| Stream | Role | Programme of training | Potential Number | Number participating | Data collection |
|-------------|--------------------|-----------------------------------|---------------------|----------------------|--------------------|
| Paramedic | Emergency Medical | CertHE in Pre-hospital | 15 | 7 | Focus group |
| practice | Technicians (EMTs) | Emergency Care (120 | | | |
| | | credits) then | | | |
| | | DipHE in Paramedic | | | |
| | | Practice | | | |
| | Community | DipHE module (Level 7 | 12 | 3 | Interviews |
| | Specialist | 20 credits) - Service | | | |
| | Paramedics (CSPs) | Redesign in Integrated | | | |
| | | Care | | | |
| | Academic staff UoC | | 3 | 1 | Meeting |
| | North West | | 1 | 1 | Meeting |
| | Ambulance Service | | | | |
| | (NWAS) | | | | |
| | Potential others: | | | | |
| | Cohort 1 | CertHE PHEC, | 5 | | |
| | | completed 2 nd year of | | | |
| | | paramedic practice | | | |
| | | DipHE at UCLan, now | | | |
| | NHS CCGs | trained paramedics | @2 | | |
| | Academic staff | | 2 | | |
| | UCLan & Edge Hill | | | | |
| Non- | Community | Consultation and | 2 | 3 | 1x1:1 interview, |
| medical | pharmacists | Physical Examination | completed | | 1x2:1 interview |
| Prescribing | | Assessment Skills (20 | (2017) | | |
| | | credits at Level 7 or | 6 in | | |
| | | level 6) PLUS Non- | training | | |
| | | | (2017/18) | | |

| Stream | Role | Programme of training | Potential | Number | Data |
|-----------|--------------------|-------------------------|-----------|---------------|----------------|
| | | | Number | participating | collection |
| | | medical prescribing (40 | | | |
| | | credits) | | | |
| | Academic staff UoC | | UoC: 3 | 2 | meetings |
| | Potential others: | | | | |
| | NHS CCGs | | @2 | | |
| | GP managers | | @2 | | |
| Mental | A&E staff and | Mental Health | @45 | | Questionnaires |
| Health | others receiving | Awareness training (1 | | | |
| awareness | training | day course) | | | |
| | Academic staff | | 2 | 2 | Interview |
| | Potential others: | | | | |
| | A&E managers | | @2 | | |
| | Service lead | | 1 | | |

Table 2 List of potential and actual participants, and method of data collection

2.3 Data Collection and Analysis

Table 2 and Table 3 outlines the various methods used for data collection. Descriptive data about the programme implementation and contexts were collected from course leads/lecturers via several face to face, telephone or skype meetings. Qualitative interviews/focus groups explored acceptability of the programme and mechanisms of impact from the perspectives of the learners. Questionnaires were used to gather information about change in knowledge and self efficacy in the groups of students accessing the Mental Health awareness training.

Thematic analysis of interview and focus group data was conducted using ATLAS software. Thematic analysis is an extensively used method of analysing qualitative data enabling the induction of coding and categorisation (Braun and Clarke, 2006). Standard statistical techniques using the SPSS software package were used for quantitative data.

2.4 Ethical considerations and Data Protection

University of Cumbria research ethics approval was gained for this evaluation. No formal NHS REC approval was sought, as this is an evaluation of an educational intervention where questionnaires and interviews will be carried out with health professionals and university staff, and did not involve NHS patients.

All potential participants were informed about the programme evaluation via an information sheet and consent form. Participants were recruited on an opt-in basis either via email (Pharmacists, Community Specialist Paramedics), face to face (Emergency Medical Technicians and Pharmacy) or an evaluation form (Mental Health Awareness training), via the training programme lead apart from the Community Specialist Paramedics, whom the researcher emailed directly due to the evaluation taking part after their training had completed.

Consent was requested via a consent form for the interviews and focus groups. For the mental health awareness training attendees, consent was implied by way of completed questionnaire return and provision of an email address for evaluation follow up. Participants were informed

that although pseudonyms would be used and the data shuffled where possible, complete anonymity could not be guaranteed due to the small numbers involved. Permission was sought for their quotes to be used. Participants were given the opportunity to opt out up until data input, after which point the researcher would be unable to remove their data due to using identifiers when storing and analysing data. Participants were informed that the evaluation would be written up as a report to be viewed by the commissioner (NHS Health Education North West), and could be made available Open Access.

Paper questionnaires and digital recording devices are stored in a locked cupboard at the HASCE office at the University of Cumbria Lancaster campus. Questionnaire and interview responses were input into SPSS and ATLAS software (respectively) and will be stored on the UoC network for a period of 5 years (UoC policy for research audit purposes).

3 The Advanced Community Specialist Paramedic (CSP)

3.1 Overview

This section describes the findings from the Community Specialist Paramedic stream of the Innovation Fund programme. In addition to evaluating the implementation and participant experience of the learning module, particular attention was given to exploring the implementation and development of the CSP role in practice, in response to the mainstreaming of the role during the evaluation timeframe.

Both the Review of Urgent and Emergency Care¹⁰ and 5 Year Forward View¹¹ describe the need to expedite the ongoing transformation of the Ambulance service into a community-based provider of mobile urgent and emergency healthcare. The CQUIN indicator for $2017/19^{12}$ incentivises managing care closer to home and a reduction in the rate of ambulance 999 calls that result in conveyance to A&E.

Although the evidence base for expanding the scope of Paramedics is currently limited,¹³ emerging studies show that some positive impacts, and there is significant interest in the UK and overseas to develop the Paramedic role as a preventative approach to reduce hospital admissions.¹⁴ North West Ambulance Service (NWAS) have thus piloted an Advanced Community Specialist Paramedic role (CSP) in order to address points raised in the Keogh report and the NHS 5 Year Forward View, namely:

- Improving the health and experience of patients
- Providing safe care delivered closer to home
- Reducing 999 demand and unplanned hospital admissions

Specifically, the CSP role has been developed:

¹⁰ NHS England (2013) Review of Urgent and Emergency Care. https://www.nhs.uk/NHSEngland/keogh-review/Pages/about-the-review.aspx

¹¹ NHS England (2014) The Five Year Forward View. https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf

¹² NHS England (2016) Commissioning for Quality and Innovation Guidance for 2017-2019. Publications Gateway Reference 06023 Available at https://www.england.nhs.uk/wp-content/uploads/2016/11/cquin-2017-19-guidance.pdf

¹³ Bigham, B., Kennedy, S., Drennan, I. and Morrison, L. (2013) Expanding Paramedic Scope of Practice in the Community: A systematic Review of the Literature. *Prehospital Emergency Care*, 17, 361-372. doi: 10.3109/10903127.2013.792890

¹⁴ See Newton, A. (2012) The ambulance service: the past, present and future (Part 1). *Journal of Paramedic Practice*, 4 (5). Cited in the PEEP report (2013) Paramedic Evidence-Based Education Project – end of Study report. Allied Health Solutions; Randall Williams II, G. & Hertelendy, A.J. (2014) The expanding scope of EMS: decreasing emergency department overcrowding in the US. *Journal of Paramedic Practice*, 6(12), 614-618. https://doi.org/10.12968/jpar.2014.6.12.614

"around balancing operation as a responder with direct efforts to improve local community infrastructures... The role is envisaged primarily as an integrator and change management role in a defined scheme. The CSP seeks to co-create and co-produce healthcare developing: self-triage, self-care, alternative access points to the health system and health promotion activities."

The following operational model for the initial cohort of CSPs was outlined as follows (NWAS, 2016):

- provide 999 Rapid Response for 30% of their working week within an agreed geo-fenced community;
- undertake advanced clinical practice within other care settings for 20% of their working week;
- act in a local health system leadership role as social change agent for 50% of their working week. This involves acting pro- and reactively to support patient's individual needs.

In terms of the Innovation Fund project, the outputs/deliverables and associated success criteria for this strand are:

- To support the development of an Advanced Community Paramedic role through
 provision of a range of learning modules embedded within existing Higher Education
 Institution Continuing Professional Development frameworks. This has the goal of
 integrating ambulance services into primary care by embedding highly trained paramedic
 practitioners within communities.
 - Success criteria: A range of learning modules, embedded within HEI CPD frameworks, which enable paramedics to select and upskill to meet the needs of the new role.

3.2 Evaluation Recruitment and Procedure

Meetings were held at various stages of the CSP project for the Researcher to gather information about the changing status of the project over the course of the evaluation period (April 2017-March 2018). One to one meetings were held between the Researcher and the Course Lead, NWAS Project Manager, NWAS Development Manager, and a Community Specialist Paramedic.

The original evaluation plan was to recruit the CSPs via one of the course leads via email. However, it became clear from the initial meetings that this would not be possible because the contact details were only available for the 3 CSPs who accessed the course via UoC (the other CSPs were allocated to one of 2 other universities). Thus, the Researcher attempted to recruit the staff via the NWAS Development Manager. The Researcher emailed the group of the 12 CSPs, with an invitation to participate in the evaluation. Responses were received back from 6 people - 3 of whom offered to participate, and 3 stated that either they didn't start or fully attend the module therefore did not meet the recruitment criteria. The 3 who agreed to participate were

¹⁵ NWAS (2016) Community Specialist Paramedic Project Report – Internal Quarter 4 CQUIN report authored by James Hayward and Duncan Robertson. July 2016, p.1

interviewed over the telephone for a maximum of 30 minutes in November/December 2017. One participant only attended 1 attendance day, and two attended all three attendance days, both of whom have taken up substantive posts as CSPs. The study was explained to them and verbal agreement to the points on the consent form was provided.

3.3 Findings

3.3.1 Context

2-year secondments into the role of Advanced Community Paramedic¹⁶ were commenced by 12 paramedics Jan-April 2015 (2 of whom started in Sept 2015). For most, the learning module commenced 1 year into their secondment (February 2016) and was completed before this evaluation project started. Thus, evaluation of this strand was conducted retrospectively, which meant that feedback from CSPs was predominantly based on accounts of events 1-2 years prior to the interviews. The benefit of this was that participants were able to reflect on how their experiences had impacted on their work beyond the programme delivery; although a number of the more negative points to arise centred on operational aspects of delivery, particularly around one University site.

The module was delivered by 3 different HEIs: Edge Hill University, the University of Central Lancashire (UCLan) and the University of Cumbria (UoC). Each of the 12 CSPs were allocated to one of the 3 universities for assessment purposes (referred to hereafter as "locations"). It became apparent from participants' responses that experiences at different locations varied. There were 3 attendance days (one at each location) over a period of several months throughout 2016.

3.3.2 Implementation and achievement of delivery

Following a request from NWAS, a modular approach was used for paramedics to selectively upskill for this role (verbal report, course lead). The module offered was a 20 credit DipHE module entitled Service Redesign in Integrated Care, with the aim of providing the student with a framework and models to enable service improvement through the redesign of integrated care services to meet the needs of the local community. According to one CSP, there was funding for a 60 credit module but the students only got 20 credits as the other modules were not designed at that point.

One cohort of 12 CSPs started the module. There was a reported difficulty in filling the available places which resulted in a number of paramedics starting the module who already worked at band 7 level with Master's qualifications (verbal reports from 2 CSPs).

There was dropout (approx. 4 people) and turnover in attendances, that is, some of the 12 who completed the module were different to those who started. It is understood that the course was offered to a wider NWAS team, to fill the places that remained after the initial dropout phase.

¹⁶ N.B The job title was adapted to 'Community Specialist Paramedic' in the early stages of the pilot, in consideration of the level of training and skill of this group of staff (CSP verbal report).

3.3.3 Mechanisms of Impact

Module Feedback

Feedback about the module was predominantly negative. There appeared to be 3 contributing mechanisms which may have affected the course completion/attrition rate: Poor delivery from one partner site in particular; an uncoordinated approach across sites; and course content that did not meet the needs of the students. Three of these mechanisms related to the course delivery at one of the locations. The first attendance day was at this location, and all 3 interviewees reported that the standard of delivery was inadequate. This included how information was communicated about the course:

"I was quite shocked because it was quite a disorganised course, to be honest, right from day one. In fact, there was very little communication and very little to tell people where we were going. We were still trying to find things out, like exactly where we needed to be, the day before we needed to be there" (Participant 2)

It was also evident that the participants expected that they would be trained by someone with paramedic expertise, which was evidently not the case at this site:

"They didn't seem to have a grasp at all of what our role actually was. Worse than that, they weren't really that interested in finding out. They had this idea in their head that this is what they were going to do. Rather than sit down with us and then turn around and go, 'actually, what we've been given is not the right information, can we change things to make it more appropriate?"" (Participant 3)

"One of the lecturers... started to tell us all how nurses are professionally registered with the NMC, and that makes them accountable and responsible for their own actions. We're saying, well, yes, but Paramedics are the same because we have the HCPC... she obviously had no concept of what a Paramedic is, and trying to deliver training to quite senior level Paramedics, when she doesn't even know the basics." (Participant 3)

Quality of Communication and Coordination

Inconsistencies in assessment feedback were also criticised. CSPs acted on the tutor's comments to make alterations to assessed pieces of work for submission, for which they invested extra time and effort. However, this was done in vain as it did not affect the outcome. This clearly had a direct impact on the outcome of the course for one participant:

"Every time I submitted an assignment, I got feedback and there was never, ever anything positive... I addressed whatever she'd asked for and put that in, then the next time I got feedback she had moved the goalposts and wanted something different. Every time... that's not how you treat your students... so in the end I just gave up." (Participant 3)

"I got told that my mark would be between 60 and 70 per cent, so I had actually passed... It wasn't necessary for me to resubmit, but if I wanted to I could. I said I'd be silly not to,

especially since I got such a low mark in my presentation, I'd like to get my overall mark up. [I went through] the comments I was given, I went ahead and changed it and still ended up with a 60 per cent mark." (Participant 2)

The preceding difficulties with the course culminated in an email invitation from the partner University for students to attend for an additional day, but the subsequent lack of coordination resulted in additional annoyance and frustration:

"[I got] an email to say that we were all being invited back for another day, because it seemed that some parts hadn't been covered in the initial days... At this stage we didn't know our marks, we didn't know if we had passed... We got sent an email and then there was hardly anything to follow it up. We were all in the dark about what was actually going on. The communication was terrible." (Participant 2)

The participants reported that while some dates for the additional day were mentioned, no specific date had seemed to be agreed, and it was unclear as to whether the day had taken place in the end. Lack of coordination across sites was evident throughout the module, in both what was being delivered:

"The lecturer made it sound as though a lecturer from another Uni should be presenting certain aspects." (Participant 1)

"I don't think they were fully in the picture as to exactly what [the module] was including, at first..." (Participant 2)

As well as the support that was provided to students:

"I think as well they were looking for different things. There were a few things between the universities was very different, the way we were looked after and our mentors and things." (Participant 2)

And also in the way of inconsistencies in the weighting of the assessments:

"I don't think they knew between themselves what exactly they were looking for. An example of that was when we had to do the presentation. I went and did it and got what I thought was a low mark for me of 50 per cent, which I was very disappointed with. When I spoke back to the person who mentored me and I discussed what I was including, she said to me -- she said that's exactly what she did tell me to include. Because she wasn't there on the day, doing the marking, it wasn't exactly what the other markers were looking for... It's frustrating when you've been led down one path and not another..." (Participant 2)

"What they said was, with the assignment, was that it would be marked by whichever university you ended up registering with, but then it would be moderated by a second marking -- somebody from one of the other universities, so that the standard across all three was maintained at the same level. That never happened." (Participant 3)

There was recognition that it is often difficult to offer courses that are partnered between universities due to differences in standards and weighting of assessments (verbal comment, course lead). In order to overcome these differences, the course lead at UoC reported that workshops could in any future instances be delivered within the separate universities, rather than attempting to deliver across universities.

Changing Relevance of Course Content

The Service Redesign in Integrated Care module was developed in partnership with NWAS with the overall objectives of the CSP role in mind (verbal report, UoC course lead). The course syllabus included indicative content on service improvement, integration of community networks, system redesign, rapid appraisal, organisational design and change management, and models of service redesign.

However, two participants reported that the CSP role evolved more towards responding and clinical work, with the result that most elements of the course were perceived as not meeting their role needs. Clinical skills input, including management of long term conditions and mental health, were specifically mentioned by two participants:

"It wasn't appropriate for me at this stage as the role was so new and we were all trying to establish the role....[however] I think the role requires clinical skill improvement more than project management but there may be a role for project management now." (Participant 1)

"I was hoping that there would be some clinical input into it... What was delivered to us seemed to be more appropriate for the next line up, so for our line managers, not for us." (Participant 3)

This was linked to a frustration with the programme itself not developing iteratively alongside the role in practice.

"I was hoping that it would help us with the role that we were doing... [But] It wasn't aimed at the Community Paramedics. With it being a new role, I don't think anybody really realised or understood how our role was going to evolve." (Participant 3)

"They did ask us what we wanted and we said we would like some input on management of chronic diseases, management of mental health issues. That was to the university people on the first contact day. They were asking, 'What do you think you want to get from this course?' And we were saying that was the kind of stuff we needed, but nothing ever happened." (Participant 3)

One of the participants did, however, recognise that some aspects of the course were relevant to their role:

"There were some bits of it that were useful and I actually think that the presentation part, looking at different aspects and looking at different things that I hadn't used before, was very good for anybody who was starting the job. That gave you some really quite useful things." (Participant 2)

However, the same participant identified the method of assessment as needing improvement. They suggested that choosing one model of change management and applying it in their role, evidenced through a workbook, would have been more appropriate:

"From what I remember of doing the assignments, it ended up being just a leadership, change management type assignment [whereby] you're just mentioning a lot of different change management to show that you've read well, rather than reading one and being able to apply it well... rather than just doing an assignment, maybe just doing some pieces of work, because people are working full time. It would be a matter of a workbook or where you produce something about what you're doing." (Participant 2)

Matching Assessment to Delivery

The need to match assessment and delivery with the practicalities of the CSP role as it developed were therefore prominent. This did not imply a programme exclusively driven by clinical delivery, but rather clear links to be drawn between the wider scope of the CSP role and its context and the student's practice. For example, one participant raised a session on financing the role which they found particularly useful:

"When we went up to, I think it was Lancashire, somebody came in to speak and it was-- it might have been someone from the CCG or someone who had a very good knowledge... Some of the information they were telling us, to understand how the money... working out how it's funded, how it's done, that part of it is very interesting. To understand what goes on behind -- because as Paramedics you just go out, traditionally, you go out in an ambulance and you pick people up. You don't worry about where funding comes from, you don't think about anything like that." (Participant 2)

The participants' responses suggest that the programme needed to make clear links between clinical aspects of practice and the wider enablers and disablers of the role, in both delivery and assessment. This can be seen in the two distinct elements delivered which were particularly poorly received by at least one participant – an overview of the College of Paramedics, and the involvement of patients on the course:

"We got a session that was obviously just used for teaching undergraduate Paramedics... it seemed to me it was just like, we've no idea what to do so we'll just stick this session in to fill a bit of time up" (Participant 3)

"They brought some patients in to talk to us about their issues. I'm not really sure why or what they hoped to achieve by that, but it took up an afternoon, so half a day. All the patients did was talk about themselves as individuals. I'm not quite sure how that was supposed to improve our understanding" (Participant 3)

3.3.4 Outcomes

The initial negative experiences of the first delivery day may have impacted on completion rates and attrition - several people within the project noted that attendance dropped off after the first attendance day, and one participant stated that it "didn't give me anything at all, except a lot of anger and a lot of resentment." (Participant 3), and that they didn't complete the module. The delivery was particularly problematic with regard to the issues relating to attendance at the first University site, and the learning experience for the students who were allocated this University for assessment purposes. It is important to note that this did not point to a problem with the aims and objectives of the programme itself, but an operational issue in very specific areas of delivery.

The success criteria outlined in the programme of work outline for the Innovation Fund were to have "a range of learning modules, embedded within HEI CPD frameworks, which enable paramedics to select and upskill to meet the needs of the new role." It could be argued, on this evidence, that changing context of the CSP pilot throughout the Innovation Fund programme resulted in an unsynchronised approach to the training offered for this cohort.

However, for the substantive CSP posts there is a requirement to achieve Master's level qualification within 5 years of being in post. The course lead at the University of Cumbria reported that the course of choice is likely to be the MSc in Practice Development, an existing course offered by the University of Cumbria. It has core modules totalling 100 credits and optional modules totalling 80 credits for students to selectively upskill based on the new requirements of the role. It has been confirmed that students will be able to APL the 20 credit Service Redesign in Integrated Care module towards the MSc Practice Development. Options include a range of clinical modules.¹⁷

<u>Implementation and Development of the CSP role</u>

This section provides some detail about how the role was implemented and developed. The CSP role was initially a secondment opportunity through a 2 year pilot scheme managed by the Urgent Care team and developed by the NWAS Regional Development Manager. NWAS conducted an in-service evaluation of the outputs and role potential of the CSPs after 1 year of being in the seconded post. The role was subsequently mainstreamed, with recruitment for 11 substantive and 1 seconded position taking place Autumn 2017. Management of the CSPs has moved from the Urgent Care Team to Heads of Service within local NHS Trusts.

When it was first introduced, there was a degree of uncertainty about what the role was, particularly because the roles were evolving differently depending on the needs of the local community the CSP was embedded within:

¹⁷ https://www.cumbria.ac.uk/media/university-of-cumbria-website/content-assets/public/aqs/documents/programmespecification/healthsocialcare/MScPracticeDevelopment.pdf

¹⁸ NWAS (2016) Community Specialist Paramedic Project Report – Internal Quarter 4 CQUIN report authored by James Hayward and Duncan Robertson. July 2016

"We [all the CSPs] all had monthly meetings and we were bumbling about what our roles were as we didn't really know, and they were all so different." (Participant 1)

"Some do get it, some don't. Even some of our managers don't quite get it. It's quite difficult... Constantly seeing GPs or care homes, CCGs or then I'd have to present to colleagues or managers. The first 18 months were literally just like being a rep, trying to sell yourself as a product, what you can do and what you are able to do. There are always constraints as well, because you can't just magic up money to do anything. You still have to work within the boundaries of what is available within your area." (Participant 2)

The CSPs had the autonomy to develop the role in whichever way they saw fit; although some aligned this with a lack of support.

"We were just told to get on and develop the roles... We weren't supported at all." (Participant 1)

When the CSP pilot ended and the roll was mainstreamed, changes occurred which meant that some of the initial work could not be sustained:

"It's gone permanent now but there have been some changes to it, so we're not working as closely with the GPs, mainly because they're not paying our wages. We can't do the work that we were doing for them, which is understandable." (Participant 2)

The CSP role as a 'system leadership, social change agent'

Of particular importance in the rationale for developing the role of CSP is the unique "systems leadership, social change agent" element of the role:

"This aspect makes it unique to other specialist paramedic roles which have traditionally been heavily weighted towards clinical time... as the NHS 5 year forward plan implementation evolves, the development of such a role is believed to be an essential part of achieving 'left-shift' with Ambulance Services to support towards preventative public health measures and prepared medical responses." 19

Although this aspect of the role was initially intended to have 50% protected time, the NWAS evaluation report stated that in practice this ratio varied depending on the needs of the community, "as the CSP balanced operation as a responder with direct efforts to improve local community infrastructures."²⁰ Indeed, the NWAS evaluation reported that the CSPs were, in practice, responding as an Urgent Care Practitioner an average of 50% of their time, which

²⁰ NWAS (2016) Community Specialist Paramedic Project Report – Internal Quarter 4 CQUIN report authored by James Hayward and Duncan Robertson. July 2016, p.2

¹⁹ NWAS (2016) Community Specialist Paramedic Project Report – Internal Quarter 4 CQUIN report authored by James Hayward and Duncan Robertson. July 2016, p.2

reduces the amount of time available to fulfil the other unique requirements of the role. Interviewees too indicated that there has been a definite shift towards emergency and urgent care responding since the pilot phase ended:

"There's been more importance put on actually responding to emergencies. Before I would go for weeks and not actually be available to respond, because I'm trying to work on certain things, but now I have to do two days a week where I'm available to respond. Now I haven't got the time I had previously to look in detail the way I did before." (Participant 2)

"Even with the networking, it's all aimed at clinical, so I would say at least 70 per cent of my work is clinical in one way or another. I know that the other Community Paramedics don't do anything like the same amount of 999s as I do." (Participant 3)

Participants were asked directly about how the "systems leadership/change agent" element of their role has evolved, based on the programme specification. Responses indicated that the term itself bears no relation to their identity as CSP:

"When they talk about Systems Leadership, to be quite honest I don't even know what that means, in reality." (Participant 3)

However, the pro-active work involved in the role is clearly of significance, with the participants referring to aspects such as working with other professions, care planning, management of frequent callers, and educating others, all of which require elements of systems leadership/change. In other words, it seemed that change agency was a clear part of the role, if not always described with that terminology. For example:

"It's about being a proactive Paramedic, a lot of it. It's the care planning, trying to look at things a little bit differently. Thinking, who do I work with that can help me not have this patient call too many times?" (Participant 2)

"I work very closely in my area with all of the other community agencies. Adult Social Care, District Nurses, Community Physiotherapists, Police, Community Fire, all those sorts of people. It's not so much leadership, it's being a part of the neighbourhood and part of the whole delivery package." (Participant 3)

"From a local point of view, I can look at reports and see how many calls there have been in that area for that month, and see if anyone was calling us a lot. A lot of that led to conversations with a lot of Social Services... being in the community allows me to pick up on patterns and be involved." (Participant 2)

Successes of the role

Despite having an overall increase in the proportion of their time spent responding, the substantive role nevertheless has the flexibility to conduct proactive work, such as investigating

the needs of the community, networking with other staff and agencies, and managing frequent callers.

"I discharge on scene, through liaising with their own GPs in this area, with whom I've got a really good working relationship. That's a big part of my work. I do GP home visits, I work with frequent callers." (Participant 3)

"In reality, first of all, every role has been different, because each individual Community Paramedic has gone into their own community and looked at the needs and the resources, so every role has been different, which obviously makes it quite difficult to provide an off the peg training course." (Participant 3)

Another success of the role, noted by the Regional Development Manager, was the use of the Manchester Triage Tool. This was piloted by the CSPs, and reportedly led to a 50% reduction in A&E attendance during the pilot.²¹

3.5 Conclusion and Recommendations

3.5.1 The programme

The DipHE module in Service Redesign in Integrated Care was designed with the objective that the CSP role would encompass change management. How relevant this course is for the role as Community Specialist Paramedic will ultimately depend on how the role continues to evolve. Two of the participants to this evaluation were clear that the content did not meet their role needs, instead referring to a need for clinical skill development, whereas one participant reported that some aspects were useful, albeit needed in more depth (funding). Problems with course delivery and approaches to assessment within and across universities are also likely to have affected the success of the course.

3.5.2 The role

Although it was evident that the CSP role has evolved differently according to location, it emerged that emergency and urgent care responding has taken more of a priority with the 2 participants still in post. Nevertheless, the role clearly offers some flexibility to offer pro-active work within the community.

Although effort was taken to gather information about the course and the CSP role from people in various roles within the programme, it is important to note that recruitment of CSPs was problematic, with only two of three participants fully completing the course and working as CSPs at the time of writing. Both of these CSPs were based at the location reported to have the delivery issues, which may make this report more heavily weighted towards the difficulties experienced than the course relevance.

²¹ See NWAS (2016) Community Specialist Paramedic Project Report – Internal Quarter 4 CQUIN report authored by James Hayward and Duncan Robertson.

3.5.3 Recommendations

- The move away from the intended CSP model for the 2 roles explored in this evaluation is noteworthy. It would be useful for future study to explore the evolving nature of a broader range of NWAS CSP posts, the extent to which they correlate with service demands or remain on track for providing a model of community paramedicine.
- Fundamentally, organisations delivering on a partnership basis should establish a professional, coordinated approach to delivery and learner support, including as a minimum:
 - Agreement on a standard for assessment, including moderation of all assessments, in order that students are given a fair and equal mark.
 - Communication procedures across universities and with students, in order that there is a clear and open channel for partners to remain in touch; and that students are provided with clear and consistent information regarding all aspects of the course, from room bookings to assessment requirements.
 - The nature of the role, and its iterative development, means that a module supporting it would benefit from co-design with stakeholders and ongoing feedback throughout the course of its delivery.
- Availability of a range of Level 7 learning modules so that CSPs can self-select according
 to their specific role requirements. Modules should include clinical skills options, such as
 management of long term conditions and mental health.

4 Emergency Medical Technician Training

4.1 Overview

The ongoing national shortage of paramedics is widely reported.²² North West Ambulance Service (NWAS) and the University of Cumbria worked in partnership to develop a progression route for Emergency Medical Technicians (EMTs) into paramedic roles in efforts to address the shortage of paramedics within the service, using a delivery mode that enabled EMTs to complete a programme of study towards paramedic registration whilst continuing to work within the service.

The training and education of paramedics has also been of national concern in recent years. In 2013 the Department of Health (England) National Allied Health Professional Advisory Board, commissioned a study and report to ensure the drive towards standardisation of education and training of Paramedics is evidence-based.²³ In England the education and training options to becoming a paramedic are extremely diverse (including Diploma in Higher Education (DipHE), Institute of Health and Care Development (IHCD), BSc(Hons), Foundation Degree and Graduate Diploma). Thus, its recommendations included for Paramedicine to be an all-graduate profession by 2019 and for education and training to be standardised nationally. Respondents to the report highlighted a concern 'about the academic reach for technicians if the threshold is immediately raised to BSc(Hons) and that in the 'race for a degree' the door may be closed on the slow track up to paramedic.'²⁴

As part of the Innovation Project funding, the EMT Training programme attempts to address this issue by aiming to support Emergency Medical Technicians to develop to Paramedic, by offering a Certificate in Higher Education, Pre-Hospital Emergency Care, which enables EMTs to APL the award into a paramedic programme, thus providing a paramedic progression route for workforce sustainability.

4.2 Evaluation recruitment and procedure

Preliminary scoping meetings were held with two programme leads to gather contextual information about this programme. Following this a focus group was conducted, made up of 7 students from a cohort of EMTs who had completed a CertHE Pre-Hospital Emergency Care and who had commenced the DipHE in Paramedic Practice at the University of Cumbria.²⁵ The

²² See, for example, National Audit Office (2017) NHS Ambulance Services. NHS England. https://www.nao.org.uk/wp-content/uploads/2017/01/NHS-Ambulance-Services.pdf

²³ Allied Health Solutions (2013). Paramedic Evidence-Based Education Project – end of Study report. https://www.hee.nhs.uk/sites/default/files/documents/PEEP-Report.pdf

²⁴ Allied Health Solutions (2013). Paramedic Evidence-Based Education Project – end of Study report. https://www.hee.nhs.uk/sites/default/files/documents/PEEP-Report.pdf p.47

²⁵ There was also an option to invite another cohort of trainees to interview, whom completed the CertHE through the Innovation Fund and completed the Paramedic Practice programme at UCLan. However, this was felt unnecessary as so much valuable data was gathered from the initial focus group.

students were recruited during their attendance on the DipHE Paramedic Practice course in coordination with the course lead, whereby the researcher met them as a group, provided verbal and written information about the study, and discussed possibilities for a focus group. The focus group was held in a classroom on the UoC Lancaster Campus, was digitally recorded and lasted approximately 1 hour 10 minutes. The students were asked about the acceptability of the programme in enabling development of the EMT role into paramedics, and also about the value of upskilling the paramedic workforce.

4.3 Findings

4.3.1 Context

The Postgraduate Certificate in Pre-Hopsital Emergency Care (PHEC) was developed collaboratively with NWAS and offered to EMTs through their employer. Delivery of the course was initially intended to be done jointly between UoC and UCLan but it was decided at an early stage that UoC would deliver separately due to its clinical skills teaching resources.

4.3.2 Implementation and achievement of delivery

The Level 4 Certificate in Higher Education (CertHE) in Pre-Hospital Emergency Care is a one year course which was offered on a full time basis to 2 cohorts of NWAS EMT1 staff as part of the HENW Innovation Fund. Students were recruited internally through NWAS dependent upon experience in the EMT role. The 2 cohorts were all approved to 'top up' to the DipHE (Level 5) in Paramedic Practice. This involved Accreditation of Prior Learning (APL) and commencing in year 2 of the 2 year programme. The first cohort completed this with UCLan as the DipHE Paramedic Practice programme development was not approved by NWAS at this stage.

The following chart shows the flow of students through the 2 programmes. The red box indicates the cohort and stage of training when the focus group was held:

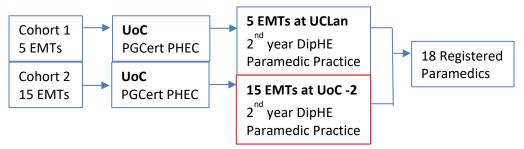


Figure 2 Flow of EMT students through the PHEC/Paramedic Practice programme. The red box indicates when the focus group took place.

At the time of the focus group (July 2017), a cohort of 15 EMT staff were studying for the DipHE in Paramedic Practice. The majority were EMT1 (Band 4) staff and two were EMT2s (Band 5). 2 students dropped out of the course before completion.

This was a full time course that was supported with online material to ensure that content was similar to how other paramedic practice programmes are normally delivered. However, a key difference is that this course was offered as a 1 day per week attendance rather than a teaching

block. This adaption was made in order to meet the needs of the employer and the students as NWAS employees fulfilling their post as EMTs. Other adaptions were made as the course progressed in order to address difficulties with students balancing training and working shifts, and the differences in experiential learning (compared to other programmes) this entailed.

4.3.3 Mechanisms of impact

A number of barriers experienced on the EMT Training resonated with issues raised by participants in other strands of the Innovation Fund project. In this case, participants provided detailed accounts of the barriers to achievement they perceived. Given that these are fundamental to understanding the impact of the programme, they are listed in this section.

Workload Balance

The overarching theme to emerge as a barrier to the training was the balance which needed to be struck between academic workload and pressures from shift work. Due to the demands of both, students reported a feeling of having to continually "juggle" the demands of the training:

"I think I speak for everybody here when I say that it's also quite hard maintaining a full-time job, doing shift work, swapping from days to nights as well as then trying to find the time to do the assignment work." (Participant 2)

Participants also noted the academic demands of the programme. This was raised both in terms of the time available to adjust to academic work following shifts, and in terms of the intensity of the work in the classroom.

"I think that's what is making it harder, when we're trying to focus on university work. We might not have switched off from a job from yesterday or something." (Participant 1)

"For me, it's just the demand of everything. It's trying to get a balance of -- I didn't expect it to be an easy course. I expected it to be demanding, but the fact that you are doing so many hours trying to get in your Paramedic hours, you're doing your placements for so many days, so many days in university. You're doing a full-time course, with very little hours, plus a full-time job." (Participant 4)

"I expected the academic demand, I fully expected that because there is a lot of information to take in. I didn't expect to be having to juggle hours and battle complaints tooth and nail just to be able to get anywhere close to meeting the requirements. I didn't expect that." (Participant 5)

In particular, it was raised that there were some inconsistencies between line management and programme expectations. This could end up in confusion for the students:

"It's finding that juggling, isn't it? It's hard to balance everything and do everything that is expected of us at the same time. ... apparently because of the hours that we dropped to

come here, I'm down on my hours, so I'm having to pick up extra shifts elsewhere, where I'm already struggling to fit to do my university work." (Participant 2)

In this model of training, shift patterns cannot be followed properly, which raises numerous problems: (1) Most of this cohort of students had been informed that they owe hours, despite some calculating that they are actually working many more; (2) crucial supervised practice was perceived to be lacking due to EMTs regularly being placed on shifts with another EMT due to Paramedic shortages; (3) for some, there was also a perceived lack of consistency with supervised practice.

Programme Delivery

In relation to this, one participant noted:

"I'm not aware of any other student Paramedics that have these issues with loss of hours. It's only us, because they do blocks." (Participant 4)

In order to facilitate running the programme alongside full-time shift patterns, the academic delivery was condensed into one day a week of teaching. Some participants reported this adding to the intensity of the workload.

"It's a full-time course that's being delivered -- I won't even say part time, because it's one day a week, so it's -- in a nutshell, anything we say all stems down to doing a full-time course, doing full time hours, but only being delivered as less than part time." (Participant 6)

"Although I do think sometimes that on certain aspects of the course when there's a lot of information you want to learn about, sometimes you don't get all of that information. For example, we did an ECG morning, whereas I think if we had spent a full day on ECGs, we would have had an opportunity to ask questions, learn a little bit more about certain aspects." (Participant 5)

A block pattern of teaching would not alleviate this, of course; the general feedback seemed to be that the part-time nature of the programme raised some important points around how much information could be taken in, and how this could be balanced with the demands of shift work.

For example, some students suggested they would have preferred covering the "need to know" first, and in more depth, whereas some other aspects of the programme could have been left. While this is typical of the first time an academic programme is run, participants also suggested that the structure of the syllabus could also be problematic; although they noted the limitations placed on this:

"Which, I think expectations wise, the University of Cumbria are trying everything they can do, but the syllabus is not designed for..." (Participant 6)

"... How our course is laid out... We appreciate that the university have got a set standard to meet and they have to get us to a certain standard in a short period of time, with what

they've got to work with. That's obviously where the intensity comes from, we appreciate that." (Participant 4)

Finding Placements

The expanse of the geographical area covered by the University of Cumbria means that placements are offered in some partner NHS sites that are too far to travel on a daily basis. Several students attempted to overcome this by contacting NHS Trusts more local to them, to arrange their own placements. However, this has resulted in further frustration with the realisation that priority is given to students from the other HEIs, due to existing established partnerships between universities, NWAS and NHS Trusts in areas across the region:

"The only issue I've had throughout the course is placements. A lot of us come from different areas of Lancashire, not necessarily in Cumbria... the placements that we are offered here around this region are as far as Kendal or Barrow. I was offered theatre placements at Barrow, which for me is a four-hour round trip every day. I'm not going to make a four-hour round trip on top of a twelve-hour shift... I don't think it's a university issue, I think it's an NHS wide issue, across communication between certain universities and hospitals." (Participant 6)

Some participants linked this back to the difference between UoC's delivery, and other universities which utilised block-teaching. Participants also discussed how existing relationships between some universities and NWAS may affect the priority for allocating student placements.

Other contextual factors associated with the training were cited as impeding the training experience, and caused a degree of stress for the students. Often, participants cited problems with their employer's support for their training as a key disabler in this regard.

<u>Supervised Hours ("Paramedic Hours")</u>

Completing the training alongside their existing employment as qualified Technicians, has created several problems. Participants suggested that in some cases employers treated shift work as independent from the University work, due to the need for EMTs to carry out their duties on a non-supernumerary basis. Formal recognition that this "work" is actually practice-based experience, would enable the various elements of the training programme to be more joined-up.

"I think they [NWAS] see it for us, as we're at university for two days and the rest of the time we are working for NWAS. In reality, we are full time students. Those days on the road should be training. We should be with a Paramedic, we should be able to practice our skills, which we've not been able to fully because sometimes we're having to drive. That's one of the issues. If you were a full-time student you would get that opportunity. We're not being exposed to the things that we need to be exposed to." (Participant 6)

A key issue raised by several EMTs is the amount of supervised practice – working with a paramedic or 'paramedic hours' – they are receiving. This is particularly the case for reserve staff (who work for several teams), and EMT2s, as they are the designated clinical lead on shifts on a regular basis. The course requirements are 750 hours' supervised practice with a Paramedic. As

EMTs on this training model, they have non-supernumerary status, which essentially often results in their duty as EMTs taking priority on a shift pattern. It was also noted that they are signed off by a Senior Paramedic whom may have supervised them only a minimal number of times.

"Even when I'm working those shifts I'm then getting put with either another tech, or I'm on urgent care, which doesn't help me with regards to getting Paramedic hours. In order for us to utilise skills or things that need to be signed off in order for us to qualify, if we're then working with a Technician or we're on urgent care shifts or anything, we can't use those skills because there's no Paramedic registration that we are working under. If we have got a Paramedic... it we can practise and obviously gain the experience that we need." (Participant 2)

"... as much as our work, NWAS, will try their best to accommodate us and put us with Paramedics, at the end of the day we're still qualified techs and they need bums on seats in the ambulances. So, to them, as much as they appreciate that we need Paramedic hours, they need the shifts covering, so if they can only put you with a Technician then that's the priority." (Participant 1)

As well as difficulty in gaining the required supervised practice from Paramedics, several students reported that they were experiencing a lack of consistent supervision:

"I'm fortunate. My crew mate, my shift mate is my mentor. I will do my shifts with him. But like you say, the reserve guys, they just don't have any consistency with anybody that they're working with." (Participant 6)

4.3.4 Enablers

Studying at UoC

When asked about enabling factors, it was clear that the quality of the UoC course was a key enabler in their objective to successfully complete their training.

"The access to content. It's always on the blackboard, you can always meet up with them. They're very good, the library is good, the campus is brilliant." (Participant 3)

"I've been quite impressed with my practical stuff, we've been exposed to, especially the delivery side of things, that was really useful." (Participant 6)

Participants also praised the communication, support from staff and quality of delivery. There was a general acknowledgement that the staff at UoC were stretched, despite being accessible and supportive.

"If you feel like you're not learning something, you can approach the lecturers and they are very good on a one to one basis. Again, they are spread very thinly between us and the RAF and the maternity lot. They seem very rushed and out of time and knackered, bless them.

They've very good and they're very approachable, and they want to help you, but there's not enough of them to cater for all of us. That definitely echoes a lot." (Participant 1)

"I don't think they can do anymore, because they're stretched, aren't they?" (Participant 4)

"I think like you say, compared to other universities where there has been a note shoved on a door, you might have travelled an hour to get into university, paid your parking for a day, to be told, sorry. I'm sure if any session here was cancelled for any reason, I am sure we would have been notified a lot earlier on the communication methods that we've got." (Participant 5)

"The lecturers are brilliant." (Participant 1)

"They are always there for a one to one as well. I went for one before without an appointment, I just walked in for one and said can you give me a bit of support, and he said yes and that was great." (Participant 6)

Despite the concerns about the workload discussed above, participants were keen to point out that the academic level was appropriate and gave them confidence that their skills could be used for the further development of their careers:

"It makes us better Clinicians." (Participant 4)

Course structure

The course structure was reported as both a barrier and an enabler. Participants identified several advantages of a rolling programme of study, whereby the curriculum is organised over the full year, rather than the academic year, including qualifying sooner than other Paramedic trainees; speedier Paramedic professional registration; summer dates mean no competition for paramedic supervision or for hospital placements; and the 1 day per week university attendance was seen as manageable for students travelling from further afield.

"Then again... when we do actually finish this course, as long as we actually all pass, which we all will -- it won't take us as long to get our registrations because there won't be as many people applying for the registration like there is in September." (Participant 2)

"We're in a better situation because we've actually started level 5 quicker and sooner before the other universities have. Therefore, we will actually be qualified before some of our other colleagues." (Participant 1)

"It would be easier to do the academic work [in a block system], but for the distance that I have to travel, because it takes me three hours to get down here. I couldn't do the block with two kids, because of the childcare expenses, and I wouldn't see them for a week, because I would have to stay down here, I couldn't drive every day... I think there are pros and cons to both sides, but because NWAS is such a large expanse of an area, to try and train

everybody in one location isn't suitable for everyone. You're never going to suit everybody." (Participant 3)

The course structure has also been described as disabling due to the problems incurred with not being able to follow shift patterns correctly, and difficulty in managing the academic workload. Some respondents highlighted that, for them, the optimal delivery mode in terms of academic input would be a teaching block of around 4 weeks:

"I feel that if I did blocks of placements, blocks of university, I think personally a block of four weeks, it would probably be. You'd learn your skills at the start of your eight weeks, you're not putting those skills into practice until week nine in theory, because that would be the first week of your placement. I've forgotten what I've done yesterday, let alone eight weeks ago." (Participant 4)

"It is information overload, isn't it?" (Participant 1)

Group size and cohesion

The size of the group and the fact that they have been through difficulties together has also been an enabler. Participants noted the importance of personalised delivery, which they had not experienced within larger cohorts at other universities:

"Sometimes the groups that have been through difficulties together that are shared, you can gel together a lot more, because you're problem solving together as well." (Participant 2)

4.3.5 Outcomes

Despite the number of barriers discussed, when participants were asked about the value of the CertHE in Pre-hospital Emergency Care, a number of key responses were given. The following chart summarises the key themes that emerged from the programme in meeting the student's expectations and project aims. These can be split into two overarching themes concerning the development of the practitioner from EMT to Paramedic, and the benefits of upskilling the workforce to address and improve patient care.

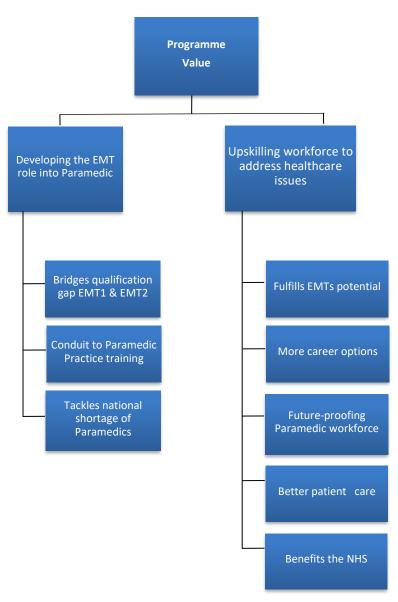


Figure 3 Key ways in which the programme provides value

<u>Developing the EMT role into Paramedic</u>

First, responses suggested the value was to academically prepare Emergency Medical Technician 1 staff for university (Level 5) study. For example:

"It was to academically link us between -- because we had been in the service for so long and out of education, it was to link us educationally to get ready for level 5 for this year. I think that was why it was done, the idea behind it." (Participant 1)

The second theme was around the value of bridging the gap between EMT1 and EMT2 staff. Participants explained the difference between the EMT1 and EMT2 roles, which includes an IHCD

certificate (Institute of Health and Care Development Level 3 Technician course that was stopped several years ago); as well as banding; responsibility and knowledge.

"Technician2s were Band 5 and your EMT1s are Band 4. So, because they've [EMT2] got a bit more responsibility and a couple more drugs and obviously the IHCD Certificate, once they'd realised that they were going to stop doing that, they adapted the role to EMT1s to pay them Band 4 with less responsibility. Last year's course was to bridge the gap." (Participant 2)

"They figured that was a massive failing in doing that and there's too big a gap now and that there was no room to progress to Paramedics because we weren't getting the skills that we needed to move." (Participant 1)

The third theme concerned the premise that the national shortage in the paramedic workforce would be eased through this model of training. In particular, the value of training people who were already established or settled in the local area, and working within NWAS, was highlighted.

"... through the universities externally, you're not getting enough people through each year for how many people are actually leaving. We all know that there is a national shortage of Paramedics, and I think what they've realised is the fact that they've got a load of techs that want to progress, that are already in the job and have already been in the job for years. They've realised, let's get them qualified and get them trained and it will help out the national shortage." (Participant 1)

"This sort of course with people that have got families that are integrated into the communities that they're in, that have bought houses, they're not going to move." (Participant 3)

The value of upskilling to become Paramedics also clearly emerged in the focus group – in terms of benefiting patients, the NHS, themselves (both through improved career opportunities and fulfilling their potential), and finally in terms of addressing evolving healthcare issues.

"It benefits the patient more than anybody, because ... with more Paramedics on the road, the better patient care there is." (Participant 6)

"The problem is that because there aren't enough Paramedics, we're most of the time currently working as double EMT1 crews. ... From a public perception point of view, a member of the public could look at two technicians and just assume that because they are in ambulance uniform, that they are Paramedics. When you then say you need Paramedic background, they turn around and say, what? I thought you were on an ambulance? Because that is the public perception." (Participant 4)

<u>Upskilling the workforce to address healthcare issues</u>

Participants suggested that the training programme was helping to fulfil the potential of many EMTs.

"We've probably all been to jobs where we know what's wrong with the patient, we know what needs to be given, and we're just tied because we haven't got the epaulettes on our shoulders. That's why I think probably a lot of us have come here, because we do get frustrated every now and again." (Participant 6)

As well as addressing the paramedic workforce shortage discussed, participants recognised that the career pathway – from EMT to Paramedic and beyond – is being developed which offers other opportunities for them to move into in future, whether within NWAS or in the wider health field, and therefore "future-proofing" them.

"Once you've got your Paramedic qualification, it opens up other fields for us to go to when we want to." (Participant 2)

"As an EMT1, you couldn't see any future bar being on an ambulance until you were 68 or whatever, but now as a Paramedic you've got other avenues, where you can see you can become a community Paramedic, you can work in a health centre, you can work in triage, rather than lifting and carrying people at that age." (Participant 6)

"Because it is so physically and mentally demanding, as well as your shifts, whether it's nights, days, then swapping back and whatever. You can't do this job for a long period of time.... That's why they are future proofing us, so that when the time comes that we do decide that either our body has had enough or we don't want to do this job anymore, that we have opened other avenues. Primary Care Centres, Urgent Care Centres, Doctors Surgeries, things like that..." (Participant 2)

Participants believed that this was providing better patient care, and wider benefits to the NHS:

"This diploma not only benefits us academically and the patient, but it also benefits the NHS because we can decide then what route that patient needs to take and not just take everyone to hospital, because we know what's going on with the patient. We have a more in-depth knowledge and we can say where they need to go. Overall it just benefits everything, and that's what they are teaching us here." (Participant 1)

"Rather than as an EMT1, just conveying to A & E because we haven't got enough of that scope, we'll be able to refer to doctors, we're able to refer to other services". (Participant 5)

4.4 Conclusion and recommendations

This programme offered a progression route for EMT staff to enable them to train as paramedics. Both courses offered as part of this programme were delivered by the University of Cumbria, which a number of participants described as being "excellent". Programmes such as this these start to address the ongoing paramedic workforce issues by future proofing the workforce.

However, this evaluation highlighted some major contextual and mechanistic barriers which need to be addressed for the benefit of other 'rolling' training programmes that are due to be implemented.

This programme of training was, to a large extent, fit for purpose for the current cohort in that participants reported it:

- (1) academically prepared Emergency Medical Technician 1 staff for university (Level 5) study;
- (2) bridged the gap between EMT1 and EMT2 staff;
- (3) addressed the shortage in the paramedic workforce by developing EMT staff into 18 paramedics (number to be confirmed as the course was nearing completion at the time of writing).
- (4) helped to future proof the paramedic workforce.

However, outcomes relating to operational issues were also evident, due to the lack of cohesion between work and study with this training model. These problems included difficulty in gaining the required amount of supervised practice, owing hours or working too many due to the mismatch of shifts with the model of study, and this resulted in a perceived lack of support from NWAS for some. While some participants suggested block delivery would have been better, this was countered by the view that too much information was being given in a short space of time – a problem that is frequently worsened by block-teaching approaches.

The key to addressing this instead appeared to be the relationship between university work and shift work. At the end of the evaluation period (March 2018) it was confirmed that the University of Cumbria is due to commence delivery of a Degree Apprenticeship in Paramedic Science, in partnership with NWAS, once approved by HEE. This will be 0.2 WTE "off the job": that is, working on a supernumerary basis for 1 day per week. It is not yet clear how this new, apprenticeship, model will provide a sustainable progression route for EMT staff as minimum entry criteria will need to be met. This strategy suggests one way of addressing a number of the barriers which this evaluation has identified.

Participants were asked for their views on how they saw this programme being delivered for future cohorts. There was general consensus that the model itself was of value, countered by a concern that the important issues described in this evaluation would not be addressed, and that an increase in throughput could impact on the quality of the training provided.

"I definitely think it [this programme model] would work in other areas. It needs to, because you can't get people being Technicians and then stop them dead and then that's their career for the rest of their life. ... [But] this course would work." (Participant 1)

One participant noted that they were concerned that employers were:

"not going to address the issues that we have, because we did it. Because we've had to do it. If we can do it, why shouldn't anyone else." (Participant 5)

Participants also noted the need to keep numbers manageable, to avoid multiplying the problems that they had raised around placements and shift patterns, and to maintain the high academic standard by ensuring an appropriate number of tutors were available:

"Because university wise, there's no problems. It's more operational and company issues than anything else." (Participant 4)

"I'm just worried that in future, because it's opened out now hasn't it, it's opened out as an external course, that they might get into the mindset that we need as many people in as we can get, and then start churning the course out..." (Participant 6)

With this in mind, the evaluation would make the following recommendations for future programmes of this type:

- Developing partnerships with NHS Trusts across the whole of the region covered by NWAS is key, in order to overcome competition from other providers and the challenges of travelling long distances for students.
- Review current procedures for communication between NWAS and the University, and between students and both organisations, to ensure that staff on certain modes of study are not penalised in terms of shift patterns, or in terms of access to supervision.
- Ensure that staff engaging in a full time programme of study whilst working are supported with their learning. This should include clear and fair shift patterns that fit in with the programme of study, consistent and regular supervised practice, and assistance in establishing relevant placements.

5 The Community Pharmacist in a Minor Injuries Role

5.1 Overview

In its 5 year Forward View, NHS England outlined a number of new models of care, including changes that will be made to primary care to reduce the pressure on under-resourced general practice. These aims include to "build the public's understanding that pharmacies and on-line resources can help them deal with coughs, colds and other minor ailments without the need for a GP appointment or A&E visit"26; and to "make far more use of pharmacists" in order to reduce the increasing burden on A&E departments.²⁷ Subsequently, the Pharmacy 5 Year Forward Viewoutlined that pharmacy services would become "The trusted, convenient first port of call for episodic healthcare advice and treatment." 28

There is an existing Community Minor Ailment Scheme in Cumbria, which encourages patients with minor ailments to visit their local pharmacy for advice and treatment, which helps to avoid referral appointments back to the GP. The scheme has been running since May 2015 and was the first project in England to allow pharmacists to legally prescribe with full access to GP information through a Medical Interoperability Gateway (MIG, 2017²⁹)

The Innovation Fund project aimed to support a reduction in attendances in A&E and GP practices, by developing the Extended Community Pharmacist role, whereby community pharmacists will be able to advise and treat patients with minor ailments within the community. The outputs/deliverables and associated success criteria for this strand are:

- To support the development of an Extended Community Pharmacist role through provision of learning modules. The goal is for community pharmacists to advise and treat patients with minor ailments within the community.
 - Success Criteria: Learning modules, embedded within HEI CPD frameworks which enable extension of knowledge and skills to meet service needs
- Formation of a Joint Board for Emergency Department and Urgent Care Pharmacy to ensure coherence between HEI education provision and student outcomes
 - Mechanism in place to ensure coherent HE provision to support the development of community pharmacy roles in the North West

²⁶ NHS England (2014) The Five Year Forward View. https://www.england.nhs.uk/wpcontent/uploads/2014/10/5yfv-web.pdf p.18

²⁷ Ibid., p.21

²⁸ The Community Pharmacy Forward View (2016). Available at http://psnc.org.uk/services- commissioning/community-pharmacy-forward-view/. Published by PSNC and Pharmacy Voice, August 2016. ²⁹ MIG (2017) Cumbria CCG – Using DCR in pharmacies to improve safety and efficiency http://healthcaregateway.co.uk/cumbria-ccg-using-dcr-pharmacies-improve-safety-efficiency/ [accessed 22 May 2017]

5.2 Evaluation Recruitment and Procedure

The Researcher had preliminary meetings with 3 programme staff in order to obtain information about the pharmacy programme and progress to date (the evaluation ran from May 2017-March 2018 whereas the first Consultation and Physical Examination Skills course described below was scheduled for September 2015). Subsequent to these initial meetings, the Researcher maintained regular contact with the course lead, in order to obtain information about current attendances, completion rates, and programme adaptations.

There were approximately 2 pharmacist trainees from Cohort 1 (January – July 2017 course) who met the eligibility criteria for recruitment into the evaluation (that is: pharmacists who are/have completed a 40 credit non-medical prescribing module, along with attending a 20 credit Consultation and Physical Examination Assessment Skills module at University of Cumbria). It was hoped that in-depth narratives about the development and impact of the new role as pharmacist non-medical prescriber with Clinical Assessment skills could be gained. The Course Lead sent an email to the potential participants inviting them to contact the Researcher if they were interested in participating, but there were no responses.

A total of 7 trainees commenced in Cohort 2 (Sept 2017-March 2018 course). It was initially anticipated that participants would be recruited for an initial interview at the beginning of the course to explore their expectations and views about the training/role, and again towards the end of their training about their experiences and implementation of the training in their role.

However, when the Researcher met the pharmacists at the second of 5 attendance days, it emerged that the pharmacists preferred to participate towards the end of the training, in order that they were in a position to provide more detailed input about their experiences. After providing an information sheet about the research, a focus group was initially arranged for one of the extra practice days in March. This was later changed into one 2:1 interview and one 1:1 interview due to low attendance on the planned focus group day. A consent form was provided to the pharmacists and completed before the interviews.³⁰ Interviews lasted approximately 30-45 minutes and were digitally recorded and transcribed.

5.3 Findings

5.3.1 Context

Recruitment

The initial intention of the programme was that Innovation Fund would be used for pharmacists completing both the Non Medical Prescribing (NMP) course (40 credits) and the Consultation and Physical Examination Skills (CPES) course (20 credits), in order to obtain a combined, named award - a University Advanced Diploma (UAD) (Level 6) / Post-Graduate Certificate (PGC) (Level 7) Practice Development: Consultation and Physical Examination Skills for Pharmacist Prescribing.

³⁰ See Appendix 3 for the semi-structured interview schedule.

However, due to low recruitment of pharmacists for both courses, the criteria was adapted to reach pharmacists who had gained the NMP qualification elsewhere.³¹

Following approval from HENW, it was agreed that some of the funding would be used to support employers in providing locum backfill to enable release of staff to access the modules. Additional funding was also requested from HENW and provided to pay for backfill for community pharmacists to attend the additional 2 days workshops. According to the most recent Innovation Fund project update, this backfill fund does not appear to have been used.

Prerequisites for the course

A prerequisite for the Skills course was that the pharmacist needed to have existing links within Primary Care, in order to conduct their practice based experience. This may have been a barrier for some pharmacists wishing to enrol.

In the early consultation stages of the project, there were discussions between HEI delivery partners around forming a Joint Board for Emergency Department and Urgent Care Pharmacy. The purpose of this board was to ensure that, whilst each HEI would deliver the programme separately, aspects such as content are discussed in order to ensure parity of experience for students and equivalency of skills upon completion. However, as the Emergency Department Pharmacist strand of the project did not take place, this was deemed not viable (as one HEI would no longer be delivering any of the project). It was envisaged that contact would be kept between Manchester, UCLan and Cumbria in order that NMP Programmes across the North can be updated with Emergency Department pharmacist developments to keep their own NMP programmes current and responsive to service needs.

The courses offered by the University of Cumbria are separate to those offered by UCLan, although initial meetings were held between the two universities to develop the programmes for Innovation Fund purposes. UCLan offered modules for Pharmacy students to enrol on Long Term Conditions modules as well as Non-Medical Prescribing modules. No pharmacists enrolled to these. It is understood from the project documents that a separate 80 places were funded by Health Education England for NMP for Community Pharmacists.

5.3.2 Implementation and achievement of delivery

Pharmacists were required to complete 75 hours of practice based experience for the Level 7 award, or 40 hours for the Level 6 award, along with evidence of 6 (Level 7) or 4 (Level 6) practical skills, signed off in practice by the GP, Advanced Nurse Practitioner, or Physiotherapist. All pharmacists initially signed up for the Level 7 route, but ultimately opted for Level 6 due to being unable to complete the course requirements.

³¹ At the time of writing the Innovation Fund Project Chair was checking the eligibility criteria for pharmacists who had already completed the NMP course at another HEI at the point of entry. If the non-UoC NMP award is agreed as part of eligibility criteria, new and retrospective awards would then be processed.

Delivery was adapted in order to better meet the needs of the students. For example, one student registered late and as the course was full, they were offered it as a distance learning course. Plus, in addition to the 2 extra days which were offered to pharmacists on the course for skills practice/assessment help, an extra practical session was offered to the pharmacists in response to feedback that they felt they needed more input. In total, therefore, there were 5 compulsory attendance days and 3 additional and optional attendance days specifically bolted-on to the course for the Innovation Fund pharmacists.

The Consultation and Physical Examination Skills module and Non-Medical Prescribing courses were scheduled for Semester 1 (Sept 2016 and September 2017) & Semester 2 (Jan 2017) starts to enable greater flexibility of start times for pharmacists. It was advertised to pharmacists who were currently undertaking a NMP programme of study at the University.

The University of Cumbria originally estimated that 10 pharmacists would be recruited to the course, but actual registrations were lower than this. No students enrolled onto the September 2016 course. Three students attended the January-July 2017 course, and 7 pharmacists attended the September 2017-March 2018 course. This left a budget surplus which will pay for a further 16 module attendances (information from Contracts/Finance Administrator).

In total, 9 pharmacists registered for the module through the Innovation Fund (one of whom did the course via distance learning using an existing online package). Only 3 applicants were eligible for the named award. 3 pharmacists suspended their studies due to being unable to complete the course requirements.

Interview participants noted that the course had required more work than they had originally expected, but that this had been beneficial to their learning:

"Initially I thought it was just a learning course whereby you would just learn the clinical skills and there was no assessment if you will, but there was a lot of extra work involved. I didn't really want to have to put it into my work/life balance at the time so I was a bit surprised by the actual work." (Participant 3)

5.3.3 Mechanisms of Impact

Feedback about the course from the 3 pharmacists participating in the evaluation was positive overall, with several comments about how the course could be improved further still.

Addressing needs in the Community Pharmacist role

The Consultation and Physical Examination Skills course was regarded as being valuable with regards to developing the pharmacist role. It was noted by participants that pharmacy undergraduate courses tended to not have a large amount of physical examination technique training. The benefits of the course were identified as allowing both *ad hoc* and routine physical presentations to be checked and potentially treated by the pharmacist, which in turn relieves pressure on the GP practice; and allowing pharmacists space for critical reflection on their own techniques and improvement in practice.

"The way I see it, whenever I look around me at the GPs in my practice, a lot of them are thinking about retirement. One of the partners is dropping to part-time in April, so in ten, fifteen, twenty years' time, I reckon there will be a lot more pharmacists in surgeries. That's why these sorts of courses are beneficial." (Participant 3)

"Because a load of people come in [to the urgent care clinic] and they maybe want to talk about their blood results, they want to talk about medication or they've had changes. They're maybe changing their medication. Those sorts of things are now coming to us... [T]hey are things we can take off the Nurse Practitioners, who then take things off the GPs, so it's sort of an upscaling." (Participant 1)

"I do a lot of medication reviews, I see a lot of patients go around care homes... all that type of thing, but I don't diagnose people as such. Why I wanted this is because I invariably get people coming in to me and in the midst of their medication review, they'll tell me they've got a sore knee or something like that... Chances are I probably won't use it very often, but it's little bits like that, where somebody will say to you, 'I've got a sore ankle.' If we could just check it all over and make sure it's okay, then you can say, 'Actually, I think you can take an anti-inflammatory' or whatever." (Participant 2)

"Yes, it's certainly prepared me [for going out into practice]. A lot of what we've learned, and doing all the research and the reading around for my essay, it's led me to reflect a bit more on my practice and take a step back sometimes and see how I could do things differently and improve. So I suppose it has affected the way I work." (Participant 3)

However, it was acknowledged that pharmacists not already embedded within a Primary Care Practice (I.e. Community Pharmacists) may have difficulty in accessing and completing this Skills course:

"I don't know how easy it would be for somebody who doesn't work in practice to do it. I think for a community Pharmacist coming in, they would find it very difficult... For a community pharmacy to be able to take out time from their full-time job, if there's no backfill, because they're not going to pay for a locum for you or anything to come to the course. How on earth do you get time to get the experience of sitting in with somebody?" (Participant 1)

Maintenance of Skills

There was general agreement that consistent skills practice would be required to ensure pharmacists remain competent:

"If you don't have it in your job role already, to keep on top of it is hard." (Participant 1)

"Yes, that's going to be an interesting one...we all have something else to do, so actually, out of my time, it will be quite difficult for me to maintain that competency. But having had

the background of this, as the jobs change and evolve, I know that if I get this, I might not use it as much as I should for maybe six months or a year, but if I do have to, then I just need a refresher, I don't need to - " (Participant 2)

"Yes, just go and do an MSK refresher or go and do a respiratory refresher." (Participant 1)

However, participants were less clear about where such top-ups might be acquired. One participant commented that face to face top ups would be beneficial, and would start with exploring options offered by the CCPE at the University of Manchester:

"They had medical actors in and stuff and it was great. We did a lot of ENT, respiratory, skin. The CCPE do a lot of further training." (Participant 3)

Practice-based experience

Three of the pharmacists work closely with the local GP practice, where significant time is spent in a triage clinic with two Nurse Practitioners and a GP where lots of acute cases are presented. This enables the pharmacists to gain exposure to Physical Examination Assessments. It is envisaged that after qualification the pharmacists will be based in the surgery for a proportion of their time, working as a clinician. The staff have prior knowledge of what patients are presenting with, so can easily be referred onto a GP if the Pharmacist or Nurse Practitioner feel the presentation is not within their area of competence.

In terms of gaining the practice hours required for the course, it appears that although the structure is in place for relevant supervised practice to take place, the demands of the job mean that dedicating time to gain practical experience is limited, and this is sometimes done in their own time:

"Sometimes it is difficult for specific roles that we perform, to actually go and do the practise." (Participant 1)

"For me, it doesn't happen in my day to day job, so I spent today with my non-medical prescriber mentor, and spent a morning with him and his colleague in the afternoon, just sitting in with them in their General Practice, just to see their day to day. I had to take time out of my job to do that." (Participant 2)

"We're very busy, so it is difficult. I haven't clocked up many of my hours, until towards the end of the course, even this week and in two weeks' time when I am back in the dispensary, where I'm working a shift pattern. 7-3 or 3-10. I might be able to come in the morning to do four or five yours under supervision." (Participant 3)

Given the restrictions on pharmacist's time, one participant commented that she appreciated that the whole course and attendance days were explicit from the beginning. This enabled her to organise her schedule and arrange for cover:

"The thing that I found really good is that if you are going to have extra days, you need to know right at the beginning, because of the way I work and the way a lot of my colleagues work, we have clinics and things like that. You need to know exactly when you come in, so you can book it in. Especially if you work part-time, because I only work part-time, I do two jobs. So I knew right at the beginning, I could look at it and think, right, I need to allocate those days for that." (Participant 2)

Pharmacist's time was seen as more of a concern that the opportunities for implementing the skills in practice:

"I must say that the vast majority of people you ask are more than willing to let you come in and sit in with them. They sometimes have to ask their superiors and all of that type of thing, but most of them, nine times out of ten they will be more than happy to let you do that. It's more down to me not being able to follow it." (Participant 2)

However, one participant noted that while observing practice was straightforward in general practice, this wasn't always the optimum place for learning:

"I sat in with one of the GPs just for one appointment, it was only about 20 minutes, but she had a patient who had hurt her knee running. She did a knee examination and immediately she said, 'That's probably not the full, proper way of doing a whole knee examination.' The gold standard, as we were taught. And it wasn't, when I looked at the videos on Blackboard... GPs cover everything, don't they, but if you went to see a Physio about an MSK appointment, that would probably give you a better training experience." (Participant 3)

The participant felt it would have been beneficial to have input from health professionals with expertise in all of the areas covered in the skills course:

"It could be stipulated within the course, well, it would be beneficial to the students to spend x number of their practice hours with a Physio, or in a cardiology outpatient department for the cardiovascular." (Participant 3)

A further point of discussion around situating the course skills in practice was how the role may overlap with other, existing roles within teams. Two participants commented that protocols are in place or being developed specifically for Pharmacist Prescribers with Clinical Skills, and other protocols for Nurse Prescribers, for example, so although there is overlap clarity remains about who can do what:

"We're going to write out, when we've finished this, we're going to write some SOPs [Standard Operating Procedures] that define our role and what we're going to cover, and where our competency ends and where we pass it to somebody else, just to make it clearer." (Participant 1)

Practical skills sessions within the course

The limitation on practice experience meant that participants felt more time could have been allocated to practical skill sessions within the course delivery itself.

"We had the morning that gave you a quick overview of your lectures and things, which was good because it was a refresher...but then we maybe only had an hour, an hour and a half of practise in the afternoon, and it's just not enough...I think I would have wanted another whole morning, if you see what I mean. Today I've purely come not to be signed off, but just to practise." (Participant 2)

Other participants suggested that embedded practical skills within the course assessment, such as an Objective Structured Clinical Examination (OSCE), would ensure that the skills were being practised:

"It's getting practise doing it. I don't know whether really it needs some sort of element of an OSCE or more practise actually involved in the course to make sure that you are actually getting the skills that you need." (Participant 1)

Given the difficulties with time and availability already noted, alternative formats to face-to-face delivery around practical skills were discussed. For one participant, the more traditional physical practice was still seen as the best way of developing their skills:

"I know people said you can go on YouTube and what have you [but] going and looking at something on YouTube doesn't work, for me. I have done, and you can watch it, but I'm a much more hands on, practical, physical person and I like to be able to do it on people. I wouldn't feel comfortable after our morning lectures, an hour and a half of practise and watching a bit on YouTube, going into my GP going, I'll do that." (Participant 2)

5.3.4 Enablers

One participant felt that the time required to complete the essential elements of the course is a challenging aspect, which may be a barrier for some considering whether or not to enrol:

"I think the main problem is just getting the time from your regular working job, to do it. We've got no backfill, no nothing. If you work full-time like I do, trying to get time to do the extra hours is really difficult." (Participant 2)

As such, participants discussed how supportive management had enabled them to complete the course.

"Our boss is quite forward-thinking. She is a partner in the practice. She owns the dispensary and she has sort of advocated the push for pharmacists to be more involved, more clinically involved." (Participant 3)

Effective communication links between the pharmacy and the practice was also seen as an enabling factor:

"If we see something -- we have protocols, so if there is a paediatric discharge, it can be dealt with by the Pharmacist, but it always goes back to the GP to have another look, before it gets put for coding or filing... The GPs and the Nurse Practitioners and generally everyone in the building, it's quite an open atmosphere. They'll come into the dispensary and ask us questions, and likewise, we've got access to email so we can always message them if we have queries." (Participant 3)

Another positive aspect was the mix of health professions – Paramedics, Nurses and Pharmacists - within the course:

"You see aspects and anecdotal stories from a range of experience that is really beneficial." (Participant 3)

Relevance of the course and minor injuries role for Community Pharmacists
Within the 2:1 interview a discussion took place about the difficulty that could be faced by
Community Pharmacists to attend and deliver a minor injuries service:

"It [the service] would have to be specific for community Pharmacists, wouldn't it? You would have to really redraw it...you don't really get any extra funding from the government to say you're doing these extra consults, do you? There would have to be a whole new sort of service set up, really." (Participant 1)

"Community pharmacy at the moment is just basically paid on the volume of prescriptions that you do. [...] Unless they're actually going to do a whole remodelling, saying, right, okay, we want community pharmacists to do that and this is a service that we can offer and you will get paid for doing it, there would be no incentive for them to come and do it." (Participant 2)

Backfill

Participants were unclear about the availability of backfill for this course, and how it could be used. Moreover, one participant commented that locum pharmacists would not generally be able to cover a pharmacists position where various roles are involved, which is the case for all interviewed here.

"As far as I'm aware, the Innovation Fund just has an amount of money that they pay and that pays for the course. But they don't pay for somebody to cover your working hours...we were told to look at it, I don't know what's come of it. The reason why we can do this is because they will give us the time to do it, there's no backfill for us, so if you don't do your bits and pieces, you're catching up." (Participant 1)

Confidence in dealing with Physical Presentations

One participant commented that the course has enabled him to be more hands on and proactive:

"[I'm] quite confident. Not just individual[ly], but pharmacy as a whole has always been a bit stand-offish in comparison to nursing. There's not a lot of physical contact with patients. Even in the pharmacy with patients. I have no problem, I had a guy in yesterday with a cracked, chipped hand, and a girl in with her mother, with a rash on her tummy. Before, I wouldn't have gone near, but now I'm seeing if it was blanched or seeing if it was scaly and rough and touching the man's hands to see how calloused they were. I even made a comment, 'It's definitely not fungal, because you've no problem with touching them.'" (Participant 3)

5.4 Conclusion and Recommendations

The feedback on the programme was positive, and the depth of knowledge and critical reflection it involved were praised by participants. However, the intended model it was designed to support – moving Community Pharmacists into a minor injuries role – does not appear to have been achieved in full: partly, this is due to the surrounding context of pharmacy working. For example, participants in the evaluation identified the key enabler for them to achieve the outcomes of the programme as being their existing links within their General Practice. But they noted, conversely, that Community Pharmacists would require much more resource to enable them to participate and deliver the service which the model outlined. However, given that none of the evaluation participants were themselves Community Pharmacists, more work would be needed to identify the key resource needs of that role.

Recruitment for the programme was lower than estimated. Completion rate was also below expectations, as 6 of 9 enrolled pharmacists were nearing completion of the course as of April 2018. However, for those participating in the evaluation, overall the course was reported as meeting their needs.

Participants suggested improvements in the programme delivery including the facilitation of practice experience with health professionals with expertise in that area (for example, a physiotherapist for musculoskeletal injuries), and to have more time built into the course dedicated for clinical skills practice. There is also a strong suggestion, from the analysis above, that a broader discussion around the prerequisites of the programme – which would include both qualifications (for entry) and resource needs (for completion) – would be beneficial for achieving the intended model.

6 Mental Health Awareness Training for Emergency Department Staff

6.1 Overview

The Five Year Forward View Implementation Plan³² outlines an ambition to ensure all acute hospitals offer integrated mental and physical health care.

"A patient presenting to ED with either a physical or mental health need should have access to ED staff that understand and can address their condition, and access to appropriate specialist services, regardless of their postcode, GP or time of arrival."33

Some of the investments within the plan include a "core 24" mental health liaison service within A&E departments, testing crisis care models in Urgent and Emergency Care Vanguards, and developing evidence-based treatment pathways for crisis care. The associated Commissioning for Quality and Innovation (CQUIN) Scheme Indicator -2018/2019 is "Improving services for people with mental health needs who present to A&E" for 2017/2018, which is to "Reduce by 20% the number of attendances to A&E for those within a selected cohort of frequent attenders who would benefit from mental health and psychosocial interventions, and establish improved services to ensure this reduction is sustainable" (Year 1) and to sustain this reduction along with reducing overall admittances by 10% for all people with primary mental health needs (Year 2).

The Innovation Fund project therefore addresses NHS England's aim to reduce A&E admissions and improve services offered to those presenting with mental health issues, by offering Mental Health Awareness Training to A&E staff. The outputs and success criteria for the 2 elements of the project are outlined below:

- To conduct a scoping exercise to establish employer (emergency department) requirements in the North West region in terms of mental health training for staff.
 - Success criteria: Increased level of intelligence about service level needs in the region
- Thereafter, to provide flexible and innovative training to support the professional development, education and training of emergency department staff in mental health.
 This has the goal of improving services for people who present to A&E with mental health issues, therefore reducing future attendances.
 - Success criteria: Access for ED staff to: (a) innovative tools and models; (b) information about CPD modules

³² NHS England (2015) Implementing the Five Year Forward View for Mental health. https://www.england.nhs.uk/wp-content/uploads/2016/07/fyfv-mh.pdf

³³ College of Emergency Medicine (2013) Mental Health in Emergency Departments – a toolkit for improving care. http://www.rcpsych.ac.uk/pdf/CEM6883-Mental-Health-in-EDs---toolkit-(FINAL-FEB-2013)-rev1.pdf

6.2 Evaluation Recruitment and Procedure

Delegates attending a 1 day mental health awareness training between May 2017 and October 2017 were informed about the Innovation Fund evaluation, and the evaluation procedure was explained (either by the Researcher or the lecturer, whoever was in attendance). They were given a course evaluation form at the start of the training day to gather expectations about the course along with self-assessed knowledge and self-efficacy in dealing with mental health issues in their practice. Delegates were asked to complete only the first side of the evaluation form before the training started (Timepoint 1), and then to complete the second side immediately after the training (Timepoint 2), which again measured perceived knowledge and self-efficacy. Delegates were recruited for follow up by way of providing their email address on the 2nd evaluation form (Timepoint 2). Those providing their email address were sent a third questionnaire approximately 3 months after the training (Timepoint 3) via a personalised email link to a Bristol Online Survey (BOS). The Researcher accessed responses (along with participants' email addresses in order to match data) by logging into BOS.

This survey explored the impact of the training in their role, and was also a method for recruiting a sub-sample of participants for interview (via a tick box response for them to consent to be contacted again). The purpose of the interview was to explore the implementation of the training in their role in more detail. Non responders were sent a reminder after 2 weeks. The chart below shows participant flow. All 40 attendees completed evaluations at Timepoints 1 and 2, and 15 individuals completed an evaluation at Timepoint 3. This is a 37.5% response rate which is significant for a 3 month follow up. Due to lack of available participants, no interviews were conducted.

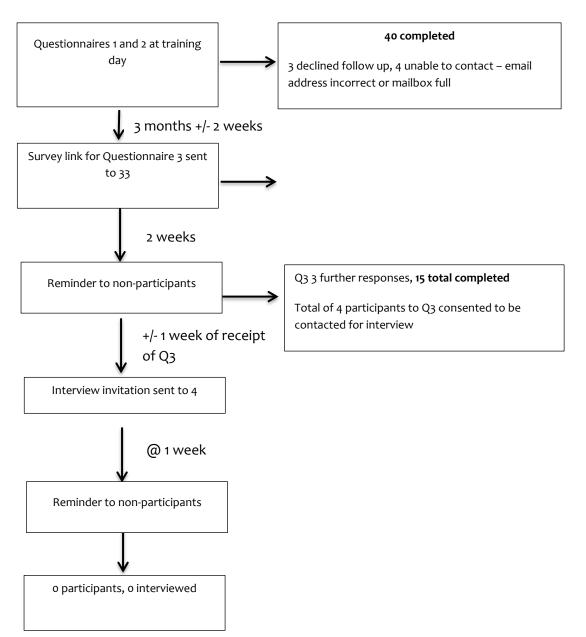


Figure 4 Participant flow through the evaluation

Academic staff from both partner sites (UoC and UCLan) were contacted directly by the researcher and provided with an information sheet and consent form. Both lecturers took part in audio recorded semi-structured interviews, lasting between 30 minutes to 1 hour at their workplace.

The survey measures were developed across all three questionnaires:

Questionnaire 1:

Participants were asked about expectations of the training, knowledge of mental health issues (5 point scale 1=no knowledge, 5=very knowledgeable), and confidence in dealing with mental health issues (5 point scale 1=not at all confident, 5=very confident)

Questionnaire 2:

Participants were again asked to self-assess their knowledge and confidence in dealing with mental health issues as in Questionnaire 1. They were also asked if their expectations of the course met (5 point scale 1=not at all met, 5=fully met), and to identify and write down one way that they could change their practice on completion of this course.

Questionnaire 3:

As in the first 2 questionnaires, knowledge and confidence was measured, along with an assessment of the role the training had in developing both knowledge and confidence (5 point scale 1=no role at all, 5=significant role). Participants were also asked whether they had any experience of dealing with mental health situations in their workplace since the training (5 point scale 1=no, none at all, 5=yes, significant). Participants were also asked if they had experienced a situation regarding mental health that the training had not prepared them for (yes/no response with additional space for comments). Finally, participants were asked to tick a designated box if they were happy for the Researcher to contact them about their responses.

Interviews:

A semi structured interview schedule was done for the academic staff and follow up of students. (see Appendices 9 and 10)

6.3 Findings

6.3.1 Context

A number of contextual factors affected the delivery of the programme, which are listed here.

<u>Difficulties</u> with recruitment

Training delivery was due to commence in September 2015. However, three workshops were cancelled due to low uptake in Semester 1 2015/16 – 2 at the University of Central Lancashire (UCLan) and 1 at the University of Cumbria (UoC). Although the programme was actively promoted with key stakeholders, it was acknowledged by the programme deliverers that "the narrow target group is restricting take up and this presents a risk" (HENW progress report, 2015). Thus, permission was sought from HENW to widen the participant base to include other staff groups involved in the emergency and urgent care provided to patients such as Urgent Care Services, GP out of hours services and Intensive Care. The first workshops did not run, therefore, until May 2017.

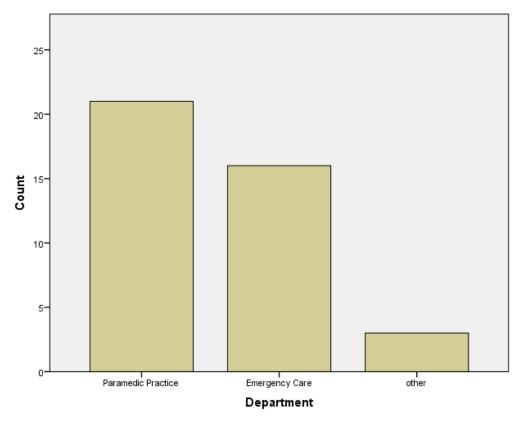
A total of 43 people attended the 4 sessions delivered by UoC within the evaluation time period. The bulleted list below shows that 2 sessions were cancelled due to tutor illness, and one was cancelled due to a low number of registrations.

- January 2017 cancelled due to tutor illness.
- 8th May 2017 (Carlisle) 7 attendees
- 9th May 2017 (Lancaster) 19 attendees
- 25th September 2017 (Lancaster) 16 registrations, course cancelled due to tutor illness. (around 6 people did not receive notification in time and attended the venue)
- 26th September 2017 (Carlisle) 1 registration, course cancelled
- 16th October 2017 (Lancaster) 13 registrations, 15 attendees
- 17th October 2017 (Carlisle) 4 registrations, 2 attendees

The 17th October session was held on request of a Senior Paramedic, to accommodate emergency dept/paramedic staff who cannot access courses further afield. Although it was indicated that attendance would be substantial, this was not the case.

The primary reason given for low recruitment was that Trusts were not releasing staff. The chart below shows that only 15 staff were recruited from the intended audience (A&E).

The chart below provides a breakdown of attendees by department:



Participants by job title:

Paramedic Practice - Total 22 participants:

Advanced Paramedic (1), Community Specialist Paramedic (1), EMT (4), Paramedic (9), Senior Paramedic (3), Student Paramedic (1), Lecturer/Senior Lecturer in Paramedic Practice (3)

Emergency Department – Total 16 participants:

Clinical leader (7), Ambulance triage coordinator (1), Assistant practitioner (1), Nurse (6), Complex case manager – frequent attenders (1)

NWAS urgent care service – total 2 participants:

Advanced Ambulance Care Assistant (1), Urgent care service assistant (1)

Partnership working

The 1 day course was developed jointly between UCLan and UoC. The first 2 workshops were delivered jointly and thereafter, were delivered separately (UoC offering training in Lancaster, Barrow and Carlisle areas, and UCLan delivering in the South of the region). The original agreement was to deliver the 1 day workshop (for maximum 20 people) on 10 occasions across Cumbria and Lancashire – the first 2 being delivered jointly.

6.3.2 Implementation and achievement of delivery

The training aimed to provide an overview of mental disorders, information about the Mental Capacity Act 2005 along with the addition of the Deprivation of Liberty Safeguards 2009. A key element of the course was encouraging reflection on participants' own experiences. It also incorporated some mental health first aid and stress responses.

Part of the training was based on a Public Psychiatric Emergency Assessment Tool,³⁴ which is based on 5 domains of questions (A-E) that can be used to collect key information about patients experiencing mental health emergencies and to pass the information to other healthcare professionals. The tool was developed by a group of mental health nurses and a trauma nurse for use by the police, paramedics and A&E staff to assist decision making and communicate decisions to appropriate staff. This grounding framework was seen as a key aspect to the delivery.

"What we're offering, it wasn't just something that we put together kind of ad hoc, there was a lot of evidence behind the approach we were advocating in terms of its effectiveness." (Participant 2)

The training also incorporated an innovative scenario developed by service users in UCLan's Community Engagement and Service User Support (COMENSUS³⁵) project, which depicts a service user's lived experience of the police and of paramedics when in a crisis situation. This local, personalised case study sets the scene for a meaningful discussion to take place:

"What we did is that we talked to colleagues in COMENSUS and we identified a [scenario] - Dealing with the Police and Paramedics in a crisis - so what they did is they arranged for professional -- they developed a script and they arranged for it to basically be re-enacted and filmed. Then the actual film itself can be interspersed within the training and that offers trigger points for, 'What would you do here? How would you respond?', then that triggers those conversations and that analysis." (Participant 2)

Development of delivery from original session plan

Feedback from one of the course deliverers indicated that the session content was adapted (a) in order to provide accurate information on the procedures that should be followed in relation to Deprivation of Liberty Safeguard applications (in light of feedback about local practice); and (b) to provide flexibility within sessions so that meaningful discussions can take place:

"I have a session plan and I have materials in PowerPoint format and stuff like that, but like I said, the bulk is that I'm reliant on what the course participants say." (Participant 2)

"[in response to a local need] I've had to really introduce quite a lot around the Mental Capacity Act and the Deprivation of Liberty Safeguards. Because we found that one of the Emergency Departments, [name] were doing Emergency DOLS Applications for everyone with mental health problems, regardless of how they presented. People with mental health problems I was being told, that when they were identified, the department doors were locked and often a member of the security team would be outside their cubicle, regardless

³⁵ COMENSUS was developed to embed service user and carer voices within health and social care practice. See http://www.uclan.ac.uk/comensus/

³⁴ See Appendix 5; also Wright, K., McGlen, I., Croll, D., Haumueller, M. (2008) Managing mental health situations. *Police Professional*, 131, 18-20; Wright K, McGlen I (2012) Mental health emergencies: using a structured assessment framework. *Nursing Standard*. 27, 7, 48-56. DOI: 10.7748/en2012.03.19.10.28.c8993

again, of presentation. That obviously caused me some concerns in terms of protected characteristics under the Equalities Act and also the fairly stringent rules around Deprivation of Liberty Safeguards." (Participant 2)

Overcoming recruitment difficulties

Several strategies were used to overcome the difficulties experienced with recruiting from the intended staff group, such as capturing newly qualified Paramedics:

"We've captured the graduate Paramedics... Of the 50 we [at UCLan] have done, 49 were going to NWAS and one person was going to Yorkshire for reasons we never quite worked out. They were all about to start their periods of preceptorship, because a lot of them had previously been employees of NWAS anyway." (Participant 2)

Or using existing links to advertise the course:

"We use the Practise Education Facilitators, we use Senior Paramedics, anyone." (Participant 1)

"NWAS have an Advanced Practitioner forum for Morecambe. Senior Practitioners. I've spoken to a couple of Advanced Practitioners who are actually in that forum, and said, maybe if we deliver it to yourselves, because they have regular meetings, they can cascade it down." (Participant 2)

Or on strength of delivery and word of mouth:

""Now that we've actually run it a couple of times ... the feedback is pretty positive. Not least because people are desperate for it. Our colleagues in the A & E departments and the Paramedics are desperately out of their depth and they are dealing with people who are suicidal and self-harming etc. ... We've run a few workshops now successfully and Cumbria have, is that we've also got that kind of feedback and word of mouth." (Participant 2)

From that standpoint, we are very much pushing at an open door. It's just about managing a resource and how we can facilitate that so that we can get more and more exposure for it.

Offering to deliver on-site, or producing a condensed version of the course:

"We did look at a way ... [of] how to condense it down to half a day or an evening, just so we could deliver it morning, afternoon, evening. Just two or three hours it would have taken. We probably couldn't go any less because then it just becomes meaningless of course. ... Part of the training is allowing people not just to tell their stories, but to make sense of what they have participated in and observed, and understand some of the behaviours. I think we're confident we can offer that condensed version, as well." (Participant 2)

However, even forming agreements at a high level has not resulted in improved attendance rates:

"The communication with both NWAS and with A & E departments has been at the highest level. For instance, when we arranged the workshop at the A & E department for Blackpool, I communicated directly with the Director of Nursing, so it was at the highest level... We've delivered in one A & E Department now, and that was in Blackpool, but to a very small number of participants. It's the same issue again, in terms of backfill..." (Participant 2)

6.3.3 Mechanisms of impact

In terms of what attendees expected of the course, the following list shows a summary of a thematic analysis of responses. The vast majority of attendees expected a gain in knowledge and understanding of mental health issues, followed by improved confidence:

| Expectation Themes | Number of Responses |
|--|---------------------|
| Improved KNOWLEDGE AND UNDERSTANDING | (n=23) |
| CONFIDENCE MANAGING PATIENTS | (n=10) |
| LEGALITIES (DOLS, MENTAL CAPACITY ACT) / AND OUR | (n=5) |
| LIMITS IN EMERGENCY CARE | |
| ASSESSMENT A systemic approach to mental health | (n=3) |
| assessment | |
| SERVICE IMPROVEMENT/practice development deliver a | (n=2) |
| better service | |
| REDUCE REFERRAL PATHWAYS expand knowledge and | (n=1) |
| understanding, learn additional referral pathways | |
| INAPPROPRIATE A&E ATTENDANCE | (n=1) |

Quantitative results from the questionnaire study showed that knowledge of, and self-efficacy in dealing with, mental health issues were also enabling factors:

- **Knowledge** increased from a mean of 2.69 (SD .52) before the course to 3.67 (SD .53) directly after the course. A Wilcoxon sign ranked test showed there was a significant difference between the scores (Z=5.57, p=.000, 95% CI, n=38)
- Confidence in ability to deal with mental health issues increased from a mean of 3.00 (SD .96) before the course to 3.68 (SD .53) after the course. A Wilcoxon sign ranked test showed there was a significant difference between the scores (Z=3.58, p=.000, 95% CI, n=38).

The following quote demonstrates how confidence issues are dealt with on the course:

"One of the things that was very evident with the groups we did with the Paramedics was a confidence issue really. It's that they were frightened of saying the wrong thing and triggering a reaction that would result in self-harm or somebody killing themselves. It's

actually reassuring them that they can't convince somebody to commit suicide, that's not their responsibility and they must never take it on. However clumsy you are, it is your sincerity and your natural empathy that will win the day. Don't be frightened about speaking to people about what you see in front of you, which is often people attempting suicide or harming themselves or threatening to harm others. It's just that conversation, that acknowledgement. A lot of it, there's a small aspect about skills which we practise with them, but a lot of it is about reassurance and confidence, that it's actually all right to talk to people." (Participant 2)

A Friedman test was carried out to look for changes across the 3 timepoints in the 15 participants to Questionnaire 3. There was found to be a significant difference between the methods, $x^2(2)=18.17$, p=.000). Dunn-Bonferroni post hoc tests were carried out which confirmed the difference between timepoint 1 and timepoint 2 (p=.001). There were no significant differences between any other timepoints, which suggests that knowledge and confidence levels in dealing with mental health issues were maintained at the 3 month point.

It is important to bear in mind, however, that the measures were based on perceived levels of knowledge rather than objective measurements, so the "knowledge" results should be viewed tentatively.

6.3.4 Enablers

As reported above (section 5.3.1), the programme initially struggled with recruitment. This was due to initial timetabling in the November-February period, when emergency services and departments were facing added pressures and struggled to release staff.

"When we initially started it, all we heard was... 'We can't free up staff because of the winter pressures." (Participant 1)

"What's being communicated all along, is that the issue is backfill, it's actually releasing staff to attend." (Participant 2)

The delivery team therefore looked at several ways of addressing these issues; with all of these, it was reported that "the staffing issue seems to have been the primary obstacle." (Participant 2)The most successful approach was therefore to provide more notice period for when the programme would be running. Recruitment then improved through a mixture of relieving pressure on rotas, and being able to demonstrate the success of the programme once people had taken part:

"We started to give people much, much more notice so they could get rotas sorted out. That seems to have made a difference. I guess also once people started to participate in the day then word spread. I think that probably helped quite a bit as well." (Participant 1)

Another possible barrier that may be a barrier to course attendance, is if staff feel it is not their job to get involved with mental health issues. Once on the course this can be discussed openly and one lecturer commented that attitude change is often evident in the course:

"We anticipated some resistance and some negative attitudes at the outset, and we certainly received them, at the outset. It all seemed to be centred around, 'this isn't our job, we are an emergency service.' So, we did have to kind of establish the fact that mental health services are not emergency services and that there is nowhere written in the constitution of the NHS or NWAS that it only responds to physical emergencies." (Participant 2)

Having a contact in practise to drive the change was thus considered a key enabler for promoting the programme and its benefits.

"I think having someone to lead that from practise is quite important. Otherwise it's just something that is skimmed over in an email. Unless you have a real interest in it, it might not." (Participant 1)

The programme deliverers were clear that the need for the programme was widely acknowledged and engaged with by leadership:

"I don't think [lack of backfill] in anyway communicates a lack of commitment to this. There is certainly an acknowledgement from NWAS that this training or comparable training is desperately needed for Paramedics, because of the amount of people in crisis that they deal with." (Participant 2)

Once people had attended the programme, the delivery team reported that the purpose of the training and its relevance to individual roles was often readily seen:

"We kind of establish with them that actually, you respond to all emergencies and that includes psychiatric emergencies. The fact that it's not acknowledged in your training, or that training is not delivered, that is an oversight in your curriculum, but it doesn't detract from the fact that it is your job...Interestingly enough, the vast majority took that on straight away. It was like the collective penny dropped." (Participant 2)

6.3.5 Outcomes

After developing the programme over time to meet recruitment needs, the participant feedback showed a positive response: 82% (n=33) of participants felt that the course mostly or fully met their expectations (I.e. scored 4 or 5 on the 5 point scale). Of these, 17% (n=7) said their expectations were 'fully met'.

One lecturer noted that despite the adjustments made, the one-day workshop was "probably about there" in terms of content.

"If it wasn't a one-day course there would be loads of stuff I would do to it, but as a one-day course, while being open to suggestions [to change], I can't think off-hand." (Participant 1)

The lecturer also noted that the delivery was designed to be reliant on participant input, rather than a more structured, didactic approach. This may have not met with some participants' expectations but, for the lecturer, its benefits outweighed the negatives:

"We could make it a more structured course, less reliant on participant input, but... if we do stuff like that we lose the flexibility. Also, I want them comfortable and I want them talking. Because when they are comfortable and talking, I don't just get the policy stuff, I get what actually happens. When we get what actually happens then we can discuss that properly and then we can start exploring, why does that happen?" (Participant 1)

As seen above in section 5.3.3, tentative results show that the training had an impact on staff knowledge and confidence in dealing with patients who present with mental health issues, and that this may have been maintained over a 3 month period. The following quotes from the interviews summarise the successes of the training from the lecturers' perspectives. These include challenging assumptions (seeing participants have a "light bulb moment"), and challenging normal working practices which have the outcome of reducing attendance at A&E:

"The opinion of many of them [the participants] at the beginning was, 'Mental health is nothing to do with us, we only fix broken bones,' but they had accepted by the end of the day that we are an emergency service for all emergencies, and that included mental health." (Participant 2)

"It's always nice when you see the lightbulbs go on... People suddenly realising that -- because people have a perception that if you do a job long enough then it becomes a job, and you have a set of working assumptions that will make your working life easier. Part of this course is to challenge some of those working assumptions." (Participant 1)

"[S] ome of the work we have done has been around, is does somebody have the capacity to make a decision? If someone is saying that they'll keep themselves safe, can you believe that? Referral on to crisis team where appropriate, and if you're taking advice from a crisis team, if the crisis team say, 'we know this person,' they're safe to leave... That can be quite counter-intuitive, but that's been a really valuable part of the training." (Participant 1)

One lecturer reported that they received feedback from one of the course delegates that showed a positive impact of the course on working practice, whereby a paramedic had made a decision to not transfer a person to an Accident and Emergency department, but deal with them instead at their home address. Because this was a different decision to that which they would have made before taking the course, it was one anecdotal example of programme impact.

In terms of the overall success of the programme, the problems of recruitment remained an issue.

"The feedback we have had from the individuals who have participated is uniformly positive. Whether that is actually then translated into positive changes in practice, I think

we would be dishonest to say we could say with any assurance at this moment in time. It's a huge organisation and we are a huge geographical area." (Participant 2)

This said, the numbers trained one the programme remain small relative to the broader workforce in emergency care, and it is unlikely that this will deliver wider performance changes beyond those trained.

One of the lecturers noted that the success of the training often involved acknowledging the distinct cultures and working practices of particular roles. As such, they suggested that the programme could be improved if it was co-delivered by a professional partner:

"Whether it was an academic or whether it was actually a senior Paramedic or an Advanced Practitioner, I can see merit in actually having a Paramedic immersed in the delivery of that programme and co-facilitating it. Perhaps more so than another mental health nurse or lecturer, to be honest... Because they are different cultures and they are different bodies, aren't they?" (Participant 2)

6.4 Conclusion and Recommendations

The Mental Health Awareness training was developed to offer A&E, Paramedic and Urgent Care staff improved knowledge and understanding of mental health issues and how to respond to patients presenting with a mental health emergency. This evaluation has shown that the course may help to increase knowledge and self confidence in dealing with mental health issues over a prolonged period of 3 months or more. Moreover, general feedback suggests that the course content generally meets the needs of those attending.

Despite these positive significant results, throughout the 3 years that the programme has been available to date, recruitment difficulties have been significant. Flexible training delivery, broadening recruitment criteria and enhancing recruitment activities have all had limited success. The main barrier has been cited as service demands on NHS staff, and lack of backfill for participants attending the training. Approximately 49 staff have, to date, accessed the training, which is a comparatively small number given the potential recruitment pool.

The evaluation was, itself, unable to recruit participants for a follow-up interview in addition to questionnaires. This means that participant's experiences of implementing the training, challenges and successes and the impact of the training on their role and patient care remains undocumented. Anecdotal evidence suggests that those who have attended the programme have seen a positive impact in practice, but more work is needed to explore this.

The evaluation recommends that the strategy of recruiting from a wider pool of participants is continued, and that the benefits of the training to services continues to be demonstrated, in order to increase recruitment.

7 Conclusion

7.1 Summary

The education and skills programmes, aimed at that directly addressing the current issues facing primary and emergency care across the North West, have been delivered within varying timescales, and with a degree of iterative development in keeping with the context of cross-institutional and inter-organisational working. In this summary, a number of prescient themes are presented, which have emerged across the evaluation of all strands of the Innovation Fund work.

- Across all strands of the programme, contextual factors have had a strong moderating
 influence on outcomes. That is to say, the design and delivery of each strand was often
 interrupted by external factors, such as problems with recruitment, balancing workloads
 for participants, and communication between organisations. As such, it is difficult to
 reasonably ascribe outcomes to designs.
- A number of participants across the different strands reported positive feedback on the quality of programme delivery and the helpfulness of staff at the University of Cumbria.
- At the same time, a number of strands reported gaps between the structure of
 programme delivery and the practicalities of their working demands. Closer dialogue
 between organisations and universities, with flexibility on both sides where appropriate,
 would enable these gaps to be less impactful on the experience of the programme.
- While recruitment from Emergency Departments was found to be problematic by a
 number of strands, there was positive feedback from those participants recruited from a
 wider area with the health service. It is likely that to address problems in emergency care
 in the future, programmes will benefit from recruiting from services and departments
 further "upstream" and "downstream" from emergency care in itself, in order to help
 reduce demands.

7.2 Strengths and limitations of the process evaluation

Based on a best-practice evaluation framework recommended by the Medical Research Council. The framework and primarily qualitative design allowed for an in-depth exploration of pathways. Data gathering was done over a period of 10 months which generally allowed for flexibility in line with the changing contextual landscape of the programme streams.

It is important to remember that while all of the programmes evaluated shared the same aims of addressing the problems with emergency care in the North-West, they were delivered separately and on varying timescales. In some cases, programmes had already run before the evaluation commenced, and in others the programme was just beginning. This, combined with the low numbers of students participating in a number of the programmes has meant that opportunities to collect a breadth of qualitative data were limited.

Appendix 1: Summary Table of Existing Evaluation of Educational Interventions to Train Emergency and Urgent Care Staff

| Author | Location | Training Intervention | Design of evaluation (inc framework used if any) | Methods | Participants | Procedure | Data analysis |
|--------------------------|---|---|---|--|--|---|------------------|
| Ellard et al, 2014 | Malawi (UK trainers & researcher s) | 30 month knowledge and skills training and mentoring. Enhancing human resources and the use of appropriate technologies for maternal and perinatal survival in sub-Saharan Africa (ETATMBA) | Mixed methods, primarily qualitative Adaptation of process evaluation framework of Steckler and Linnan | Semi-structured Interviews, convenience sample. Quantitative data from registers, health records | 54 recruited from 81 non-physician clinicians (NPCs) (trainees). 45 retained throughout evaluation | 1 st Interviews at 4-5 months after module 1 (Timepoint 1). N=19. Perceptions of the training and support, new knowledge gained. 2 nd Interviews at 4-5 months after module 2 (clinical leadership – Timepoint 2). N=12. Training content and its implementation in their clinical work, challenges and successes in using and sharing these skills in their facilities. 3 rd Interviews during module 5&6 (Timepoint 3). N=39. Asked to provide specific examples of how they had used the training in their clinical work, describing actual cases on key aspects of training delivery skills: practical, audit, leadership. | |
| | | | | | District medical and nursing officers 'Cascadees' of training from trainees – nurses, midwives, NCPs Obstetricians | Timepoint 2 - How they perceived the training and how it had fitted into their hospital. N=7 Timepoint 2 - Delivery and content of training they had received. N=10 Timepoint 3 - How they supported the trainees. N=2 | |

| Author | Location | Training Intervention | Design of evaluation (inc framework used if any) | Methods | Participants | Procedure | Data analysis |
|---------------------------|-------------------------------------|---|--|---|--|--|---|
| Ellard et al, 2017 | Tanzania (UK researcher s) | 3 month knowledge and skills training Enhancing human resources and the use of appropriate technologies for maternal and perinatal survival in sub-Saharan Africa (ETATMBA) | Qualitative process evaluation exploring the implementation and acceptability of the ETATMBA training programme | Semi structured interviews | Trainees N=27/36 District medical officers N=5 Cascadees of the training N=12 Trainers (obstetricians) N=3 | The following themes around the training were covered: the selection of trainees, delivery of the training, relationships between NPCs/ACs and medical doctors, implementation of training into practice, support for implementation, challenges, impact of training, sustainability and recommendations | Interviews recorded and transcribed verbatim. Framework method (Ritchie and Spencer, 1994; Pope and Mays, 1995) |
| Ericson et al, 2017 | Sweden | 2 week interprofessional education for students as part of their professional training. Clinical training provided for the mixed profession team of students in a designated part of the emergency department, supervised by mixed profession supervisors | Mixed methods. Realist evaluation (Pawson et al, 2006) to identify facilitators/inhibit ors to the successful implementation of the training | Internal documents, semi- structured interviews, observations and questionnaires | Medical, nursing and physiotherapy students | N=total 120, questionnaire sent immediately post-training. Likert scales reflecting the learning goals and the students' general attitude towards, 1-9 scale (neg-positive). two open-ended questions for free text comments on the positive and negative aspects of clinical education in the emergency department. N=7/10 were randomly chosen from a list and invited to participate in a voluntary, individual interview to explore their views about the interprofessional education activities and their own roles. Observation was done to count the collaborative activities between students. | Interviews - recorded and transcribed verbatim. Coded using an inductive thematic approach. Thematic summaries were triangulated and agreed |
| | | | | | Supervisors | N=total 72. Included open-ended questions for comments which explored their perceptions of working in the clinical education in the emergency department. Also included a couple of closed questions with Likert scaling but no detail provided in paper. | with research team. |

| Author | Location | Training Intervention | Design of evaluation (inc framework used if any) | Methods | Participants | Procedure | Data analysis |
|--|--------------------|---|--|---|---|--|--|
| | | | | | | N=7/10 were randomly chosen from a list and invited to participate in a voluntary, individual interview to explore their views about the interprofessional education activities and their own roles | |
| | | | | | Clinical managers (head of ED and head nurse) | N=2 Interviewed to explore what they perceived as positive and/or negative with this model of clinical education in the emergency department | |
| Walker et al, 2015 | Guatemala | 3-day (2 module) Simulation-based obstetric and neonatal emergency and team training programme to improve quality of neonatal care. Included etablishing strategic goals to improve clinical practice | Questionnaires and self reports | | Obstetric and neonatal care providers who received 2 modules of PRONTO training | N=207/219. Pre-post test changes in knowledge and self-efficacy in obstetric hemorrhage and neonatal resuscitation, preeclampsia/eclampsia and shoulder dystocia (94 questions). Team improvement planning sessions were held to set goals for improving obstetric/neonatal care, teamwork, work processes, and infrastructure at their site. Teams self reported goal attainment, verified through observation when possible. | longitudinal fixed- effects linear regression model and descriptive stats |
| Parque tte- Warren et al, 2014 | Ontario, Canada | Partnerships for Health programme for primary health teams involving Educational activities, supportive activities, IT support, and reporting activities | Process evaluation to capture program details that would allow for an accurate interpretation of program outcomes. Logic model clearly defined | program documentation; participant observation; and in-depth interviews | Implementers | Post programme in-depth interviews - perspectives about their team's functioning, administration and/or implementation processes including challenges encountered, critical elements to success, and reasoning behind changes made from intended to implemented activities. | |
| | | | | | Programme participants | interviews | |

| Author | Location | Training Intervention | Design of evaluation (inc framework used if any) | Methods | Participants | Procedure | Data analysis |
|--------|----------|-----------------------|--|---------|---|---|------------------|
| | | | | | (administrative staff, case manager, family physician, nurse, pharmacist) | were conducted post-program to capture their views about the program including expectations of and the value of each activity and the implementation processes used | |

Appendix 2: Interview Schedule – Paramedic Practice (staff)

Paramedic Practice

Interview schedule for academic / NHS staff

Thank you for agreeing to take part in this interview to tell us about your experience of and views about the Innovation Fund paramedic programme (both the emergency medical technician training and the advanced community paramedic training) and how this supports development of the workforce. I hope to interview around 30 people in relation to the paramedic programme in total.

My name is Clare Robinson and I am working as a research assistant. I am doing this interview on behalf of the Health and Social Care Evaluation Team at the University of Cumbria.

With your permission, the interview will be recorded for transcription purposes, and individual quotations may be used in a report which will be fed back locally and nationally. Your comments may be communicated back to the research team. The recording will be erased from the digital recorder once it has been transcribed.

Individual names will be removed from comments and care will be taken to protect the anonymity of participants. However, given the low numbers there is a chance that you may be identified from any quotes used.

The interview should take about 40 minutes.

Would you like to be sent a copy of the report once it is completed?

now complete consent form -

1 Acceptability of the training / role

- a. In your view, to what extent does the Certificate in Pre-hospital Emergency Care support the development of an Emergency Medical Technician role?
- b. In your view, to what extent does the Diploma in Service Redesign in Integrated Care support the development of an Community Specialist Paramedic role?
- c. How do you see the role of the Advanced Community Paramedic in meeting service needs?
 - e.g. reductions to A&E visits, establishing links with community

2 Implementation

- a. To what extent do you feel the paramedic programme has been implemented as planned, so far? both EMT and CSP programme
 - i. What changes have been made along the way, if any?
 - What caused these changes to happen? (Was this, for example, a contextual issue, or an issue with design?)
 - o In what ways have the changes been beneficial?
- b. What problems were you faced with and how were these overcome?

Prompts: timescales, recruitment issues, partnership working, clarity of the role alongside existing systems, unproductive overlap with other roles

c. If another university/practice were to adopt this programme, what would you advise them to do to avoid these barriers?

3 Impact of the training

- a. What have the main successes of the programme been, if any? both EMT and CSP programme
 - i. Can you provide an example?
- b. What difference has it/will it make to the delivery of healthcare?
 - i. Can you give examples?
 - ii. Has/will there be an improvement in patient care? How might this be measured?
- c. Where do you see the programme / role of advanced community paramedic developing from here?
- d. How easily do you think this programme / CSP role could be rolled out to other areas?
- e. Have there been any unintended outcomes of the programme? **Prompts:** working relationships with GP practice, communication, interest in role

Appendix 3: Interview Schedule – Paramedic Practice (participants)

Paramedic Practice

Interview schedule for Advanced Community Paramedics

Thank you for agreeing to take part in this interview to tell us about your experience of and views about your training and role as Advanced Community Paramedic. I hope to interview around 10 people in total.

My name is Clare Robinson and I am working as a research assistant. I am doing this interview on behalf of the Health and Social Care Evaluation Team at the University of Cumbria.

With your permission, the interview will be recorded for transcription purposes, and individual quotations may be used in a report which will be fed back locally and nationally. Care will be taken to protect the anonymity of participants, such as using pseudonyms instead of individual names. However, given the low numbers being interviewed, there is a possibility that you could be identified from the quotes used in reports.

Your comments may be communicated back to the research team. The recording will be erased from the digital recorder once it has been transcribed.

The interview should take up to 15 minutes.

Would you like to be sent a copy of the report once it is completed?

now complete consent form -

When did the course start in relation to their secondment?

Gaps between attendance days?

Did they complete?

1 Acceptability/expectations of the training

- d. What were your expectations of the Service Redesign in Integrated Care learning module?
 - i. Were your expectations been met?
 - ii. Where did you get your expectations from?Prompts: e.g. told about the course, assumptions
 - b. What *value* does the course have in developing the knowledge and/or skills required for the role of CSP?
 - What areas of this module do you think could be improved?
 Prompts: delivery, content (ask for specifics)
 - c. What modules/CPD do you feel you would benefit from in carrying out the CSP role?

2 Context

a. Do you think there were any aspects to the success (or otherwise) of the learning modules that were specific to your cohort of CSPs?

3 Barriers

- a. What, in your view, were the main problems with the training?
 - Prompts: delivery, relevance
 - i. How were the problems overcome?
- b. What would you advise other CSPs to do to avoid these barriers?

4 Implementation of the role of CSP

- a. How easy was it/has it been to implement the link/leadership (social change agent/50% of the role) part of the role?
 - i. Do other people understand the role, are there unproductive overlaps with other roles, is it clear how the CPS fits with existing systems?

5 Impact of the training and role as Advanced Community Paramedic

- a. How has your role evolved since the end of the pilot?
 Prompts: what areas have changed/stayed the same, what proportion of your work is the emergency response element?
- b. Where do you see the role developing from here?

3 Unexpected pathways and consequences of the training

| a. | Has there been anything during or as a result of the programme that has been unexpected in your view? |
|----|--|
| | Prompts: working relationships with other professionals, communication, interest in role, effort/resources required |
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Appendix 4: Focus Group Schedule – Paramedic Practice

Paramedic Practice

Focus group schedule for Emergency Medical Technicians

Thank you for agreeing to take part in this interview to tell us about your experience of and views about education programme to support your development into a paramedic. I hope to conduct 2 focus groups in total.

My name is Clare Robinson and I am working as a research assistant. I am doing this interview on behalf of the Health and Social Care Evaluation Team at the University of Cumbria.

With your permission, the focus group will be recorded for transcription purposes, and individual quotations may be used in a report which will be fed back locally and nationally. Care will be taken to protect the anonymity of participants, such as using pseudonyms instead of individual names. However, given the low numbers being interviewed, there is a possibility that you could be identified from the quotes used in reports.

Your comments may be communicated back to the research team. The recording will be erased from the digital recorder once it has been transcribed.

The focus group should take up to 1 hour.

Would you like to be sent a copy of the report once it is completed?

- now complete consent form -

1 Acceptability of the training and role progression

- e. What were your expectations of the training programme?
 - a. To what extent have these expectations been met?
 - b. Where did you get your expectations from?
- f. What do you understand the role progression route to involve?

Prompts: How clearly do you think the role progression route has been articulated? Was it always clear, or did it become clearer as the programme went on?

g. What are the perceived benefits and costs – to you – of progressing your role from Technician to Paramedic?

2 Impact of the training

- a. How easy has it been to implement the new role in practice?
- b. What have the main successes of the programme been, if any?
 - i. Can you provide an example?
 - ii. How did these successes come about what factors were involved?

Prompts: course content, support received, initiative, resources, fit with existing systems, clarity of role

- c. What difference has it/will it make to the delivery of healthcare?
 - i. Can you give examples?
 - ii. Has/will there be an improvement in patient care? How might this be measured?
- d. What problems have you been faced with during your training?
 - a. How have these been overcome?

Prompts: course content, perceived self efficacy in doing the role, support received, resources, clarity of the role alongside existing systems, unproductive overlap with other roles

- e. If someone else was to follow the same education programme, what would you advise them to do to avoid these barriers?
- f. Where do you see the role developing from here?
- g. How easily do you think this programme could be rolled out to other areas?

i. Unexpected pathways and consequences of the training

b. Has there been anything during or as a result of the training programme that has been unexpected, in your view?

Prompts: working relationships with other professionals, communication, interest in role, effort/resources required

Appendix 5: Public Psychiatric Emergency Assessment Tool

| | Domain | Explanation | Examples of questions asked by emergency nurses |
|---|---------------------------|---|--|
| A | Appearance and atmosphere | What can be observed immediately about the patient in distress | What is the patient's height, weight, build and ethnicity? Are there signs of injury such as bleeding or bruising, or verbal or non-verbal signs of pain? Is the patient's complexion pale, clammy or flushed? Are there obvious odours such as alcohol, cannabis, faeces, urine or ketones? Does the patient seek, maintain or avoid eye contact? Is the patient stumbling, upright, stooped or bent over, or waving or pointing? Are there signs that the patient has slept rough or is incontinent, or is there evidence of self-neglect? If the patient is holding something, is he or she gripping it? |
| В | Behaviour | What the patient is doing and whether this is in keeping with the situation | Is the patient's behaviour in keeping with the setting? How aware is the patient of surrounding people, and does he or she recognise and respect them? Is the patient confrontational, guarded, gregarious, distracted, fearful, happy or sad, for example? Is the patient open to persuasion or negotiation? Is the patient's behaviour changeable and, if it is, how and how often? Does the patient appear to protect something, such as a personal item or a person? Has the patient voiced intent to harm or kill him or herself, or others? What is the nature of the patient's volition and decisiveness? Is there noticeable spitting, dry mouth or salivation during speech? Does the patient gesture or signal? Does the patient express delusions about who he or she is, or who surrounding people are? |
| С | Communication | What the patient says and how he or she says it | Is the patient's speech shaky, emotional, slurred or repetitive, or are expletives used? Are the patient's words disordered or ordered, or is there a unique meaning that they ascribe to words or phrases that are not commonly understood by the nurse? Does the patient use song lyrics or words from texts? Does the patient respond to voices that others cannot hear, and is there confabulation? Does the patient interrupt or pre-empt, and is the patient responsive to requests? Is the patient seeking reassurance? Is there emotional flatness or expressiveness? Is there noticeable spitting or salivation, or does the patient have a dry mouth? |
| D | Danger | Whether the patient is in danger and whether his or her actions may endanger others | Is the setting appropriate, for example a curtained cubicle or room with a door? Does the patient possess, or indicate that he or she possesses, weapons or potential weapons? What equipment, such as chairs, clinical instruments, pens, scissors, stethoscopes or sharps bins, could be used against you? Do you need security staff or the police to attend and, if you do, should their presence be overt or covert? What effect would their presence have on the patient? Do you need a personal alarm? Is the patient situated between you and your escape route? Should he or she be moved? Are other people in the area at risk? Conversely, does the presence of other people increase the risk to you, the patient or others, perhaps because of their proximity or mode of communication? Does the patient have any apparent disability or other special needs? Is the patient continually monitored or left unsupervised for periods? Are staff involved in the patient's care aware of a risk of self-injury? |
| E | Environment | Where the patient is situated and whether anyone else is nearby | Where does the patient think he or she is? What is his or her orientation to time? How does the environment, including lights and sounds, affect the patient and how does he or she respond? Does the patient know who other people in the environment are? |

Appendix 6: Mental Health Awareness Pre- and Post-Training Questionnaire

Thank you for attending the Mental Health Awareness training workshop today.

This Mental Health Training workshop is being evaluated as part of a wider project aimed at improving the delivery of healthcare through training. I am keen to hear your views about this training. Please take a few moments to complete this form. Please fill this page in BEFORE the training starts, then complete overleaf at the end of the workshop. Then please fold the form in half and hand in to the trainer. You will not be identifiable in any evaluation reports that are written.

PLEASE COMPLETE THIS PAGE BEFORE THE TRAINING STARTS

| 1. | What department are you attending from? | | | | | | | | |
|--------|--|--|--------------------------|-----------------|-----------------|--|--|--|--|
| | ☐ Paramedic pra | actice | ☐ Emergency care | | | | | | |
| | ☐ Critical care | | ☐ Other (please | | | | | | |
| | | | state) | | | | | | |
| 2. | . What is your job title? | | | | | | | | |
| 3. | 3. What are your expectations of the course today? | | | | | | | | |
| •••• | | | | | | | | | |
| 4. | 4. On a scale of 1 (no knowledge) to 5 (very knowledgeable), how would you rate your curs knowledge of mental health issues? | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | | | | |
| | | | | | | | | | |
| No kno | owledge | | | Very | / knowledgeable | | | | |
| | | | | | | | | | |
| 5. | | do you currently feel a ase tick the box releva | bout dealing with mental | l health issues | in your day to | | | | |
| | 1 | 2 | 3 | 4 | 5 | | | | |
| | | | | | | | | | |
| | Not at all confide | ent | | | Very confident | | | | |

Please complete the next page after the course has finished!

PLEASE COMPLETE THIS PAGE AFTER THE TRAINING HAS FINISHED!

| 6. | On a scale of 1 (not at all met) to 5 (fully met), please indicate the extent to which your expectations of the course were met: | | | | | | |
|--------|---|---|--|------------------------|--------------------|--|--|
| | 1 | 2 | 3 | 4 | 5 | | |
| Not at | □ all met | | | | □ Fully met | | |
| | Please comm | nent further: | | | | | |
| 7. | Please descr today's sess | - | hich you could change y | our day to day practi | ice as a result of | | |
| | | | | | | | |
| 8. | | f 1 (no knowledge owledge of ment | e) to 5 (very knowledgeab al health issues? | le), how would you no | ow rate your | | |
| | 1 | 2 | 3 | 4 | 5 | | |
| | | | | | | | |
| No kno | owledge | | | Ver | y knowledgeable | | |
| 9. | | • | ntly feel about dealing with | n mental health issues | s in your day to | | |
| | 1 | 2 | 3 | 4 | 5 | | |
| | | | | | | | |
| | Not at all cor | nfident | | | Very confident | | |
| | | | e for me to contact you in the ining in your practice. | the near future so I c | an ask you | | |

By providing your Name and Email address you are agreeing for me to contact you again.

| | | Thank yo | u for your time | ! | |
|----------------|----------------------|-----------------|-----------------|---|--|
| Clare Robinsor | , Health Psycholo | ogist | | | |
| Health and Soc | cial Care Evaluation | on Team, Univer | sity of Cumbria | | |
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Appendix 7: Mental Health Awarenss Follow-Up Questionnaire

This questionnaire relates to the Mental Health Awareness training you attended at the University of Cumbria approximately 3 months ago.

We are interested in hearing whether or not you have used aspects of the training in your role, so that we can feedback about the impact of the training. Please take up to 5 minutes to answer 5 questions relating to the training:

| On a scale of 1 (no knowledge) to 5 (very knowledgeable), how would you rate your knowledge of mental health issues? | | | | | |
|--|------------------|--|-------------------------------------|---------------------------|--------|
| | 1 | 2 | 3 | 4 | 5 |
| | | | | | |
| No kn | owledge | | | Very knowledgea | able |
| 2. | What role has th | e training had in develo | oping your knowledge? | | |
| | 1 | 2 | 3 | 4 | 5 |
| | | | | | |
| No rol | e at all | | | Significant re | ole |
| 3. | | o you feel about dealing tick the box relevant to | g with mental health issu o you. | ues in your day to day | |
| | 1 | 2 | 3 | 4 | 5 |
| | | | | | |
| Not at | all confident | | | Very con | fident |
| | | | | | |
| 4. | | e training had in develo | oping your confidence in | your ability to deal with | |
| | 1 | 2 | 3 | 4 | 5 |
| | | | | | |
| No rol | e at all | | | Significant | role |
| 5. | Have you come | across situations in you | ur role that you felt the tra | aining had not prepared y | you |

for?

| Yes □ | No □ | | | | | | | |
|---------|--|---|---|------|--|------------|-----------------|--------|
| a. | If yes, please tel it | | | | | | | |
| 6. | . Have you had any experiences in dealing with mental health issues in your role since attending the training? | | | | | | | |
| | 1 | 2 | 3 |] | | 4 □ | . | 5 □ |
| No, nor | ne at all | | S | Some | | | Yes, significar | nt |

Thank you for your time!

Clare Robinson, Health Psychologist

Health and Social Care Evaluation Team, University of Cumbria

Appendix 8: Interview Schedule – Mental Health Awareness (staff)

Mental Health Awareness

Interview schedule for academic/NHS staff

Thank you for agreeing to take part in this interview to tell us about the Innovation Fund Mental Health Awareness training and how this develops the workforce. I hope to interview around 10 people in total, in relation to this part of the programme.

My name is Clare Robinson and I am working as a research assistant. I am doing this interview on behalf of the Health and Social Care Evaluation Team at the University of Cumbria.

With your permission, the interview will be recorded for transcription purposes, and individual quotations may be used in a report which will be fed back locally and nationally. Your comments may be communicated back to the research team. The recording will be erased from the digital recorder once it has been transcribed.

Individual names will be removed from comments and care will be taken to protect the anonymity of participants. However, given the low numbers there is a chance that you may be identified from any quotes used.

The interview should take about 20-30 minutes.

Would you like to be sent a copy of the report once it is completed?

now complete consent form -

2 Acceptability of the training

h. In your view, to what extent does the training programme support staff in dealing with patients who present with mental health issues?

2 Implementation

- d. To what extent do you feel the programme has been implemented as planned, so far?
 - ii. What changes have been made along the way, if any?
 - What caused these changes to happen? (Was this, for example, a contextual issue, or an issue with design?)
 - o In what ways have the changes been beneficial?
- e. What problems were you faced with and how were these overcome?

Prompts: timescales, recruitment issues, partnership working

f. If another university were to adopt this programme, what would you advise them to do to avoid these barriers?

4 Impact of the training

- f. What have the main successes of the programme been, if any?
 - i. Can you provide an example?
- g. What difference has it/will it make to the delivery of healthcare?
 - i. Can you give examples?
 - ii. Has/will there be an improvement in patient care? How might this be measured?
- h. Where do you see the programme/role developing from here?
- i. How easily do you think this programme/role could be rolled out further?
- j. Have there been any unintended outcomes of the programme? **Prompts:** working relationships with GP practice, communication, interest in role

Appendix 9: Interview Schedule: Mental Health Awareness (participants)

Mental Health Awareness

Interview schedule for attendees on the mental health awareness training

Thank you for agreeing to take part in this interview to tell us about your views on the mental health training and your subsequent experiences of dealing with issues related to mental health in your role. I hope to interview around 10 people in total.

My name is Clare Robinson and I am working as a research assistant. I am doing this interview on behalf of the Health and Social Care Evaluation Team at the University of Cumbria.

With your permission, the interview will be recorded for transcription purposes, and individual quotations may be used in a report which will be fed back locally and nationally. Care will be taken to protect the anonymity of participants, such as using pseudonyms instead of individual names. However, given the low numbers being interviewed, there is a possibility that you could be identified from the quotes used in reports.

Your comments may be communicated back to the research team. The recording will be erased from the digital recorder once it has been transcribed.

The interview should take around 20 minutes.

Would you like to be sent a copy of the report once it is completed?

now complete consent form -

1 Implementation of the role

- h. How easy has it been to implement the training in practice?
 - i. Can you provide an example?
 - ii. What were the challenges and successes?
- i. What, in your view, have the main obstacles been in implementing the training? Prompts: course content, perceived self efficacy in doing the role, support/resources, clarity of the role alongside existing systems, unproductive overlap with other roles
 - a. How have these obstacles been overcome?
- j. If someone else was to follow the same programme, what would you advise them to do to avoid these barriers?

2 Impact of the training

b. Have you had any experiences of dealing with mental health issues subsequent to the training?

Prompts: course content, support/resources, initiative, fit with existing systems, clarity of role

- c. What difference has the training made to the delivery of healthcare?
 - i. Can you give examples?
 - ii. Has there been an improvement in patient care? How might this be measured?

3 Unexpected pathways and consequences of the training

c. Has there been anything during or as a result of the training programme that has been unexpected, in your view?

Prompts: working relationships with other professionals, communication, effort/resources required

Appendix 10: Interview Schedule – Community Pharmacist (staff)

Non-medical prescribing

Interview schedule for academic/NHS staff

Thank you for agreeing to take part in this interview to tell us about your experience of and views about the Non-Medical Prescribing and Consultation and Physical Examination Assessment Skills combined course and how this develops the workforce. I hope to interview around 4 people in total.

My name is Clare Robinson and I am working as a research assistant. I am doing this interview on behalf of the Health and Social Care Evaluation Team at the University of Cumbria.

With your permission, the interview will be recorded for transcription purposes, and individual quotations may be used in a report which will be fed back locally and nationally. Your comments may be communicated back to the research team. The recording will be erased from the digital recorder once it has been transcribed.

Individual names will be removed from comments and care will be taken to protect the anonymity of participants. However, given the low numbers there is a chance that you may be identified from any quotes used.

The interview should take 20-30 minutes.

Would you like to be sent a copy of the report once it is completed?

3 Acceptability of the training / role

- i. In your view, to what extent does the training programme support the development of the extended community pharmacist role?
- j. How do you see the role of the extended community pharmacist in meeting service needs? e.g. relieving GP appointment times, reductions to A&E visits

2 Implementation

- g. To what extent do you feel the programme has been implemented as planned, so far? iii. What changes have been made along the way, if any?
 - What caused these changes to happen? (Was this, for example, a contextual issue, or an issue with design?)
 - o In what ways have the changes been beneficial?
- h. What problems were you faced with and how were these overcome?

Prompts: timescales, recruitment issues, partnership working, clarity of the role alongside existing systems, unproductive overlap with other roles

i. If another university/practice were to adopt this programme, what would you advise them to do to avoid these barriers?

5 Impact of the training

- k. What have the main successes of the programme been, if any?
 - i. Can you provide an example?
- I. What difference has it/will it make to the delivery of healthcare?
 - i. Can you give examples?
 - ii. Has/will there be an improvement in patient care? How might this be measured?
- m. Where do you see the programme/role developing from here?
- n. How easily do you think this programme/role could be rolled out to other pharmacies?
- Have there been any unintended outcomes of the programme?
 Prompts: working relationships with GP practice, communication, interest in role

Appendix 11: Interview Schedule – Community Pharmacist (participants)

Non-medical prescribing

Interview schedule for Pharmacists

Thank you for agreeing to take part in this interview to tell us about your experience of and views about the Non-Medical Prescribing and Consultation and Physical Examination Assessment Skills combined course and its impact on your role. I hope to interview around 4 people in total.

My name is Clare Robinson and I am working as a research assistant. I am doing this interview on behalf of the Health and Social Care Evaluation Team at the University of Cumbria.

With your permission, the interview will be recorded for transcription purposes, and individual quotations may be used in a report which will be fed back locally and nationally. Care will be taken to protect the anonymity of participants, such as using pseudonyms instead of individual names and shuffling the data so that participants are not identifiable.

Your comments may be communicated back to the research team. The recording will be erased from the digital recorder once it has been transcribed.

The interview should take between 30-40 minutes.

Would you like to be sent a copy of the report once it is completed?

now complete consent form -

1 Acceptability of the training and role

- k. What are / were your expectations of the Clinical Examination Skills training?
 - a. To what extent have these expectations been met?
 - b. Where did you get your expectations from?
- I. What do you understand the new role of pharmacist non-medical prescriber with assessment skills to be?
 - What does the role do?
 - Do patients and other staff understand the role?
 - How is the role different to other roles in the practice?

Prompts: How clearly do you think the role has been articulated? Was it always clear, or did it become clearer as the pilot went on?

How is being articulated? e.g. formally in documentation; announced in staff meetings; by the activities of the enhanced non-medical prescriber as the role develops; etc.

m. What, in your opinion, is the added value of this new role [NMP with Assessment Skills]? Prompts: In addressing some of the issues in primary care such as relieving GP appointment times, benefits to you personally/professionally

2 Context

a. Do you think there were any aspects to the success (or otherwise) of this programme that were specific to your pharmacy?

Prompts: size of Practice; demographics of patients; history of new interventions in pharmacy, etc

b. How easily do you think this programme could be rolled out to other pharmacies?

3 Enablers

- a. What, in your view, are the main aspects to the success of the Non-Medical Prescribing and Clinical Examination Skills training programme?
- b. What, in your view, are the main aspects to the success of your subsequent role as non-medical prescriber with assessment skills?

Prompts: course content, support received, initiative from pharmacist, resources, fit with existing systems, clarity of role

4 Barriers

- c. What problems have you been faced with during your training?
 - ii. How have these been overcome?
- d. What, in your view, are the main obstacles in implementing the role of pharmacist non-medical prescriber with assessment skills?

Prompts: course content, perceived self efficacy in doing the role, support received, resources, clarity of the role alongside existing systems, unproductive overlap with other roles

e. If another pharmacy was to adopt the role, what would you advise them to do to avoid these barriers?

5 Impact of the training

- k. How easy has it been to implement the new role in practice?
- I. What have the main successes of the programme been, if any?
 - a. Can you provide an example?
 - b. Has there been an improvement in patient care? How might this be measured? Can you give examples?
- m. Where do you see the role developing from here?

6 Unexpected pathways and consequences of the training

d. Has there been anything during or as a result of the training programme that has been unexpected, in your view?

Prompts: working relationships with GP practice, communication, interest in role, effort/resources required

7 Self assessment of knowledge, skill, self efficacy

- a. On a scale of 1 (no knowledge) to 5 (very knowledgeable), how would you rate your current knowledge of
 - i. Non-Medical Prescribing?
 - ii. Physical Examination Assessment?
- b. On a scale of 1 (no current competence) to 5 (competent), how do you rate your skills in
 - i. Non-Medical Prescribing?
 - ii. Physical Examination Assessment?
- c. On a scale of 1 (not confident at all) to 5 (very confident), how do you rate your confidence in your ability to carry out the role as non-medical prescriber with assessment skills?